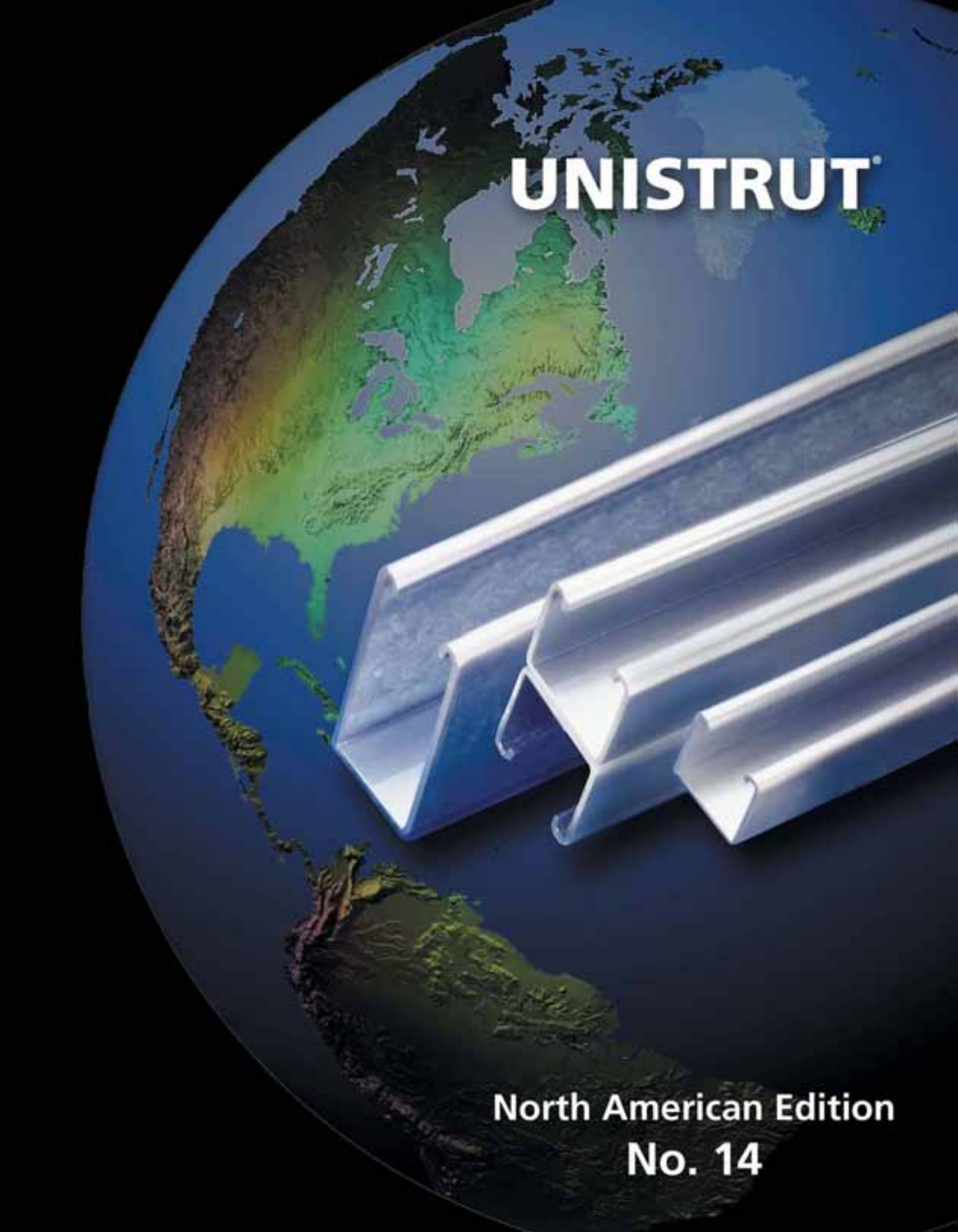
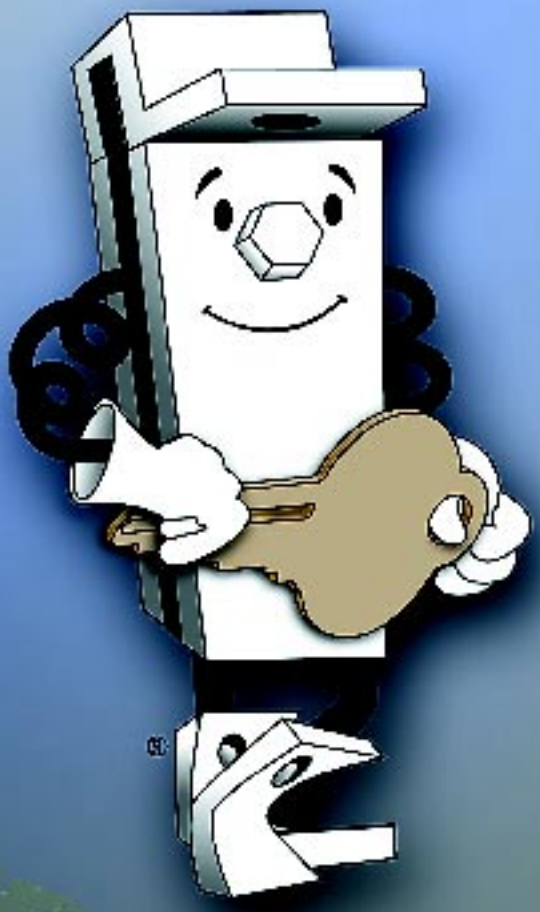

UNISTRUT®
North American Edition
No. 14

MEET MR. STRUT

Mr. Strut has symbolized Unistrut innovation for over 50 years and he's still coming up with fresh ideas and new ways to help you work easier, faster and smarter! So watch for Mr. Strut. When he's around you're never far from the Unistrut World of Support.



UNISTRUT®

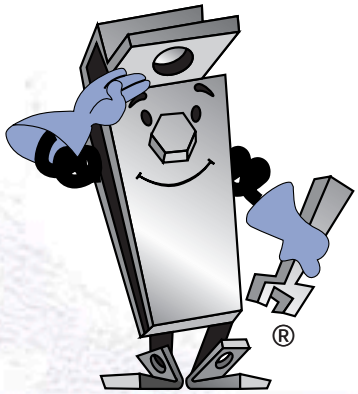
The Unistrut World of Support starts with our network of Unistrut Service Centers across the nation.

The Unistrut World of Support starts with our network of Unistrut Service Centers across North America. They go far beyond providing local product inventories... by offering complete application solutions, based on experience gained from thousands of projects worldwide.

It's the kind of knowledgeable assistance that can help save time and cost now, and simplify change in the future.

Technical help? No one knows the engineering side of Unistrut support systems like your local Unistrut team. And if it's special fabrication, cutting or custom finishing you want, the pros at your local Unistrut Service Center will make it happen...quickly, efficiently, economically.

So when it's help you need, call your Unistrut Service Center—the quickest way to unlock Unistrut's World of Support.



UNISTRUT®

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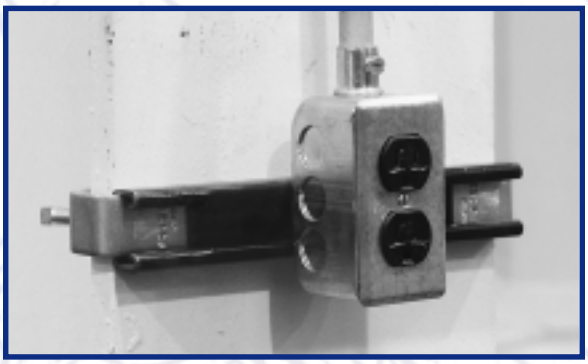
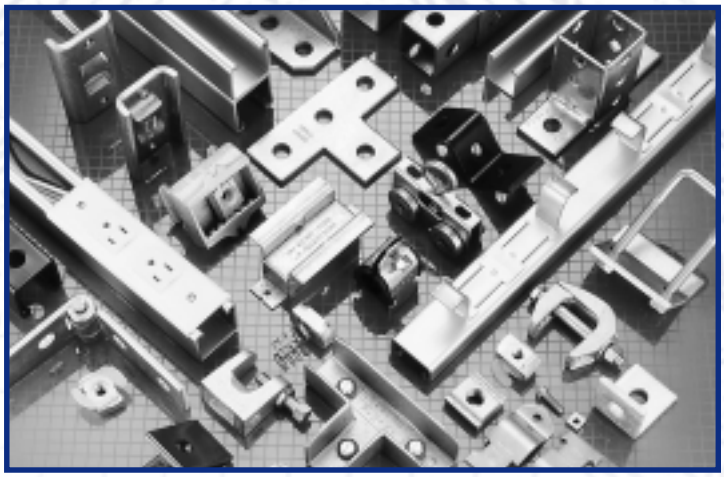
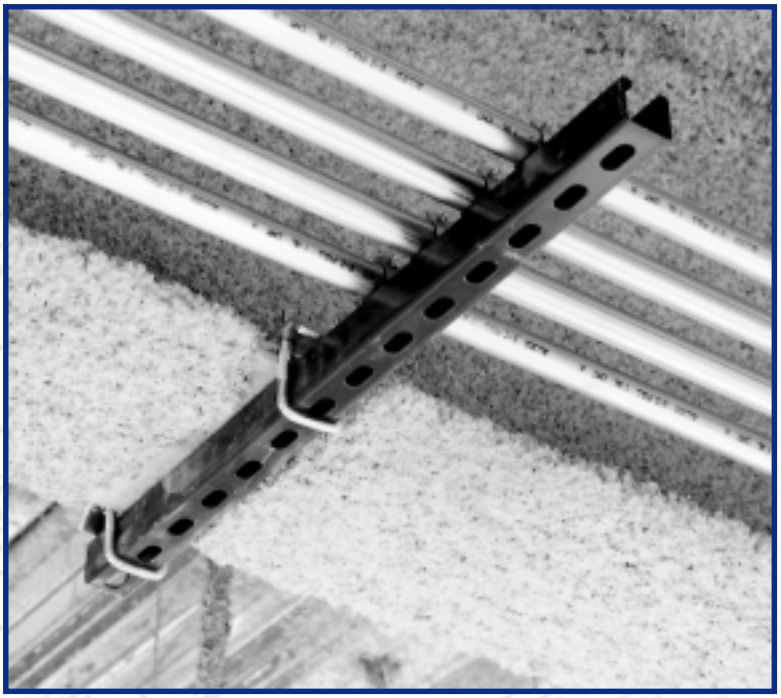
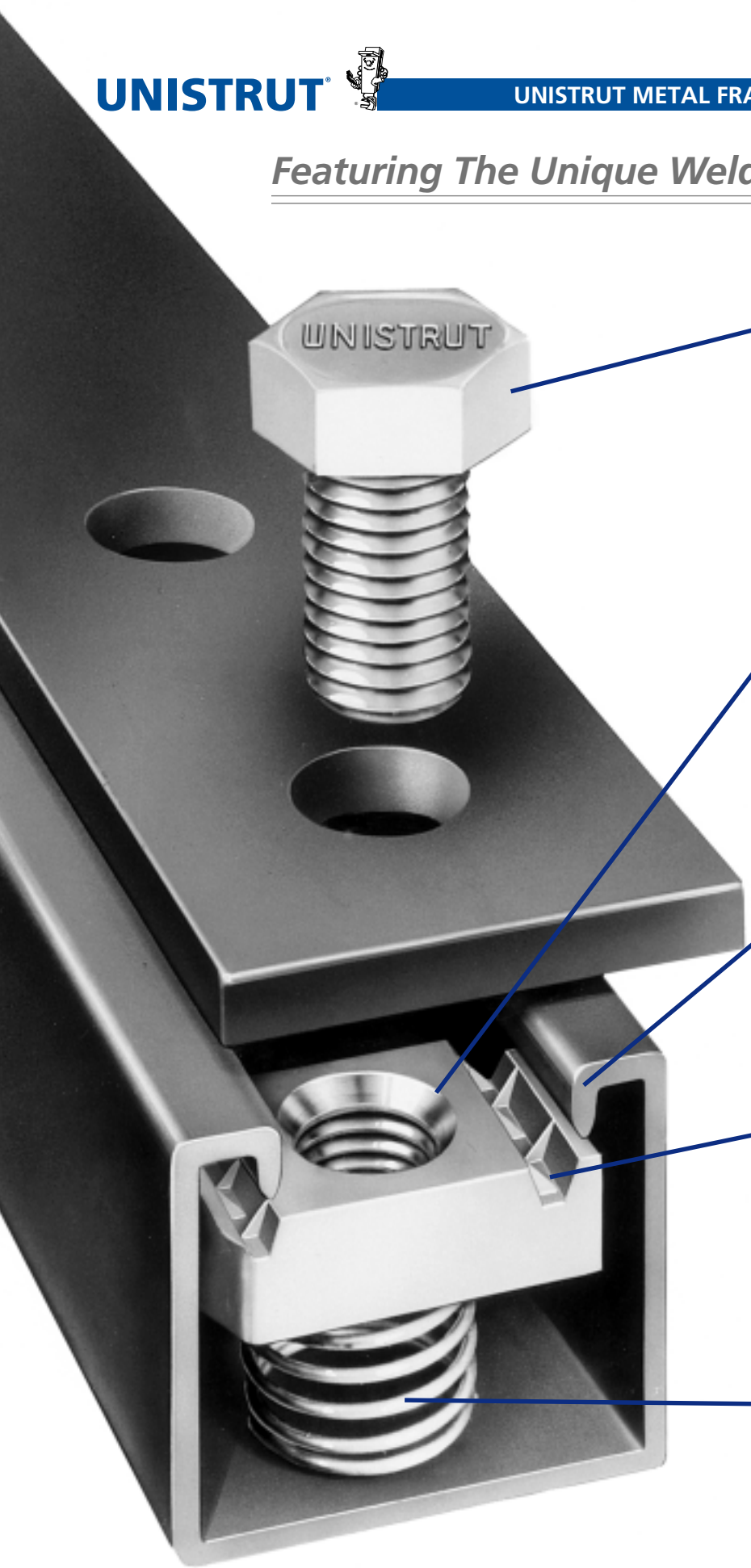






Featuring The Unique Weldless Connection



Hex-head bolt connects fitting to channel as it is threaded into spring nut.

Chamfer in the nut eases starting of the bolt. Nut teeth create a strong, vise-like grip when tightened against the inturned channel edges.

Channel edges and the nut's tapered grooves act as guides to provide fool-proof alignment of connection.

Nut teeth grip the channel's inturned edges, tying the channel sides together in a "box" configuration for added strength.

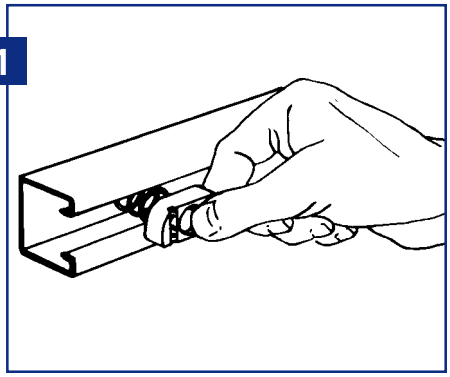
Spring allows precision placement anywhere along channel length, then holds the nut in position while the connection is completed.

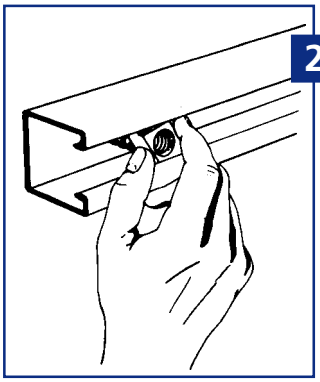
UNISTRUT®

Strong, Fast, Economical and Adjustable

Insert the spring nut anywhere along the continuous slotted channel. The rounded nut ends permit easy insertion.

1



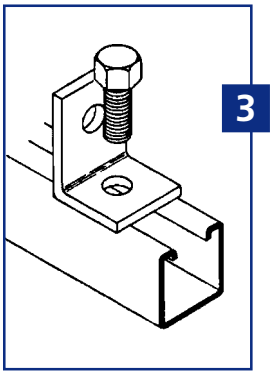


2

A 90° clockwise turn aligns the grooves in the nut with the inturned edges of the channel.

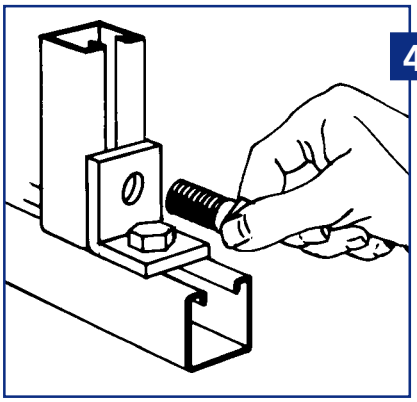
Fittings can be placed anywhere along the channel opening, permitting complete freedom of adjustment. The need for drilling holes is eliminated.

- *100% Adjustable*
- *100% Reusable*
- *No Welding*
- *No Drilling*
- *No Special Tools*



3

Insert the bolt through the fitting and into the spring nut. (See illustration 5 for end view showing the nut in place)

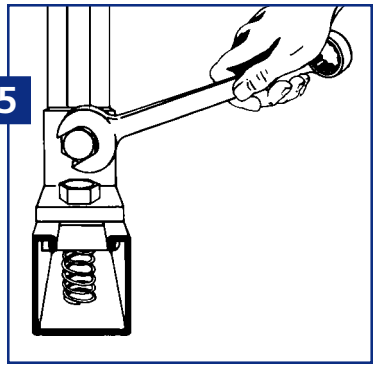


4

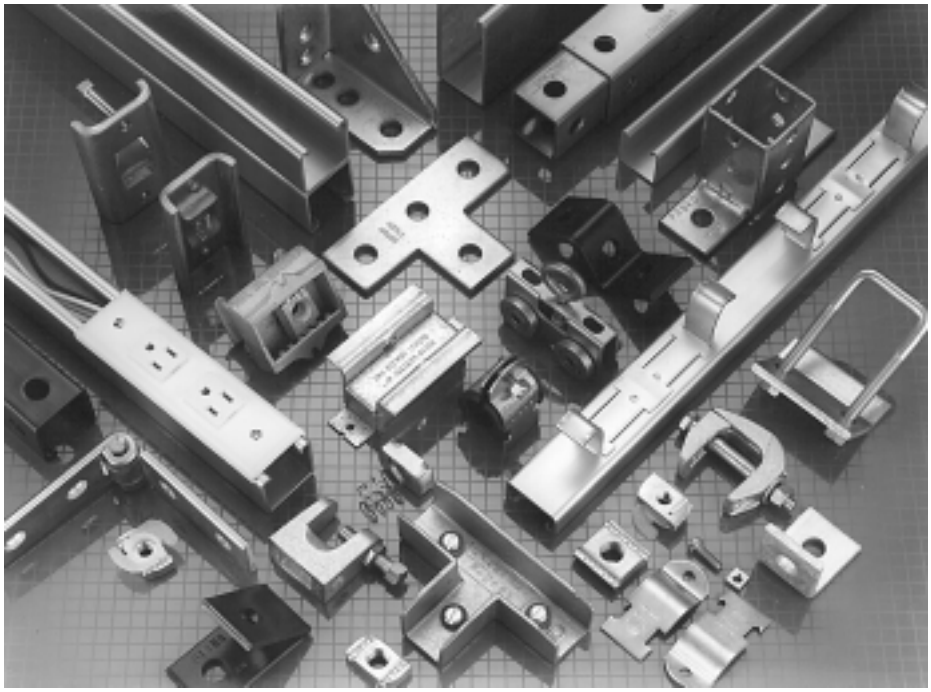
Additional channel sections can now be bolted to the fitting already in place by following procedure described in steps 1–3.

Tightening with a wrench locks the serrated teeth of the nut into the inturned edges of the channel, to complete a strong, vise-like connection.

5



Serving Design Professionals for Over 60 Years



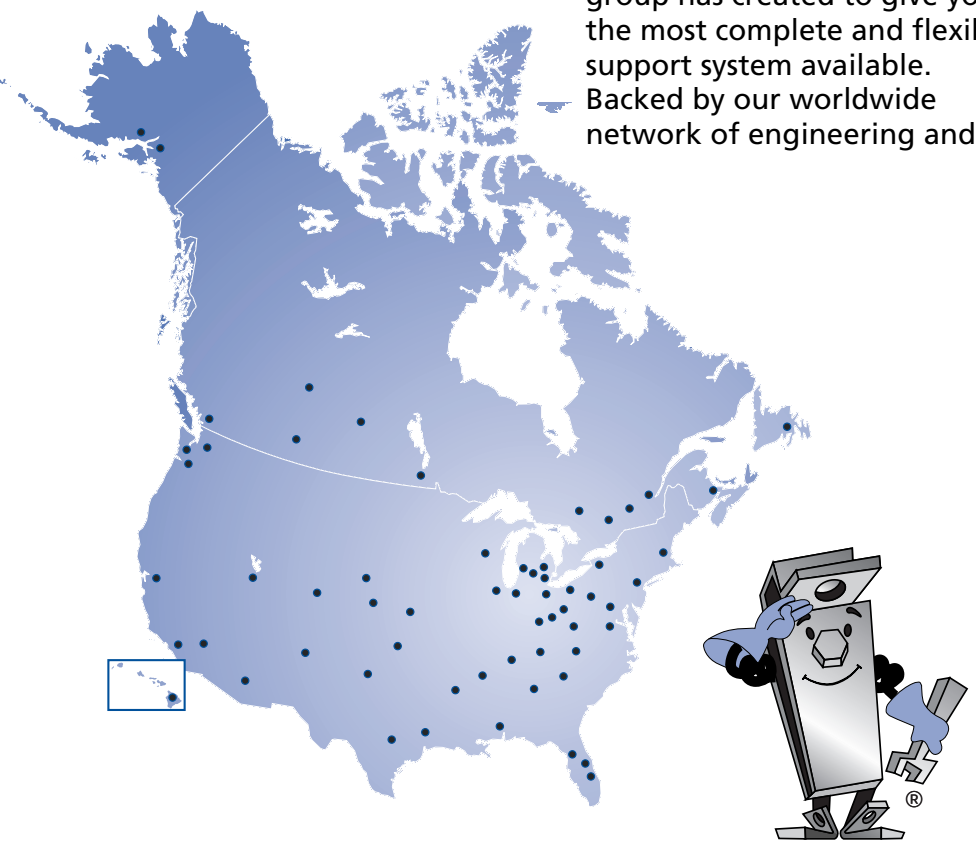
Unistrut products have been helping to build a better world since 1924. Used extensively in nuclear, industrial and commercial construction markets for over 75 years, Unistrut Metal Framing has set the standard for product design, quality and performance. The initial Unistrut concept — a simple spring nut and bolt connecting a fitting to a continuous slotted channel — has evolved into a comprehensive engineered building and support system.

Unistrut® — The Original Metal Framing System

There is only one Unistrut Metal Framing System. It incorporates the innovative product improvements that our research and development group has created to give you the most complete and flexible support system available. Backed by our worldwide network of engineering and distribution centers, Unistrut provides customers with total-resource capability.

A North American network of Unistrut Service Centers — stocking standard Unistrut components — are located in principal cities to serve you quickly and directly. Many Service Centers are equipped to design and supply drawings for any type of metal framing application and also offer fabrication and installation services.

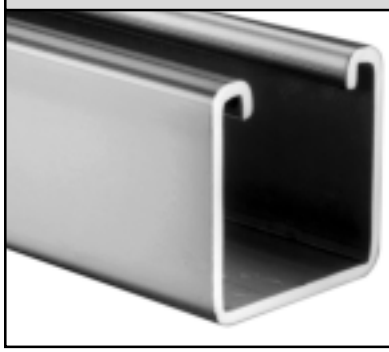
This catalog is a comprehensive presentation of Unistrut Metal Framing components plus technical data required by design, specification and construction professionals.

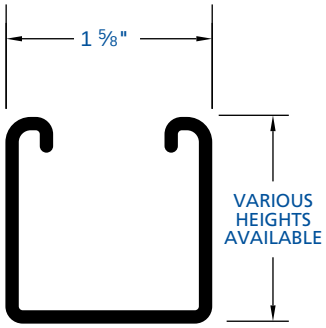


The Most Complete Metal Framing System — Three Channel-Width Options

Adjustability, demountability and reusability are engineered into each of the three Unistrut channel series. Each series offers channels of varying depth and gage plus a complete line of fittings and accessories.

1⅝" width Series Channel

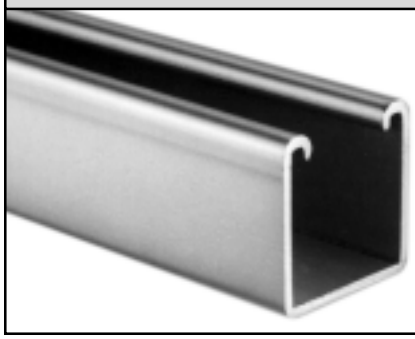


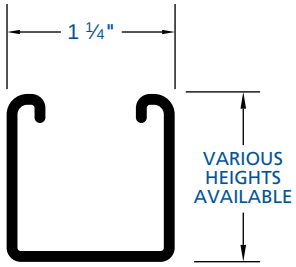


1⅝" (41mm) width

Designed to carry the heaviest loads and provide the widest variety of applications, the 1⅝" series has become the accepted standard for use in mechanical, electrical and general construction applications where supports and attachments must meet the highest strength requirements.

1¼" width Series Channel

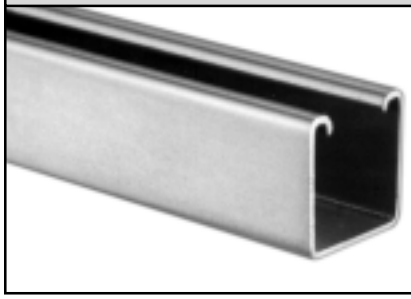


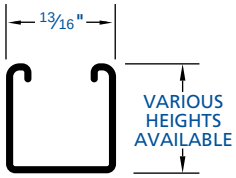


1¼" (32mm) width

A framing system designed for medium loads, the 1¼" series is especially suitable for use in the OEM, commercial and display markets. It maintains a lightness in scale and a clean line that makes it aesthetically pleasing as well as functional.

13⁄16" width Series Channel





13⁄16" (21mm) width

A unique half-size reduction of the 1⅝" channel-width series, this smaller channel size can be used to carry light loads economically in applications such as instrumentation, retail displays and light-duty laboratory supports. It also provides the flexibility found in all Unistrut framing systems.

Product Load Testing

Product testing is an important Part of Unistrut'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, 1996 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, Unistrut will develop a test to quantify and verify it. Using design properties of the Unistrut 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, 1996 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.

Quality Program

Unistrut is committed to being the "best" in the metal framing industry. In order to meet this goal, Unistrut has adopted the philosophy of "Zero Defects and Continuous Improvement". This means on-going reviews of our manufacturing processes, operating procedures and quality systems to find ways of improving efficiency, productivity and quality. It means establishing process controls and problem-prevention techniques to ensure that superior quality is built into every Unistrut product.

Our drive to be the best includes not just quality products, but on-time delivery and prompt resolution of customer needs and concerns. At Unistrut, quality is number one.

Traceability

UNISTRUT CHANNEL IS STAMPED WITH A NUMERIC CODE THAT ALLOWS TRACEABILITY TO THE ORIGIN OF THE STEEL

Material

Framing Members

Unistrut channels and continuous inserts are accurately and carefully cold-formed to size from low carbon strip steel. One side of the channel has a continuous slot with inturned edges. Secure attachments may be made to the framing member with the use of hardened, toothed, slotted nuts which engage the inturned edges.

Raw steel shall conform to the following ASTM specifications:

GAGE	FINISH	ASTM NO.
12	GR & HG	A1011 SS GR 33
	PG	A653 GR 33
14	GR & HG	A1011 SS GR 33
	PG	A653 GR 33
16	GR & HG	A1011 SS GR 33
	PG	A653 GR 33
19	GR	A1008

Nuts and Bolts

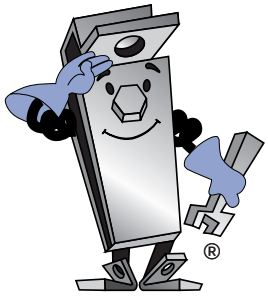
Unistrut nuts are made from steel bars. After all machining operations are complete, they are thoroughly case hardened. Nuts are rectangular with ends shaped to permit a quarter turn clockwise in the framing member after insertion through the slotted opening in the channel. Two toothed grooves in the top of the nut engage the inturned edges of the channel and, after bolting operations are completed, will prevent any movement of the bolt and nut within the framing member. All bolts and nuts have Unified coarse screw threads. The standard framing nut is ½" and conforms to ASTM Specification A1011 SS GR 33 (material only). Screws conform to SAE J429 GR 2 (also meets and exceeds ASTM A307).

Fittings

Unistrut fittings, unless noted otherwise, are punch-press made from hot rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A575, A576, A635 or A36. The fitting steel also meets the physical requirement of ASTM A1011 SS GR 33. The pickling of the steel produces a smooth surface free from scale.

Weights and Dimensions

Weights given for all materials are approximate shipping weights. All dimensions are subject to commercial tolerance within published specifications.



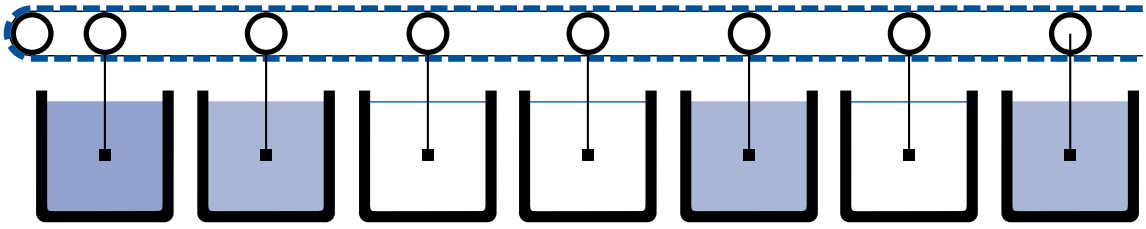
WE RESERVE THE RIGHT TO MAKE SPECIFICATION CHANGES WITHOUT NOTICE.

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.

THE BLUE COLOR USED ON UNISTRUT COMPONENTS ILLUSTRATED IN THIS CATALOG IS FOR GRAPHIC ENHANCEMENT ONLY, AND DOES NOT REPRESENT ACTUAL PRODUCT COLOR.

Perma-Green® III

The performance of Unistrut's Perma-Green III far exceeds that of conventional finishes. And compared to competitive "high-performance" coatings, Perma-Green III provides superior resistance to chalking, checking and fading and is far less vulnerable to common acidic atmospheres, solvents and alkalis. Just as important, Perma-Green III is the result of an environmentally neutral process that virtually eliminates the toxic metals commonly found in competitive paint-based finishes.



TANK 1
First stage hot alkaline cleaning of channel.

TANK 2
Second stage hot alkaline cleaning of channel.

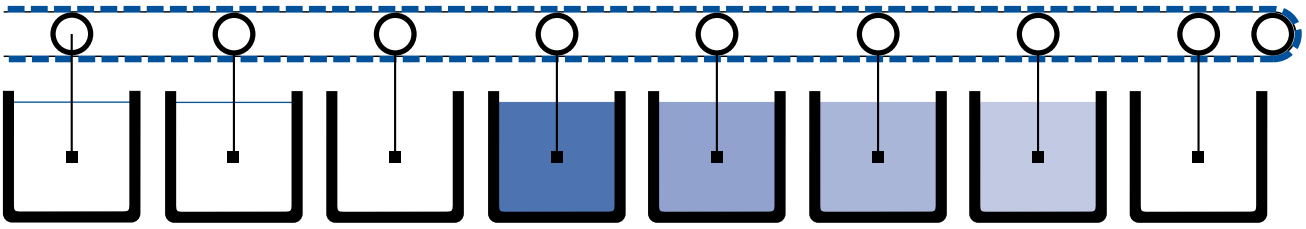
TANK 3
Channel is rinsed with clean water to remove cleaning solution.

TANK 4
Conditioning rinse.

TANK 5
Channel is phosphated to produce an zinc phosphate coating.

TANK 6
Channel is rinsed to remove excess phosphate solution.

TANK 7
Sealer is applied.



TANK 8
First stage deionizer water rinse to remove excess sealer.

TANK 9
Second stage deionized water rinse to prepare channel for E-Coating.

TANK 10
Final deionizer water rinse.

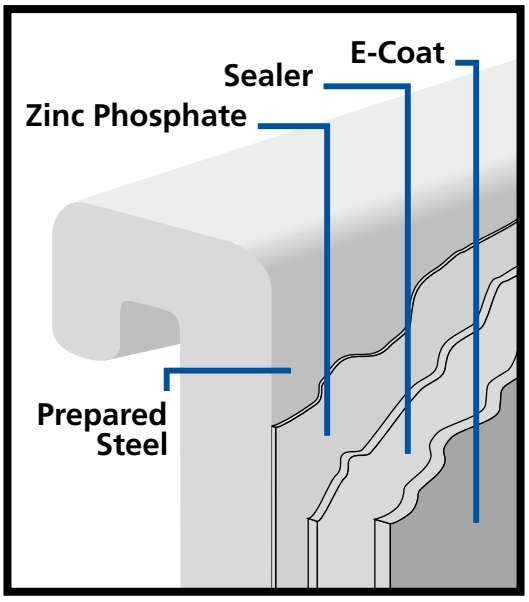
TANK 11
Electro-deposit ion tank applies the acrylic Perma-Green® III to all surfaces.

TANK 12
Post rinse spray.

TANK 13
Post rinse dip tank.

TANK 14
Post rinse spray.

OVEN
The cure process dries the channel and cross links the acrylic thermoset resins at 375°.



Unistrut Perma-Green III is a factory applied, electro-deposition acrylic coating with superior rust protection and fade-resistance. The acrylic coating is a proprietary formulation and is essentially *"heavy-metal" free*. The electrodeposition coating process provides a smooth, hard, durable surface which is completely cured. This inhibits introduction of airborne contaminates which can adversely affect sensitive manufacturing environments.

Before the electrodeposition acrylic coating is applied, Unistrut channel and fittings are thoroughly cleaned and coated with an zinc phosphate conversion coating. Unistrut's unique, custom-designed "prep" process consists of ten separate steps, the most thorough in the industry. The cleaning, phosphating and electrodeposition coating processes are continuous and, unlike "batch" processing, result in a uniform coating quality.

Production samples are tested on a continuous basis for corrosion resistance. Unistrut Perma-Green III exceeds 400 hours salt spray (⅛" creep from scribe) when tested to ASTM B117. Unscribed samples exceed 600 hours salt spray. (6% red rust)

PERMA-GREEN® III (GR) TECHNICAL DATA

STEEL SUBSTRATE PREPARATION

Ten stage continuous cleaning, phosphate process.

Substrate after "prep": sealed zinc phosphate conversion coating.

COATING

Thermoset acrylic

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

Hardness: 2H.

Coating Process:
Cathodic Electrodeposition.

PERFORMANCE

Salt Spray:
Scribed: exceeds 400 hours per ASTM B117. (⅛" creep)
Unscribed: exceeds 600 hours per ASTM B117. (6% red rust)

Chalk:
Nominal at 1,000 hours per weatherometer G-23 test.

Checking:
None at 1,000 hours per weatherometer G-23 test.

Fade:
Less than 50% compared to standard epoxy E.C. coatings.

ENVIRONMENTAL ISSUES

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

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

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.

Zinc Coating

Unistrut products are available in three types of zinc coatings:

- Electroplated
- Pregalvanized
- Hot Dip Galvanized.

Zinc coatings offer two types of protection:

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

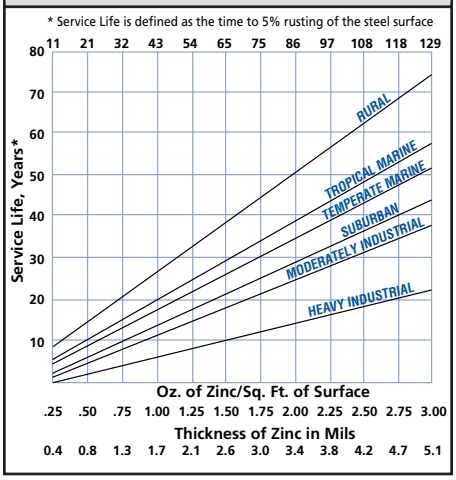
The service life of zinc coating is directly related to the zinc coating thicknessas shown below.

COMPARISON OF ZINC GALVANIZED FINISHES

Finish	Zinc Thickness
Hot Dip Galvanized	2.6 MIL
Pregalvanized	.75 MIL
Electro-Galvanized	.2 to .5 MIL
Perma-Gold	.5 MIL

As shown in the graph, when the zinc coating is double, the service life is double under most conditions.

Life of Protection vs. Thickness of Zinc and Type of Atmosphere



Electroplated Zinc– ASTM B633, Type III SC1

In the electroplating process, the part to be zinc coated is immersed in a solution of zinc ions. An electric current causes the zinc to be deposited on the part.

Zinc plated parts typically have a zinc coating of .2 to .5 MIL and are recommended for dry indoor use.

Pregalvanized Zinc- ASTM A653

Pregalvanized steel is zinc coated by a hot dip process. Steel strip from a coil is fed through a continuous zinc coater which cleans, fluxes and coats the steel with molten zinc. After cooling, the steel is recoiled.

The pregalvanized zinc coating conforms to a G-90 thickness designation per ASTM A653. The zinc thickness is .75 MIL or .45 oz./sq. ft. of surface area.

This coating is offered on Unistrut channel and tubing and is a well-proven, time-tested performer for indoor and outdoor applications. For severe corrosion applications, hot dip galvanizing, as described below, is a good alternative.

HOT DIP GALVANIZED (HG) ASTM A123 OR A153

In hot dip galvanizing, the finished part is immersed in a bath of molten zinc. This method results in complete zinc coverage and a thicker coating than pregalvanized or plated zinc.

The zinc coating is typically 2.6 MIL or 1.5 oz./sq. ft. of surface area.

This is the coating of choice for applications where severe corrosion is a design factor.

SPECIAL COATING

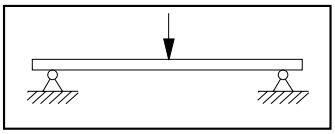
When specific applications require other than standard available finishes, special finishes can be supplied per customer requirements.

Beams

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

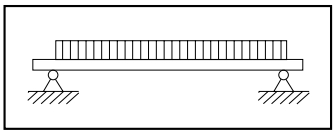
(a) the amount of load applied,
(b) the type of loading applied, and
(c) the support conditions.

BEAM LOADING - POINT LOAD



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

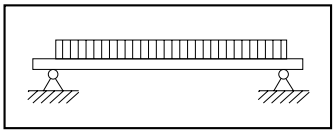
BEAM LOADING - UNIFORM LOAD



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

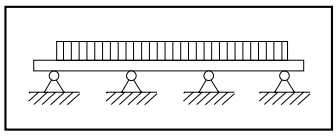
Point and uniform loads can be placed on a beam in any combination. A series of point loads can approximate a uniform loading. The load charts and tables are based on a uniform load unless identified otherwise.

SUPPORT CONDITIONS - SIMPLE BEAM



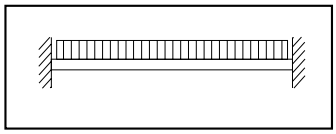
A simple beam has supports that prevent movement left and right, or up and down, but do not restrain the beam from rotating at the supports into a natural deflected curve. Most Unistrut Metal Framing connections produce simple beams. The load charts and tables are based on simple beams unless identified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

SUPPORT CONDITIONS - CONTINUOUS BEAM



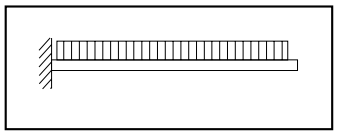
Any simple beam that is supported at one or more intermediate points is a continuous beam. A mezzanine joist that passes over three or more columns is an example of a continuous beam.

SUPPORT CONDITIONS - FIXED-END BEAM



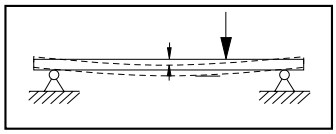
Supports that prevent the beam from rotating into a natural deflected curve produce a fixed-end beam. A welded end connection to very rigid support produces a fixed-end beam.

SUPPORT CONDITIONS - CANTILEVER BEAM



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

DEFLECTION



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

(a) the amount of load,
(b) the support conditions,
(c) the stiffness of the beam's cross-sectional shape, and
(d) the stiffness of the beam material.

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

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

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

BENDING MOMENT

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

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

Columns

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

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

(a) the length of column,
(b) the type of loading,
(c) the support conditions, and
(d) the column's cross-sectional shape and material.

COLUMN LENGTH

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

COLUMN LOADING – CONCENTRIC LOADING

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

COLUMN LOADING – ECCENTRIC LOADING

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

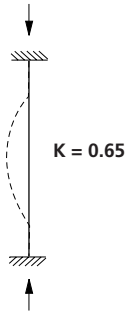
The load tables give allowable loads for both concentric (loaded at C.G.) and certain eccentric (loaded at slot face) loading. Allowable loads for other eccentric loading must be determined by a qualified design professional.

SUPPORT CONDITIONS

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

SUPPORT CONDITIONS - FIXED TOP – FIXED BOTTOM

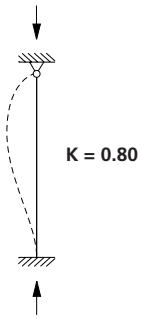
Both ends are restrained against rotation and lateral movement (translation).



SUPPORT CONDITIONS - PINNED TOP – FIXED BOTTOM

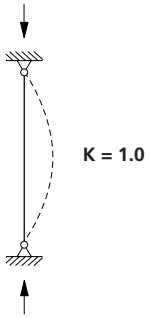
The top is restrained against lateral movement (translation) but is allowed to rotate. The bottom is restrained against rotation and lateral movement.

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



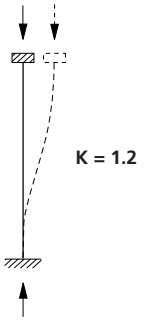
SUPPORT CONDITIONS - PINNED TOP – PINNED BOTTOM

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



SUPPORT CONDITIONS - FIXED / FREE TOP – FIXED BOTTOM

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



CROSS-SECTIONAL SHAPE

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

BOLT TORQUE

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

Recommended Bolt Torque						
Bolt Size	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
	20	18	16	13	11	10
Foot Lbs.	6	11	19	50	100	125
N•m	8	15	25	70	135	170

These are based on using a properly calibrated torque wrench with a clean dry (non-lubricated) Unistrut fitting, bolt and nut. A lubricated bolt or nut can cause extremely high tension in the connection and may lead to bolt failure. It must be noted that the accuracy of commercial torque wrenches varies widely and it is the responsibility of the installer to ensure that proper bolt torque has been achieved.

Unit Conversions

English To Metric

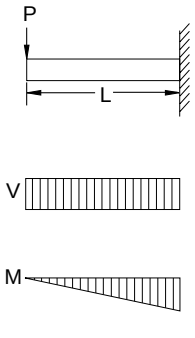
To Convert From	To	Multiply By
Length		
Inch [in]	Millimeter [mm]	25.400 000
Foot [ft]	Meter [m]	0.304 800
Yard [yd]	Meter [m]	0.914 400
Mile [mi] (U.S. Statute)	Kilometer [km]	1.609 347
Area		
Square Inch [in^2]	Square Millimeter [mm^2]	645.16
Square Foot [ft^2]	Square Meter [m^2]	0.092 903
Square Yard [yd^2]	Sqare Meter [m^2]	0.836 127
Square Mile [mi^2] (U.S. Statute)	Square Kilometer [km^2]	2.589 998
Acre	Square Meter [m^2]	4046.873
Acre	Hectare	0.404 687
Volume		
Cubic Inch [in^3]	Cubic Millimeter [mm^3]	16387.06
Cubic Foot [ft^3]	Cubic Meter [m^3]	0.028 317
Cubic Yard [yd^3]	Cubic Meter [m^3]	0.764 555
Gallon [gal] (U.S. Liquid)	Litre [l]	3.785 412
Quart [qt] (U.S. Liquid)	Litre [l]	0.946 353
Mass		
Ounce (Avoirdupois) [oz]	Gram [g]	28.349 520
Pound (Avoirdupois) [lb]	Kilogram [kg]	0.453 592
Short Ton	Kilogram [kg]	907.185
Force		
Ounce-Force	Newton [N]	0.278 014
Pound-Force [lbf]	Newton [N]	4.448 222
Bending Moment		
Pound-Force-Inch [lbf-in]	Netwon-Meter [N-m]	0.112 985
Pound-Force-Foot [lbf-ft]	Newton-Meter [N-m]	1.355 818
Pressure, Stress		
Pound-Force per Square Inch [lbf/in^2]	Kilopascal [kPa]	6.894 757
Foot of Water (39.2 F)	Kilopascal [kPa]	2.988 980
Inch of Mercury (32 F)	Kilopascal [kPa]	3.386 380
Energy, Work, Heat		
Foot-Pound-Force [ft-lbf]	Joule [J]	1.355 818
British Thermal Unit [Btu]	Joule [J]	1055.056
Calorie [cal]	Joule [J]	4.186 800
Kilowatt Hour [kW-h]	Joule [J]	3,600,000
Power		
Foot-Pound-Force /Second [ft-lbs/s]	Watt [W]	1.355 818
British Thermal Unit /Hour [Btu/h]	Watt [W]	0.293 071
Horsepower [hp] (550 Ft. Lbf/s)	Kilowatt [kW]	0.745 700
Angle		
Degree	Radian [rad]	0.017 453
Temperature		
Degree Fahrenheit [°F]	Degree Celsius [°C]	(F° -32)/1.8

Metric to English

To Convert From	To	Multiply By
Length		
Millimeter [mm]	Inch [in]	0.039 370
Meter [m]	Foot [ft]	3.280 840
Meter [m]	Yard [yd]	1.093 613
Kilometer [km]	Mile [mi] (U.S. Statute)	0.621 370
Area		
Square Millimeter [mm^2]	Square Inch [in^2]	0.001550
Square Meter [m^2]	Square Foot [ft^2]	10.763 915
Sqare Meter [m^2]	Square Yard [yd^2]	1.195 991
Square Kilometer [km2]	Square Mile [mi^2](U.S. Statute)	0.386 101
Square Meter [m^2]	Acre	0.000 247
Hectare	Acre	2.471 046
Volume		
Cubic Millimeter [mm^3]	Cubic Inch [in^3]	0.000061
Cubic Meter [m^3]	Cubic Foot [ft^3]	35.314 662
Cubic Meter [m^3]	Cubic Yard [yd^3]	1.307 950
Litre [l]	Gallon [gal] (U.S. Liquid)	0.264 172
Litre [l]	Quart [qt] (U.S. Liquid)	1.056 688
Mass		
Gram [g]	Ounce (Avoirdupois) [oz]	0.035 274
Kilogram [kg]	Pound (Avoirdupois) [lb]	2.204 624
Kilogram [kg]	Short Ton	0.00110
Force		
Newton [N]	Ounce-Force	3.596 941
Newton [N]	Pound-Force [lbf]	0.224 809
Bending Moment		
Netwon-Meter [N-m]	Pound-Force-Inch [lbf-in]	8.850 732
Newton-Meter [N-m]	Pound-Force-Foot [lbf-ft]	0.737 562
Pressure, Stress		
Kilopascal [kPa]	Pound-Force per Square Inch [lbf/in^2]	0.145 038
Kilopascal [kPa]	Foot of Water (39.2 F)	0.334 562
Kilopascal [kPa]	Inch of Mercury (32 F)	0.295 301
Energy, Work, Heat		
Joule [J]	Foot-Pound-Force [ft-lbf]	0.737 562
Joule [J]	British Thermal Unit [Btu]	0.000948
Joule [J]	Calorie [cal]	0.238 846
Joule [J]	Kilowatt Hour [kW-h]	2.78^{-7}
Power		
Watt [W] /Second [ft-lbs/s]	Foot-Pound-Force	0.737 562
Watt [W] /Hour [Btu/h]	British Thermal Unit	3.412 142
Kilowatt [kW]	Horsepower (550 Ft. Lbf/s) [hp]	1.341 022
Angle		
Radian [rad]	Degree	57.295 788
Temperature		
Degree Celsius [°C]	Degree Fahrenheit [°F]	1.8xC°+32

Beam Support Conditions

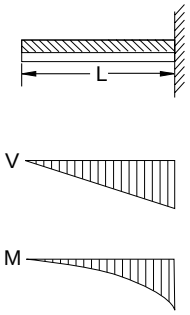
Cantilever Beams



$V_{max.} = P$

$M_{max.} = PL$

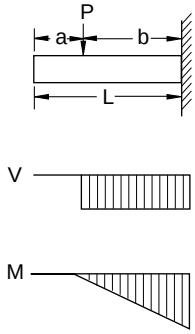
$\Delta_{max.} = \frac{PL^3}{3EI}$



$V_{max.} = W$

$M_{max.} = \frac{WL}{2}$

$\Delta_{max.} = \frac{WL^3}{8EI}$

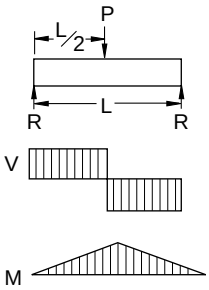


$V_{max.} = P$

$M_{max.} = Pb$

$\Delta_{max.} = \frac{Pb^2(3L-b)}{6EI}$

Cantilever Beams

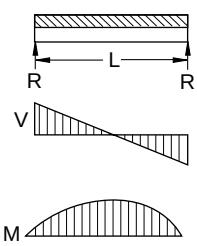


$R = \frac{P}{2}$

$V_{max.} = \frac{P}{2}$

$M_{max.} = \frac{PL}{4}$

$\Delta_{max.} = \frac{PL^3}{48EI}$

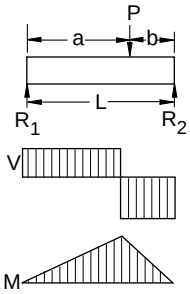


$R = \frac{W}{2}$

$V_{max.} = \frac{W}{2}$

$M_{max.} = \frac{WL}{8}$

$\Delta_{max.} = \frac{5WL^3}{384EI}$



$R_1 = \frac{Pb}{L}$

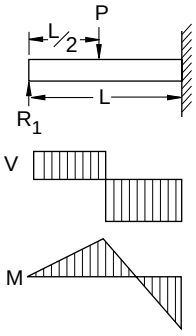
$R_2 = \frac{Pa}{L}$

$V_{max.} = \frac{Pa}{L}$

$M_{max.} = \frac{Pab}{L}$

$\Delta_{max.} = \frac{Pab(a+2b)\sqrt{3a(a+2b)}}{27EIL}$

Cantilever Beams



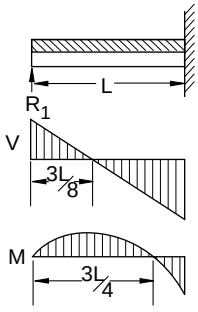
$R_1 = \frac{5P}{16}$

$V_{max.} = \frac{11P}{16}$

$M_{max.} = \frac{3PL}{16}$

$\Delta_{max.}$ at $x = 0.447L$

$\Delta_{max.} = 0.009317\frac{PL^3}{EI}$



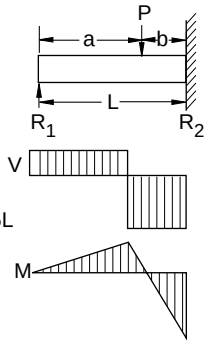
$R_1 = \frac{3W}{8}$

$V_{max.} = \frac{5W}{8}$

$M_{max.} = \frac{WL}{8}$

$\Delta_{max.}$ at $x = 0.4215L$

$\Delta_{max.} = \frac{WL^3}{185EI}$



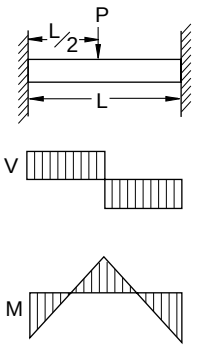
$R_1 = \frac{Pb^2}{2L^3}(a+2L)$

$R_2 = \frac{Pa}{2L^3}(3L^2-a^2)$

M at point of load $= R_1 a$

M at fixed end $= \frac{Pab}{2L^3}(a+L)$

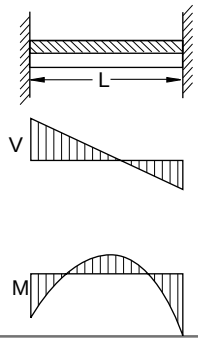
Cantilever Beams



$V_{max.} = \frac{P}{2}$

$M_{max.} = \frac{PL}{8}$

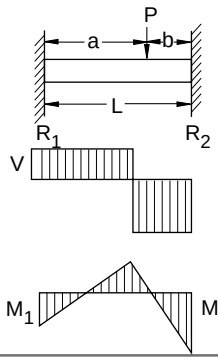
$\Delta_{max.} = \frac{PL^3}{192EI}$



$V_{max.} = \frac{W}{2}$

$M_{max.} = \frac{WL}{12}$

$\Delta_{max.} = \frac{WL^3}{384EI}$



$R_1 = \frac{Pb^2}{L^3}(3a+b)$

$R_2 = \frac{Pa^2}{L^3}(a+3b)$

$M_1 = \frac{Pab^2}{L^2}$

$M_2 = \frac{Pa^2b}{L^2}$

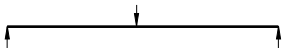
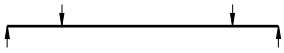
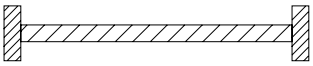
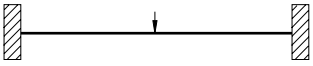
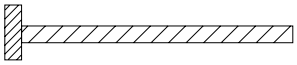
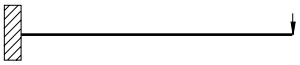
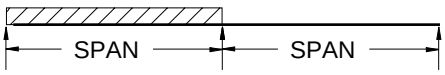
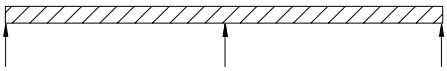
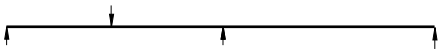
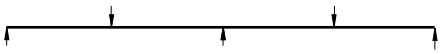
R – Reaction
M – Moment
P – Concentrated Load

W – Total Uniform Load
V – Shear
L – Length

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

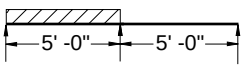
CONVERSION FACTORS FOR BEAMS WITH VARIOUS STATIC LOADING CONDITIONS

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

Load and Support Condition	Load Factor	Deflection Factor
1. Simple Beam, Uniform Load 	1.00	1.00
2. Simple Beam, Concentrated Load at Center 	.50	.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	.30
5. Beam Fixed at Both Ends, Concentrated Load at Center 	1.00	.40
6. Cantilever Beam, Uniform Load 	.25	2.40
7. Cantilever Beam, Concentrated Load at End 	.12	3.20
8. Continuous Beam, Two Equal Spans, Uniform Load on One Span 	1.30	.92
9. Continuous Beam, Two Equal Spans, Uniform Load on Both Ends 	1.00	.42
10. Continuous Beam, Two Equal Spans, Concentrated Load at Center of One Span 	.62	.71
11. Continuous Beam, Two Equal Spans, Concentrated Load at Center of Each Span 	.67	.48

EXAMPLE I:

Determine load and deflection of a P 1000 beam continuous over one support and loaded uniformly on one span.



SOLUTION:

A. From load table for P1000 on page 26 load for a 5'-0" span is 680# and deflection is .35".
B. Multiply by factors from Table above.
Load = 680# x 1.30 = 884#
Deflection = .35" x .92 = .32"

EXAMPLE II

Determine load and deflection of a P 5500 cantilever beam with a concentrated load on the end.

SOLUTION:

A. From load table P5500 on page 57 load for a 3'-0" span is 2190# and deflection is .09".
B. Multiply by factors from Table above.
Load = 2190# x .12 = 263#
Deflection = .09" x 3.20 = .29"

PART I - GENERAL

1.01 SCOPE OF WORK

A. Provide all Unistrut Metal Framing material, fittings and related accessories (Strut System) as indicated on the Contract Drawings.
B. Provide all labor, supervision, engineering, and fabrication required for installation of the Strut System in accordance with the Contract Drawings and as specified herein.
C. Related work specified elsewhere.

1.02 QUALITY ASSURANCE

A. Manufacturer's qualifications:
   1. The manufacturer shall not have had less than 10 year's experience in manufacturing Strut Systems.
   2. The manufacturer must certify in writing all components supplied have been produced in accordance with an established quality assurance program.
B. Installer's qualifications:
   1. Installer must be a Unistrut trained manufacturer's authorized representative/installer with not less than 5 years experience in the installation of Strut Systems of this size and conformation.
   2. All Strut System components must be supplied by a single manufacturer.
C. Standards:
   1. Work shall meet the requirements of the following standards:
      a. Federal, State and Local codes.
      b. American Iron and Steel Institute (AISI) Specification for the Design of Cold-Formed Steel Structural Members 1996 Edition.
      c. American Society for Testing And Materials (ASTM).

1.03 SUBMITTALS

A. Structural Calculations and Shop Drawings
   1. Submit structural calculations for approval by the project engineer. Calculations may include, but are not limited to:
      a. Description of design criteria.
      b. Stress and deflection analysis.
      c. Selection of Unistrut framing members, fittings, and accessories.
   2. Submit all shop/assembly drawings necessary to completely install the Strut System in compliance with the Contract Drawings.
   3. Submit all pertinent manufacturers published data.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. All material is to be delivered to the work site in original factory packaging to avoid damage to the finish.
B. Upon delivery to the work site, all components shall be protected from the elements by a shelter or other covering.

1.05 GUARANTEE

A. Separate guarantees shall be issued from the erector and manufacturer, valid for a period of 1 year, against any defects that may arise from the installation or manufacture of the Strut System components.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. All Strut System components shall be as manufactured by UNISTRUT CORPORATION or approved equal as determined by the Architect or Engineer of record in writing 10 days prior to bid date.

2.02 MATERIALS

A. All channel members shall be fabricated from structural grade steel conforming to one of the following ASTM specifications: A 1011 SS GR 33, A 653 GR 33.
B. All fittings shall be fabricated from steel conforming to one of the following ASTM specifications: A 575, A 576, A 36 or A 635.
C. Substitutions
   Any substitutions of product or manufacturer must be approved in writing ten days prior to bid date, by Architect or Engineer of record.

2.03 FINISHES

A. Strut System components shall be finished in accordance with one of the following standards:
   1. PERMA-GREEN® II (GR)
      Rust inhibiting acrylic enamel paint applied by electro-deposition, after cleaning and phosphating, and thoroughly baked. Color is per Federal Standard 595a color number 14109 (dark limit V-). Finish to withstand minimum 400 hours salt spray when tested in accordance with ASTM B 117.
   2. ELECTRO-GALVANIZED (EG)
      Electrolytically zinc coated per ASTM B 633 Type III SC 1
   3. PRE-GALVANIZED (PG)
      Zinc coated by hot-dipped process prior to roll forming. The zinc weight shall be G90 conforming to ASTM A 653.
   4. HOT-DIPPED GALVANIZED (HG)
      Zinc coated after all manufacturing operations are complete. Coating shall conform to ASTM A 123 or A 153.
   5. SPECIAL COATING / MATERIAL
      (Describe as applicable)

PART 3 - EXECUTION

3.01 EXAMINATION

A. The installer shall inspect the work area prior to installation. If work area conditions are unsatisfactory, installation shall not proceed until satisfactory corrections are completed.

3.02 INSTALLATION

A. Installation shall be accomplished by a fully trained manufacturer authorized installer.
B. Set Strut System components into final position true to line, level and plumb, in accordance with approved shop drawings.
C. Anchor material firmly in place. Tighten all connections to their recommended torques.

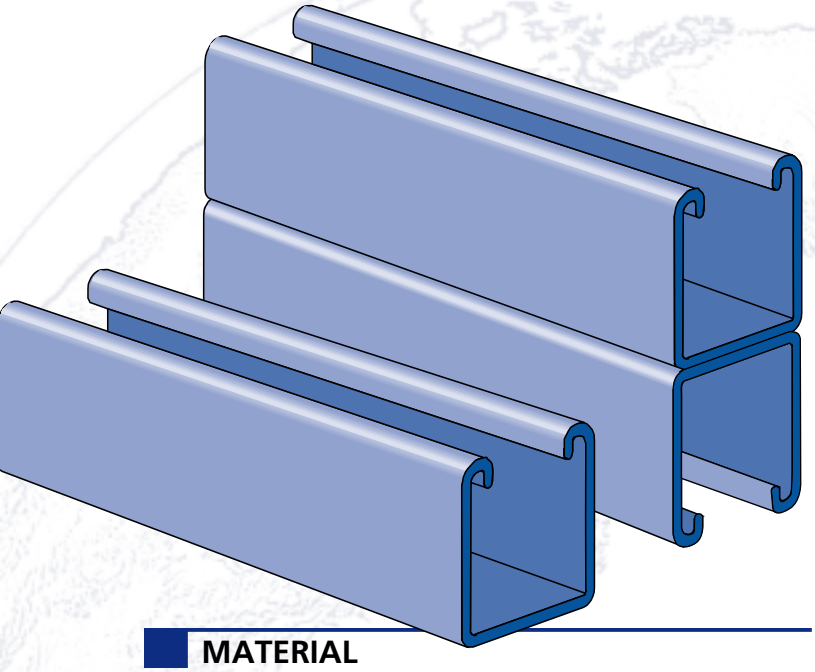
3.03 CLEANUP

A. Upon completion of this section of work, remove all protective wraps and debris. Repair any damage due to installation of this section of work.

3.04 PROTECTION

A. During installation, it shall be the responsibility of the installer to protect this work from damage.
B. Upon completion of this scope of work, it shall become the responsibility of the general contractor to protect this work from damage during the remainder of construction on the project and until substantial completion.

1⅝" CHANNEL



MATERIAL

Unistrut channels are accurately and carefully cold formed to size from low-carbon strip steel.

All spot-welded combination members, except P1001T, are welded 3" (76 mm) maximum on center.

STEEL: PLAIN

12 Ga. (2.7 mm), 14 Ga.(1.9 mm) and 16 Ga. (1.5 mm) ASTM A1011 SS GR 33.

STEEL: PRE-GALVANIZED

12 Ga. (2.7 mm), 14 Ga. (1.9 mm) and 16 Ga. (1.5mm) ASTM A653 GR 33.

For other materials, see Special Metals or Fiberglass sections.

FINISHES

All channels are available in:

- Perma Green II (GR).
- Pre-galvanized (PG), conforming to ASTM A653 G90.
- Hot-dipped galvanized (HG), conforming to ASTM A123.
- Plain (PL).

STANDARD LENGTHS

Standard lengths are 10 feet (3.05m) and 20 feet (6.10m). Tolerances are +⅛" (3.2 mm) to +½" (12.7 mm) to allow for cutting. Special lengths are available for a small cutting charge with a tolerance of ±⅛" (3.2mm).

CURVED CHANNEL

Many Unistrut 1⅝" (41mm) channel sections are available as curved pieces in both single and combination styles. Contact your local Unistrut Service Center or Unistrut Corporation for ordering information.

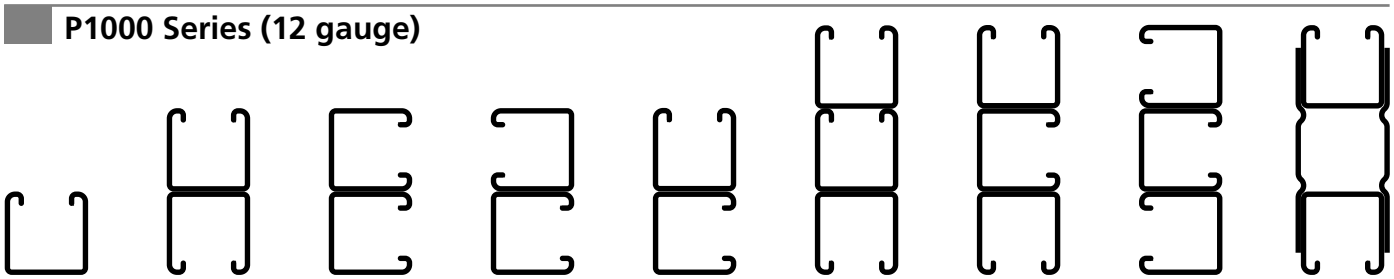
DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in millimeters and rounded to one decimal place.

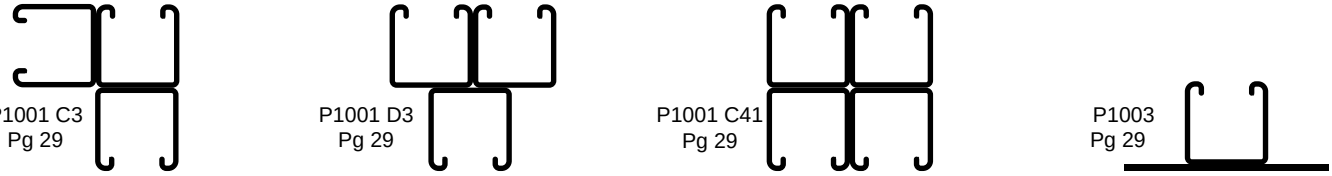
LOAD DATA

All beam and column load data pertains to carbon steel and stainless steel channels. Load tables and charts are constructed to be in accordance with the SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 1996 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE.

P1000 Series (12 gauge)

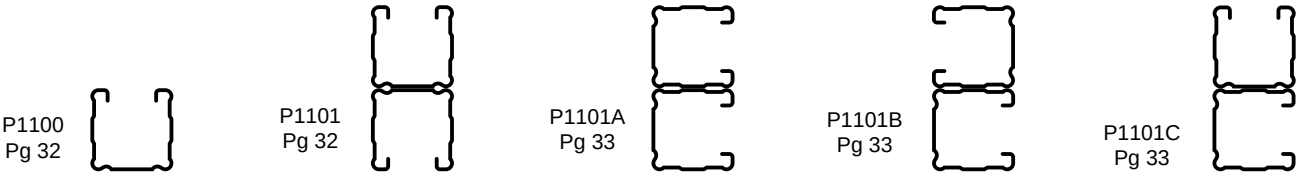


P1000 Pg 25
P1001 - Pg 25 P1001T - Pg 28
P1001A Pg 28
P1001B Pg 28
P1001C Pg 28
P1001 3 Pg 29
P1001 A3 Pg 29
P1001 B3 Pg 29
P1004A Pg 29



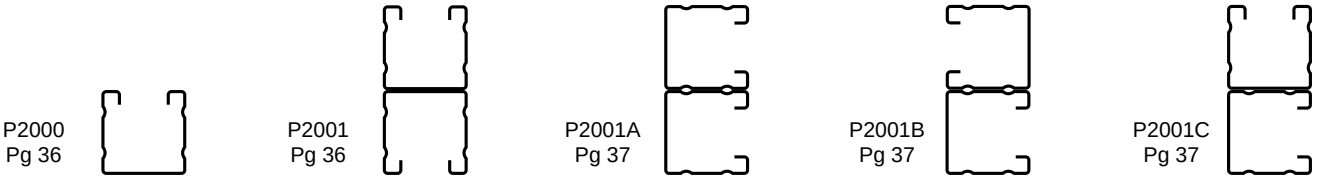
P1001 C3 Pg 29
P1001 D3 Pg 29
P1001 C41 Pg 29
P1003 Pg 29

P1100 Series (14 gauge)



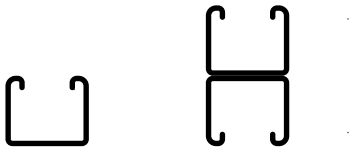
P1100 Pg 32
P1101 Pg 32
P1101A Pg 33
P1101B Pg 33
P1101C Pg 33

P2000 Series (16 gauge)



P2000 Pg 36
P2001 Pg 36
P2001A Pg 37
P2001B Pg 37
P2001C Pg 37

P3000 Series (12 gauge)



P3000 Pg 40
P3001 Pg 40

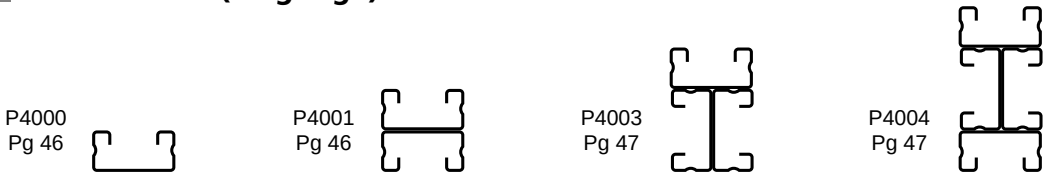
P3300 Series (12 gauge)

P3300 Pg 43
P3301 Pg 43

P4100 Series (14 gauge)

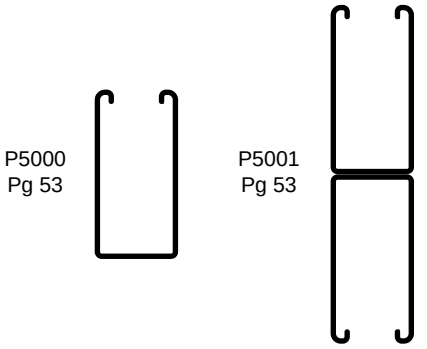
P4100 Pg 50
P4101 Pg 50

P4000 Series (16 gauge)

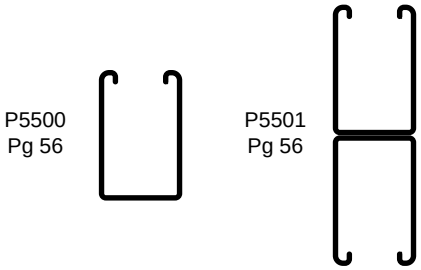


P4000 Pg 46
P4001 Pg 46
P4003 Pg 47
P4004 Pg 47

P5000 Series (12 gauge)

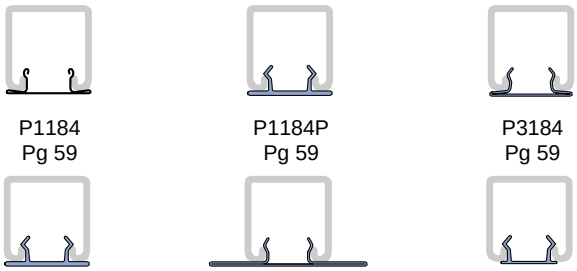


P5500 Series (12 gauge)

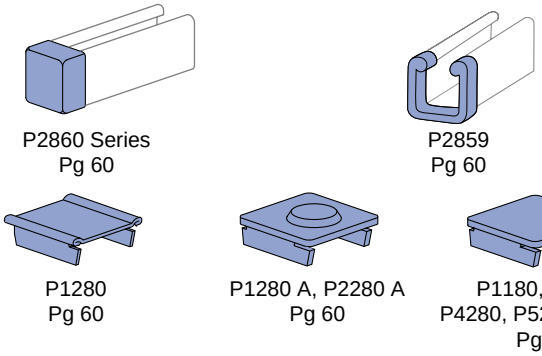


P9000 Series (12 gauge) Telestrut Channel

1⅝" Channel Closure Strips

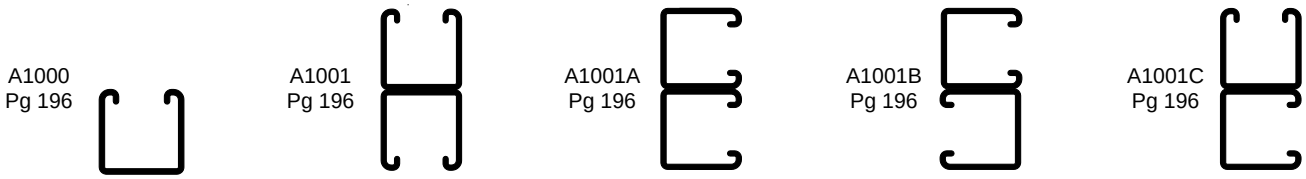


End Caps and Frame Caps



Alternate Framing Systems

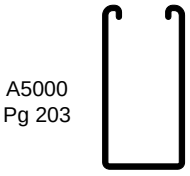
A1000 Series (14 gauge) – 1¼" Channel



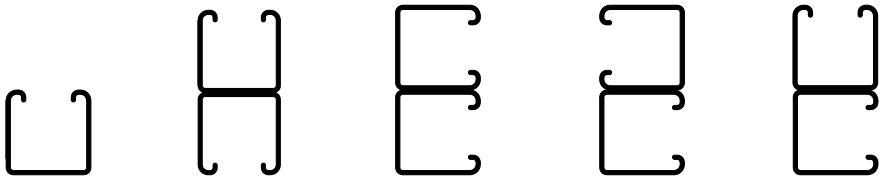
A3300 Series (14 gauge) 1¼" Channel

A4000 Series (19 gauge) 1¼" Channel

A5000 Series (14 gauge) 1¼" Channel



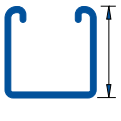
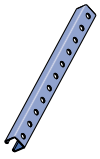
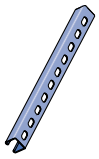
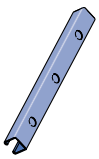
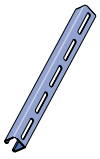
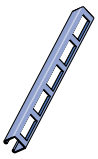
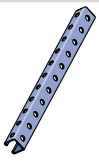
P6000 Series (19 gauge) – 13/16" Channel



P7000 Series (19 gauge) 13/16" Channel

Combinations not shown in catalog are available on special order. Consult factory for details.

Channel Selection Chart

	Channel Dimensions		Material & Thickness			Hole Pattern Styles					
	Width 	Height 	Steel	Stainless Steel	Alum.						
Channel	Width In *(mm)*	Height In *(mm)*	Steel gauge	Stainless gauge	Alum. In *(mm)*	HS	T	KO	SL	DS	H3
								..... *Steel Only*			
P1000	1⅝ *41*	1⅝ *41*	12 ga	12 ga	0.109 *2.8*	■	■	■	■	■	■
P1100	1⅝ *41*	1⅝ *41*	14 ga	14 ga	—	■	■	■	■	–	–
P2000	1⅝ *41*	1⅝ *41*	16 ga	—	—	■	■	■	■	–	–
P3000	1⅝ *41*	1⅜ *35*	12 ga	—	—	■	■	■	■	–	–
P3300	1⅝ *41*	⅞ *22*	12 ga	12 ga	—	■	■	–	■	–	–
P4000	1⅝ *41*	13/16 *21*	16 ga	16 ga	0.078 *2.0*	■	■	–	■	–	–
P4100	1⅝ *41*	13/16 *21*	14 ga	—	—	■	■	–	■	–	–
P5000	1⅝ *41*	3¼ *83*	12 ga	—	—	■	■	■	■	–	–
P5500	1⅝ *41*	2 7/16 *62*	12 ga	—	0.109 *2.8*	■	■	■	■	–	–

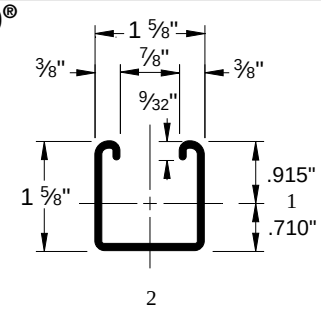
Channels & Combinations in Descending Order of Strength

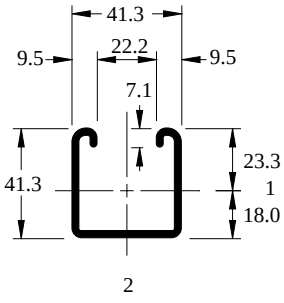
Channel	Area In² *(cm²)*	Weight lbs/ft *(kg/m)*	I In⁴ *(cm⁴)*	s In³ *(cm³)*	Allow. Moment In-lbs *(N•m)*
P5001	1.794 *11.6*	6.10 *9.1*	5.578 *232.2*	1.716 *28.1*	33,909 *3,831*
P1004A	1.978 *12.8*	6.70 *10.0*	4.079 *169.8*	1.673 *27.4*	42,075 *4,754*
P5501	1.453 *9.4*	4.94 *7.4*	2.811 *117.0*	1.153 *18.9*	28,998 *3,276*
P1001C41	2.223 *14.3*	7.60 *11.2*	1.860 *77.4*	1.145 *18.8*	28,796 *3,254*
P5000	0.897 *5.8*	3.05 *4.5*	1.099 *45.7*	0.628 *10.3*	15,794 *1,784*
P1001	1.112 *7.2*	3.80 *5.6*	0.930 *38.7*	0.572 *9.4*	14,386 *1,625*
P1101	0.834 *5.4*	2.84 *4.2*	0.741 *30.8*	0.456 *7.5*	11,468 *1,296*
P3001	1.007 *6.5*	3.40 *5.1*	0.593 *24.7*	0.431 *7.1*	10,840 *1,225*
P5500	0.726 *4.7*	2.47 *3.7*	0.523 *21.8*	0.391 *6.4*	9,834 *1,111*
P2001	0.681 *4.4*	2.32 *3.4*	0.616 *25.6*	0.379 *6.2*	9,532 *1,077*
P9200	0.489 *3.2*	2.23 *3.3*	0.278 *11.6*	0.297 *4.9*	7,470 *844*
A5000	0.492 *3.2*	1.67 *2.5*	0.359 *14.9*	0.266 *4.4*	6,690 *756*
A1001	0.610 *3.9*	2.08 *3.1*	0.303 *12.6*	0.242 *4.0*	6,086 *688*
P3301	0.797 *5.1*	2.70 *4.0*	0.177 *7.4*	0.202 *3.3*	5,080 *574*
P1000	0.556 *3.6*	1.90 *2.8*	0.185 *7.7*	0.202 *3.3*	5,080 *574*
P9000	0.384 *2.5*	2.05 *3.1*	0.164 *6.8*	0.203 *3.3*	5,060 *572*

Combinations not shown in catalog are available on special order. Consult factory for more details.

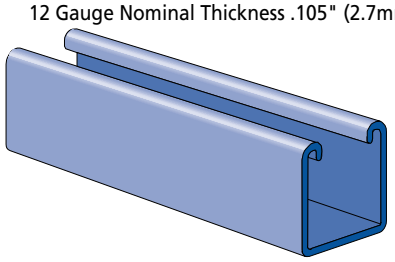
Channel	Area In² *(cm²)*	Weight lbs/ft *(kg/m)*	I In⁴ *(cm⁴)*	s In³ *(cm³)*	Allow. Moment In-lbs *(N•m)*
P1100	0.417 *2.7*	1.42 *2.1*	0.149 *6.2*	0.166 *2.7*	4,175 *472*
P3000	0.503 *3.2*	1.70 *2.5*	0.121 *5.0*	0.154 *2.5*	3,873 *438*
P4101	0.574 *3.7*	1.94 *2.9*	0.114 *4.7*	0.141 *2.3*	3,546 *401*
P2000	0.340 *2.2*	1.16 *1.7*	0.124 *5.2*	0.140 *2.3*	3,521 *398*
P4001	0.478 *3.1*	1.64 *2.4*	0.101 *4.2*	0.125 *2.0*	3,144 *355*
A3301	0.460 *3.0*	1.56 *2.3*	0.078 *3.2*	0.103 *1.7*	2,590 *293*
A1000	0.305 *2.0*	1.04 *1.5*	0.061 *2.5*	0.086 *1.4*	2,163 *244*
P3300	0.398 *2.6*	1.35 *2.0*	0.037 *1.5*	0.072 *1.2*	1,811 *205*
P6001	0.211 *1.4*	0.72 *1.1*	0.044 *1.8*	0.054 *0.9*	1,358 *153*
P4100	0.287 *1.9*	0.97 *1.5*	0.025 *1.0*	0.053 *0.9*	1,333 *151*
A4001	0.245 *1.6*	0.90 *1.2*	0.031 *1.3*	0.049 *0.8*	1,232 *139*
P4000	0.239 *1.5*	0.82 *1.2*	0.023 *1.0*	0.048 *0.8*	1,207 *136*
A3300	0.230 *1.5*	0.78 *1.2*	0.017 *0.7*	0.038 *0.6*	956 *108*
P6000	0.105 *0.7*	0.36 *0.5*	0.009 *0.4*	0.020 *0.3*	503 *57*
A4000	0.123 *0.8*	0.45 *0.6*	0.007 *0.3*	0.019 *0.3*	478 *54*
P7001	0.146 *0.9*	0.50 *0.7*	0.007 *0.3*	0.017 *0.3*	428 *48*
P7000	0.073 *0.5*	0.25 *0.4*	0.002 *0.1*	0.007 *0.1*	176 *20*

P1000®

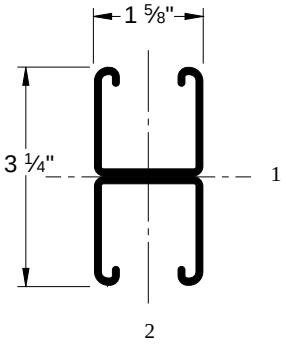


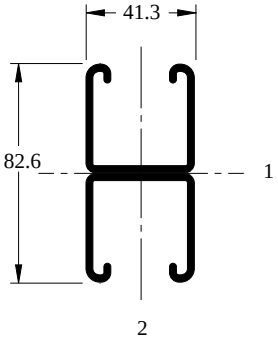


Wt/100 Ft:190 Lbs (283 kg/100 m)
Allowable Moment 5,080 In-Lbs (570 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

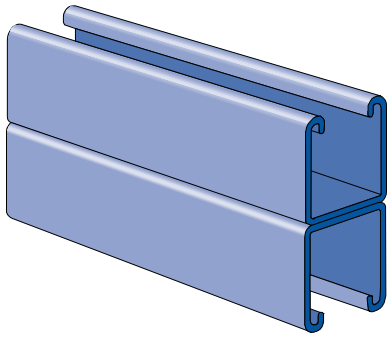


P1001





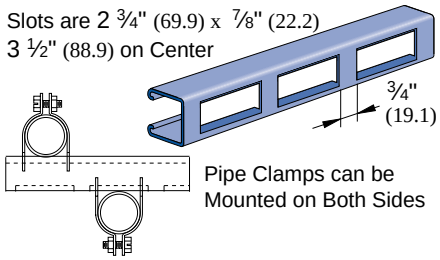
Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 14,390 In-Lbs (1,630 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



P1000 DS

Wt/100 Ft: 173 Lbs (257 kg/100 m)

Slots are 2 3/4" (69.9) x 7/8" (22.2)
3 1/2" (88.9) on Center

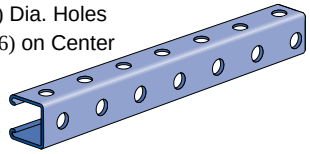


Pipe Clamps can be Mounted on Both Sides

P1000 H3

Wt/100 Ft: 175 Lbs (260 kg/100 m)

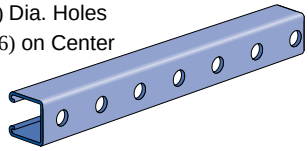
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P1000 HS

Wt/100 Ft:185 Lbs (275 kg/100 m)

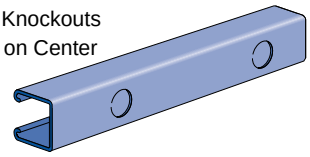
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P1000 KO

Wt/100 Ft: 190 Lbs (283 kg/100 m)

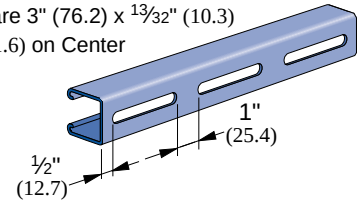
7/8" (22.2) Knockouts
6" (152.4) on Center



P1000 SL

Wt/100 Ft: 185 Lbs (275 kg/100 m)

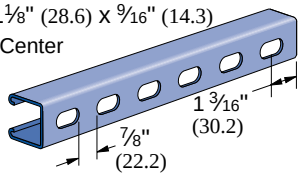
Slots are 3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P1000 T

Wt/100 Ft: 185 Lbs (275 kg/100 m)

Slots are 1 1/8" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010

P1008T
P1006T1420
P1010T

P1024
P1012S
P1023S

P1012
P1023
P1024S

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P1000

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
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	510
60	680	0.35	650	490	320
72	560	0.50	450	340	220
84	480	0.68	330	250	170
96	420	0.89	250	190	130
108	380	1.13	200	150	100
120	340	1.40	160	120	80
144	280	2.01	110	80	60
168	240	2.74	80	60	40
192	210	3.57	60	50	NR
216	190	4.52	50	40	NR
240	170	5.58	40	NR	NR

BEAM LOADING – P1001

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
24	3,130 *	0.03	3,130 *	3,130 *	3,130 *
36	3,130 *	0.07	3,130 *	3,130 *	3,130 *
48	2,400	0.13	2,400	2,400	2,400
60	1,920	0.20	1,920	1,920	1,630
72	1,600	0.28	1,600	1,600	1,130
84	1,370	0.39	1,370	1,240	830
96	1,200	0.50	1,200	950	640
108	1,070	0.64	1,000	750	500
120	960	0.79	810	610	410
144	800	1.13	560	420	280
168	690	1.54	410	310	210
192	600	2.01	320	240	160
216	530	2.55	250	190	130
240	480	3.15	200	150	100

COLUMN LOADING – P1000

Unbraced Height In	Maximum 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	3,450	10,750	9,900	8,770	7,730
36	3,050	8,910	7,730	6,370	5,280
48	2,660	7,250	5,980	4,660	3,770
60	2,290	5,890	4,660	3,600	2,940
72	2,000	4,800	3,770	2,940	2,380
84	1,760	4,010	3,170	2,460	1,970
96	1,570	3,450	2,730	2,090	1,650
108	1,410	3,020	2,380	1,800	**
120	1,270	2,680	2,090	**	**

COLUMN LOADING – P1001

Unbraced Height In	Maximum 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	25,060	24,620	23,900	23,050
36	6,230	24,000	23,050	21,570	19,890
48	5,950	22,590	21,030	18,690	16,170
60	5,620	20,890	18,690	15,540	12,400
72	5,240	18,990	16,170	12,400	8,960
84	4,830	16,970	13,640	9,470	6,580
96	4,390	14,900	11,200	7,250	5,040
108	3,930	12,860	8,960	5,730	3,980
120	3,510	10,910	7,250	4,640	**

ELEMENTS OF SECTION P1000/P1001

Parameter	P1000	P1001
Area of Section	0.556 In^2	1.112 In^2
Axis 1-1		
Moment of Inertia (I)	0.185 In^4	0.930 In^4
Section Modulus (S)	0.202 In^3	0.572 In^3
Radius of Gyration (r)	0.577 In	0.915 In
Axis 2-2		
Moment of Inertia (I)	0.236 In^4	0.472 In^4
Section Modulus (S)	0.290 In^3	0.580 In^3
Radius of Gyration (r)	0.651 In	0.651 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

NR = Not Recommended.

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"DS" Series	**70%**	**"T" Series**	**85%**
"KO" Series	**95%**	**"H3" Series**	**90%**
"SL" Series	**85%**	**"HS" Series**	**90%**

BEAM LOADING – P1000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	780	1	780	780	780
750	624	2	624	624	606
1,000	468	4	468	468	341
1,250	375	6	375	327	218
1,500	312	9	303	227	151
1,750	268	12	223	167	111
2,000	234	15	170	128	85
2,500	187	24	109	82	55
3,000	156	34	76	57	38
3,500	134	47	56	42	28
4,000	117	61	43	32	21
4,500	104	77	34	25	17
5,000	94	95	27	20	NR
6,000	78	137	19	NR	NR

BEAM LOADING – P1001 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	1420 *	1	1420 *	1420 *	1420 *
750	1420 *	1	1420 *	1420 *	1420 *
1,000	1326	2	1326	1326	1326
1,250	1061	3	1061	1061	1061
1,500	884	5	884	884	761
1,750	758	7	758	758	559
2,000	663	9	663	642	428
2,500	530	13	530	411	274
3,000	442	19	381	286	190
3,500	379	26	280	210	140
4,000	332	34	214	161	107
4,500	295	44	169	127	85
5,000	265	54	137	103	69
6,000	221	77	95	71	48

COLUMN LOADING – P1000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,571	4,904	4,525	4,019	3,548
750	1,485	4,493	4,019	3,437	2,935
1,000	1,334	3,818	3,261	2,645	2,154
1,250	1,187	3,218	2,645	2,052	1,664
1,500	1,051	2,714	2,154	1,664	1,355
1,750	937	2,298	1,799	1,399	1,136
2,000	844	1,960	1,547	1,202	968
2,500	698	1,521	1,202	920	**
2,750	638	1,366	1,075	815	**

COLUMN LOADING – P1001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	2,919	11,381	11,185	10,870	10,496
750	2,878	11,168	10,870	10,395	9,842
1,000	2,792	10,721	10,218	9,437	8,563
1,250	2,686	10,173	9,437	8,335	7,161
1,500	2,562	9,541	8,563	7,161	5,755
1,750	2,425	8,844	7,634	5,985	4,436
2,000	2,275	8,104	6,687	4,866	3,396
2,500	1,951	6,569	4,866	3,130	2,174
2,750	1,779	5,812	4,042	2,587	1,797

ELEMENTS OF SECTION P1000/P1001 *(METRIC)*

Parameter	P1000	P1001
Area of Section	3.59 cm^2	7.17 cm^2
Axis 1-1		
Moment of Inertia (I)	7.7 cm^4	38.7 cm^4
Section Modulus (S)	3.31 cm^3	9.37 cm^3
Radius of Gyration (r)	1.5 cm	2.3 cm
Axis 2-2		
Moment of Inertia (I)	9.8 cm^4	19.6 cm^4
Section Modulus (S)	4.75 cm^3	9.50 cm^3
Radius of Gyration (r)	1.7 cm	1.7 cm

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

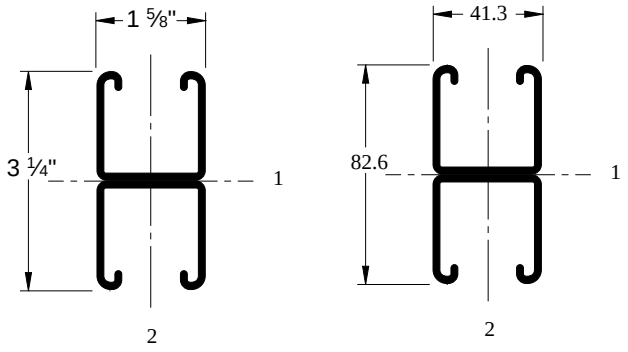
NR = Not Recommended.

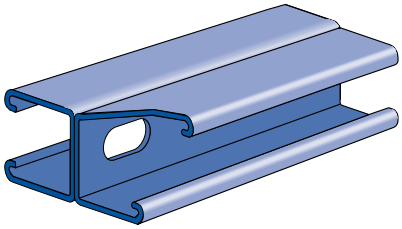
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"DS" Series	**70%**	**"T" Series**	**85%**
"KO" Series	**95%**	**"H3" Series**	**90%**
"SL" Series	**85%**	**"HS" Series**	**90%**

P1001 T

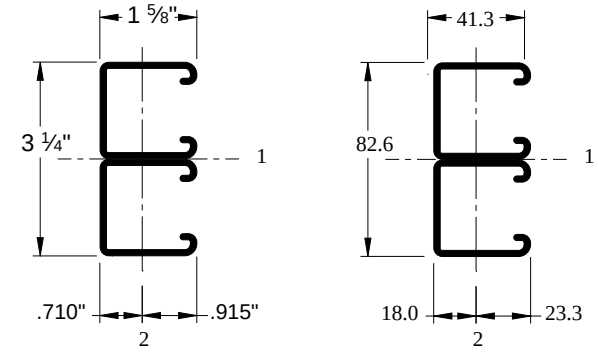
Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 14,390 In-Lbs (1,630 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

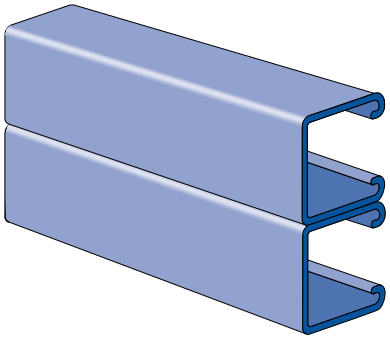




P1001 A

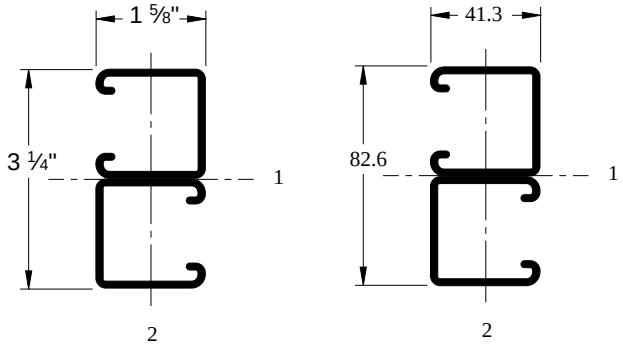
Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 18,660 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

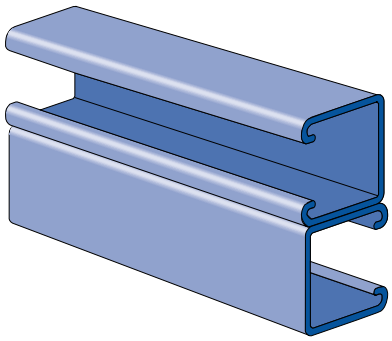




P1001 B

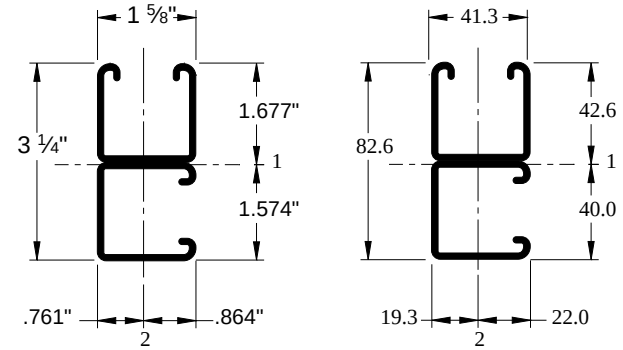
Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 18,660 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

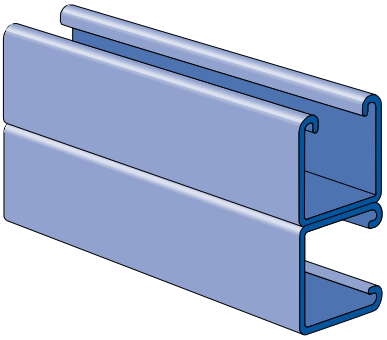




P1001 C

Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 15,970 In-Lbs (1,800 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

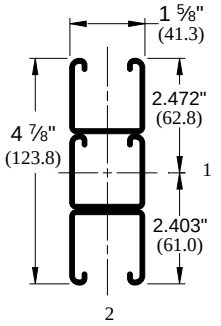


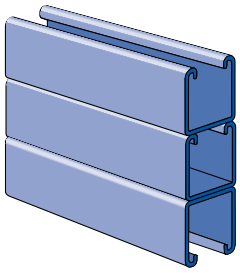


Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

P1001 3

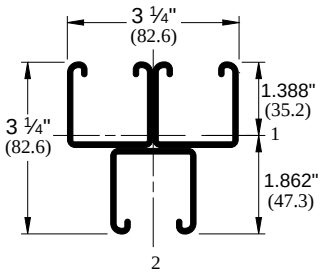
Wt/100 Ft: 570 Lbs (848 kg/100 m)
Allowable Moment 31,890 In-Lbs (3,600 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

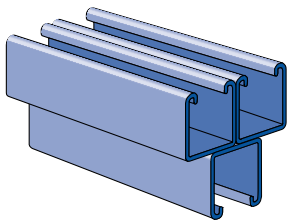




P1001 D3

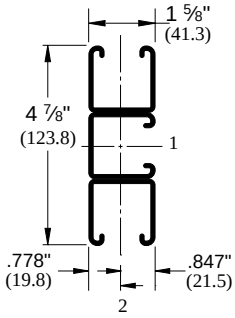
Wt/100 Ft: 570 Lbs (848 kg/100 m)
Allowable Moment 17,580 In-Lbs (1,990 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

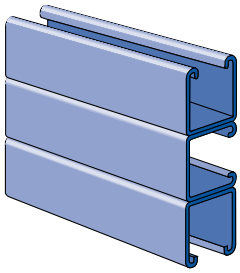




P1001 A3

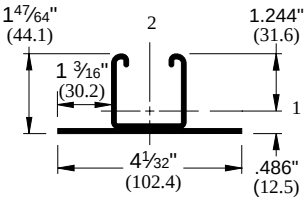
Wt/100 Ft: 570 Lbs (848 kg/100 m)
Allowable Moment 32,820 In-Lbs (3,710 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

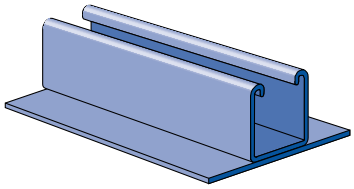




P1003

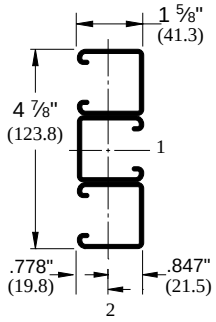
Wt/100 Ft: 332 Lbs (494 kg/100 m)
Allowable Moment 6,560 In-Lbs (740 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

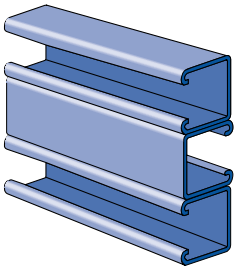




P1001 B3

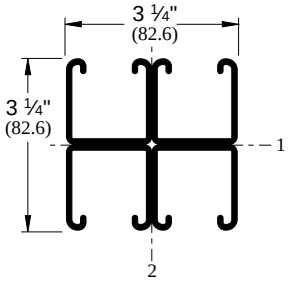
Wt/100 Ft: 570 Lbs (848 kg/100 m)
Allowable Moment 37,570 In-Lbs (4,240 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

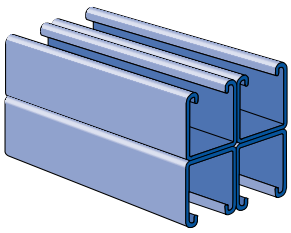




P1001 C41

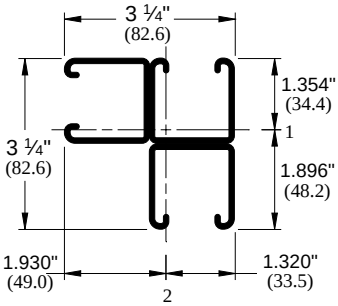
Wt/100 Ft: 760 Lbs (1131 kg/100 m)
Allowable Moment 28,800 In-Lbs (3,250 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

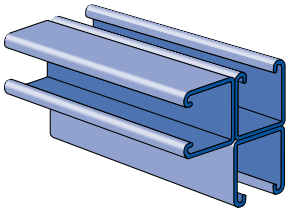




P1001 C3

Wt/100 Ft: 570 Lbs (848 kg/100 m)
Allowable Moment 18,710 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

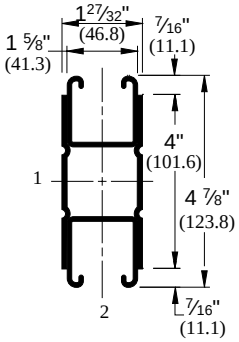


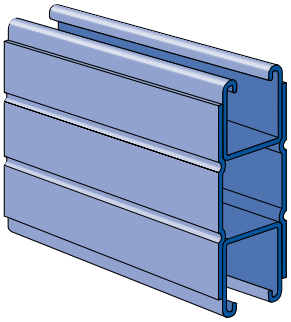


Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

P1004 A

Wt/100 Ft: 670 Lbs (997 kg/100 m)
Allowable Moment 42,080 In-Lbs (4,750 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)





Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P1001 C41

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
24	6,270 *	0.03	6,270 *	6,270 *	6,270 *
36	6,270 *	0.07	6,270 *	6,270 *	6,270 *
48	4,800	0.13	4,800	4,800	4,800
60	3,840	0.20	3,840	3,840	3,250
72	3,200	0.28	3,200	3,200	2,260
84	2,740	0.39	2,740	2,490	1,660
96	2,400	0.50	2,400	1,910	1,270
108	2,130	0.64	2,010	1,510	1,000
120	1,920	0.79	1,630	1,220	810
144	1,600	1.13	1,130	850	560
168	1,370	1.54	830	620	410
192	1,200	2.02	640	480	320
216	1,070	2.55	500	380	250
240	960	3.15	410	300	200

BEAM LOADING – P1004 A

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
24	9,350 *	0.02	9,350 *	9,350 *	9,350 *
36	9,350	0.05	9,350	9,350	9,350
48	7,010	0.08	7,010	7,010	7,010
60	5,610	0.13	5,610	5,610	5,610
72	4,680	0.19	4,680	4,680	4,680
84	4,010	0.26	4,010	4,010	3,640
96	3,510	0.34	3,510	3,510	2,790
108	3,120	0.42	3,120	3,120	2,200
120	2,810	0.52	2,810	2,670	1,780
144	2,340	0.76	2,340	1,860	1,240
168	2,000	1.03	1,820	1,360	910
192	1,750	1.34	1,390	1,040	700
216	1,560	1.70	1,100	830	550
240	1,400	2.10	890	670	450

COLUMN LOADING – P1001 C41

Unbraced Height In	Maximum 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	12,910	50,480	49,820	48,780	47,610
36	12,560	48,920	47,610	45,710	43,730
48	12,130	46,990	45,050	42,420	39,930
60	11,640	44,890	42,420	39,340	35,690
72	11,120	42,750	39,930	35,690	30,280
84	10,570	40,690	37,450	31,180	24,930
96	9,930	38,770	33,900	26,690	19,890
108	9,270	36,360	30,280	22,370	15,720
120	8,620	33,450	26,690	18,330	12,730

COLUMN LOADING – P1004 A

Unbraced Height In	Maximum 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	11,390	36,960	33,980	30,430	27,500
36	10,510	30,840	27,500	24,180	21,870
48	9,780	26,260	23,320	20,720	19,070
60	9,240	23,120	20,720	18,750	17,540
72	8,830	20,980	19,070	17,540	16,660
84	8,520	19,510	17,970	16,770	15,660
96	8,260	18,470	17,190	16,280	11,990
108	8,050	17,690	16,660	13,640	9,470
120	7,870	17,110	16,280	11,050	7,670

ELEMENTS OF SECTION P1001 C41/ P1004 A

Parameter	P1001 C41	P1004 A
Area of Section	2.223 In^2	1.978 In^2
Axis 1-1		
Moment of Inertia (I)	1.860 In^4	4.079 In^4
Section Modulus (S)	1.145 In^3	1.673 In^3
Radius of Gyration (r)	0.915 In	1.436 In
Axis 2-2		
Moment of Inertia (I)	2.411 In^4	1.121 In^4
Section Modulus (S)	1.484 In^3	1.204 In^3
Radius of Gyration (r)	1.041 In	0.753 In

*Load limited by spot weld shear.

Notes:

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.

BEAM LOADING – P1001 C41 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	2844 *	1	2844 *	2844 *	2844 *
750	2844 *	1	2844 *	2844 *	2844 *
1,000	2654	2	2654	2654	2654
1,250	2123	3	2123	2123	2123
1,500	1769	5	1769	1769	1523
1,750	1517	7	1517	1517	1119
2,000	1327	9	1327	1285	856
2,500	1062	13	1062	822	548
3,000	885	19	761	571	381
3,500	758	26	559	420	280
4,000	664	34	428	321	214
4,500	590	44	338	254	169
5,000	531	54	274	206	137
6,000	442	77	190	143	95

BEAM LOADING – P1004 A *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	4241 *	1	4241 *	4241 *	4241 *
750	4241 *	1	4241	4241	4241
1,000	3878	1	3878	3878	3878
1,250	3102	2	3102	3102	3102
1,500	2585	3	2585	2585	2585
1,750	2216	4	2216	2216	2216
2,000	1939	6	1939	1939	1878
2,500	1551	9	1551	1551	1202
3,000	1293	13	1293	1252	835
3,500	1108	18	1108	920	613
4,000	970	23	939	704	470
4,500	862	29	742	557	371
5,000	776	36	601	451	301
6,000	646	52	417	313	209

COLUMN LOADING – P1001 C41 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	5,859	22,918	22,624	22,166	21,649
750	5,789	22,598	22,166	21,513	20,803
1,000	5,647	21,957	21,281	20,314	19,336
1,250	5,480	21,222	20,314	19,096	17,950
1,500	5,297	20,437	19,336	17,950	16,379
1,750	5,104	19,640	18,396	16,708	14,371
2,000	4,907	18,859	17,523	15,045	12,358
2,500	4,444	17,420	15,045	11,700	8,585
2,750	4,200	16,462	13,697	10,103	7,095

COLUMN LOADING – P1004 A *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	5,182	16,859	15,521	13,920	12,588
750	4,979	15,414	13,920	12,297	11,070
1,000	4,667	13,331	11,848	10,431	9,473
1,250	4,410	11,742	10,431	9,285	8,561
1,500	4,207	10,579	9,473	8,561	7,999
1,750	4,048	9,734	8,814	8,077	7,639
2,000	3,921	9,114	8,348	7,741	7,406
2,500	3,726	8,300	7,741	7,346	5,173
2,750	3,650	8,018	7,551	6,157	4,275

ELEMENTS OF SECTION P1001 C41/ P1004 A *(METRIC)*

Parameter	P1001 C41	P1004 A
Area of Section	14.34 cm^2	12.76 cm^2
Axis 1-1		
Moment of Inertia (I)	77.4 cm^4	169.8 cm^4
Section Modulus (S)	18.76 cm^3	27.42 cm^3
Radius of Gyration (r)	2.3 cm	3.6 cm
Axis 2-2		
Moment of Inertia (I)	100.4 cm^4	46.7 cm^4
Section Modulus (S)	24.32 cm^3	19.73 cm^3
Radius of Gyration (r)	2.6 cm	1.9 cm

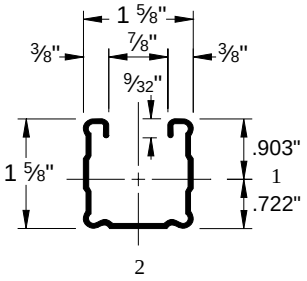
*Load limited by spot weld shear.

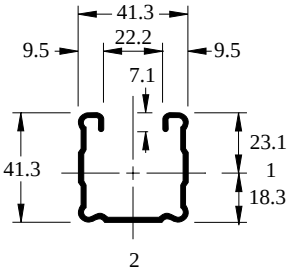
Notes:

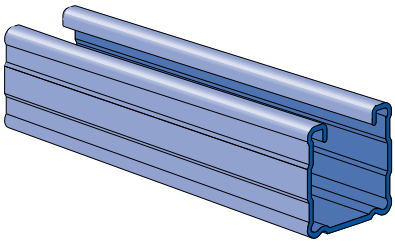
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.

P1100

Wt/100 Ft: 142 Lbs (211 kg/100 m)
Allowable Moment 4,170 In-Lbs (470 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

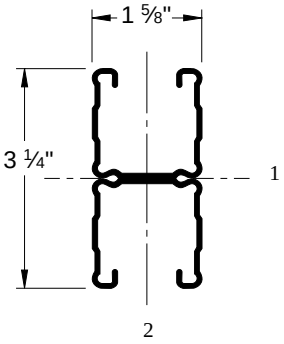


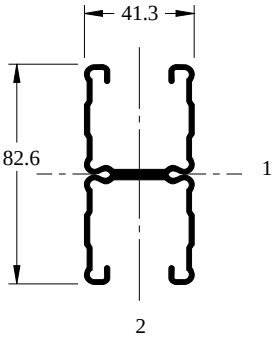


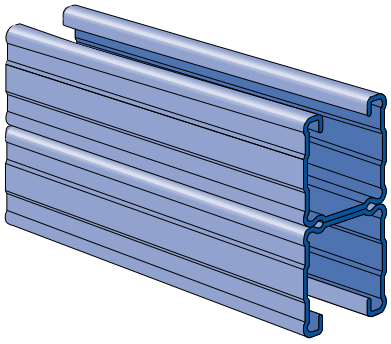


P1101

Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 11,470 In-Lbs (1,300 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)



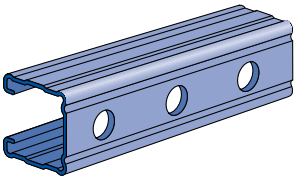




P1100 HS

Wt/100 Ft: 136 Lbs (202 kg/100 m)

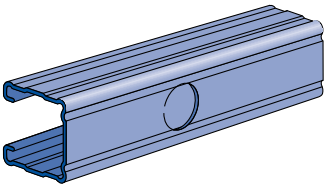
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P1100 KO

Wt/100 Ft: 140 Lbs (208 kg/100 m)

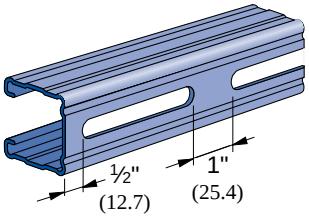
7/8" (22.2) Knockouts
6" (152.4) on Center



P1100 SL

Wt/100 Ft: 136 Lbs (202 kg/100 m)

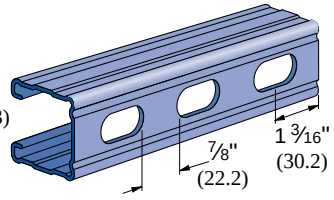
Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P1100 T

Wt/100 Ft: 136 Lbs (202 kg/100 m)

Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010

P1008T
P1006T1420
P1010T

P1024
P1012S
P1023S

P1012
P1023
P1024S

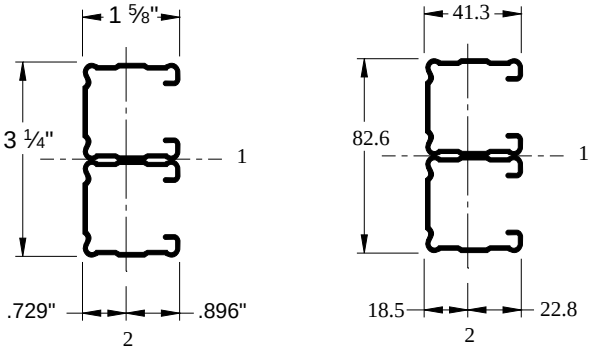
P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

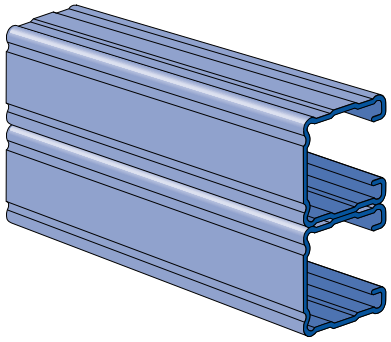
P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

P1101 A

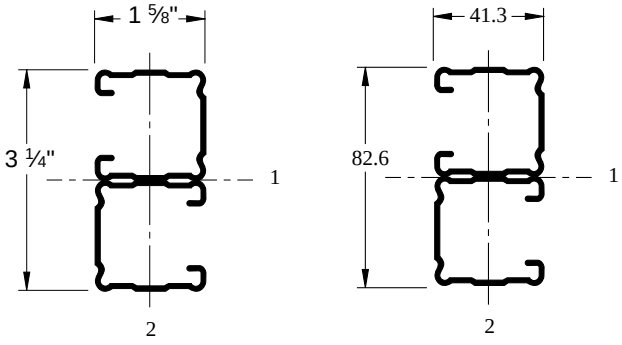
Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 14,180 In-Lbs (1,600 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

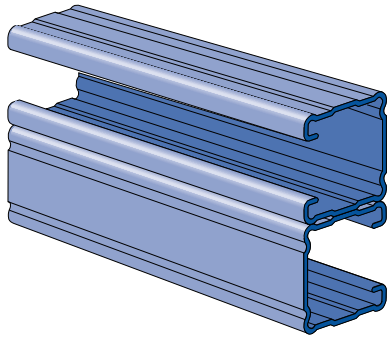




P1101 B

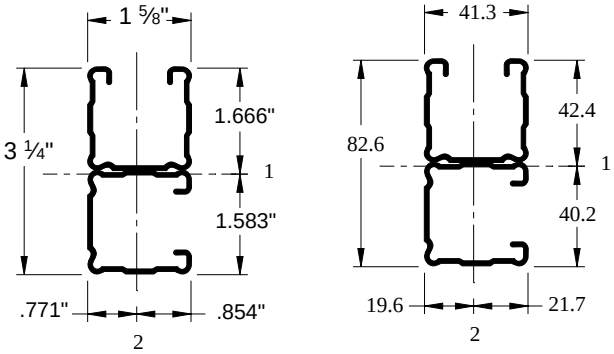
Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 14,180 In-Lbs (1,600 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

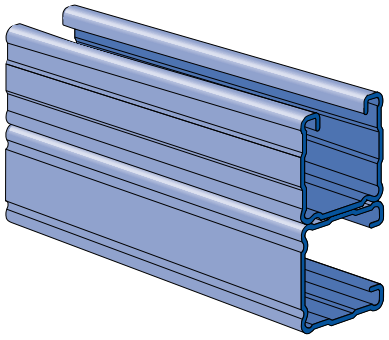




P1101 C

Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 12,500 In-Lbs (1,410 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)





Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P1100

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
24	1,390	0.06	1,390	1,390	1,390
36	930	0.13	930	930	720
48	700	0.23	700	610	410
60	560	0.36	520	390	260
72	460	0.51	360	270	180
84	400	0.70	270	200	130
96	350	0.91	200	150	100
108	310	1.15	160	120	80
120	280	1.42	130	100	70
144	230	2.05	90	70	50
168	200	2.79	70	50	30
192	170	3.65	50	40	30
216	150	4.62	40	30	NR
240	140	5.70	30	NR	NR

BEAM LOADING – P1101

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
24	1,850 *	0.03	1,850 *	1,850 *	1,850 *
36	1,850 *	0.07	1,850 *	1,850 *	1,850 *
48	1,850 *	0.13	1,850 *	1,850 *	1,850 *
60	1,530	0.20	1,530	1,530	1,300
72	1,270	0.28	1,270	1,270	900
84	1,090	0.39	1,090	990	660
96	960	0.50	960	760	510
108	850	0.64	800	600	400
120	760	0.79	650	490	320
144	640	1.13	450	340	220
168	550	1.54	330	250	170
192	480	2.01	250	190	130
216	420	2.55	200	150	100
240	380	3.15	160	120	80

COLUMN LOADING – P1100

Unbraced Height In	Maximum 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	2,770	8,120	7,450	6,540	5,660
36	2,410	6,650	5,660	4,480	3,520
48	2,040	5,240	4,140	3,040	2,390
60	1,690	4,050	3,040	2,270	1,830
72	1,440	3,140	2,390	1,830	1,480
84	1,260	2,560	1,980	1,530	1,240
96	1,120	2,170	1,700	1,310	1,060
108	1,000	1,880	1,480	1,140	**
120	910	1,670	1,310	**	*

COLUMN LOADING – P1101

Unbraced Height In	Maximum 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	5,050	18,820	18,500	17,980	17,360
36	4,890	18,050	17,360	16,280	15,050
48	4,670	17,020	15,880	14,170	12,320
60	4,420	15,780	14,170	11,850	9,530
72	4,120	14,390	12,320	9,530	6,950
84	3,800	12,910	10,450	7,350	5,100
96	3,460	11,380	8,630	5,630	3,910
108	3,100	9,870	6,950	4,450	3,090
120	2,770	8,420	5,630	3,600	**

ELEMENTS OF SECTION P1100/P1101

Parameter	P1100	P1101
Area of Section	0.417 In^2	0.834 In^2
Axis 1-1		
Moment of Inertia (I)	0.149 In^4	0.741 In^4
Section Modulus (S)	0.166 In^3	0.456 In^3
Radius of Gyration (r)	0.597 In	0.942 In
Axis 2-2		
Moment of Inertia (I)	0.183 In^4	0.366 In^4
Section Modulus (S)	0.225 In^3	0.451 In^3
Radius of Gyration (r)	0.662 In	0.662 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

NR = Not Recommended.

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

BEAM LOADING – P1100 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	641	1	641	641	641
750	513	2	513	513	488
1,000	385	4	385	385	274
1,250	308	6	308	263	176
1,500	257	9	244	183	122
1,750	220	12	179	134	90
2,000	192	16	137	103	69
2,500	154	24	88	66	44
3,000	128	35	61	46	31
3,500	110	48	45	34	22
4,000	96	62	34	26	17
4,500	86	79	27	20	14
5,000	77	97	22	17	NR
6,000	64	140	15	11	NR

BEAM LOADING – P1101 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	839 *	1	839 *	839 *	839 *
750	839 *	1	839 *	839 *	839 *
1,000	839 *	2	839 *	839 *	839 *
1,250	839 *	3	839	839	839
1,500	705	5	705	705	607
1,750	604	7	604	604	446
2,000	529	9	529	512	341
2,500	423	13	423	328	218
3,000	352	19	303	227	152
3,500	302	26	223	167	111
4,000	264	34	171	128	85
4,500	235	44	135	101	67
5,000	211	54	109	82	55
6,000	176	77	76	57	38

COLUMN LOADING – P1100 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,262	3,701	3,407	2,999	2,603
750	1,186	3,382	2,999	2,508	2,071
1,000	1,047	2,831	2,355	1,817	1,407
1,250	907	2,318	1,817	1,332	1,052
1,500	778	1,877	1,407	1,052	845
1,750	681	1,516	1,148	873	707
2,000	605	1,264	972	747	606
2,500	495	954	747	579	466
2,750	453	852	670	517	**

COLUMN LOADING – P1101 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	2,291	8,545	8,403	8,174	7,902
750	2,259	8,390	8,174	7,828	7,425
1,000	2,192	8,065	7,699	7,130	6,490
1,250	2,109	7,666	7,130	6,323	5,459
1,500	2,013	7,205	6,490	5,459	4,419
1,750	1,906	6,696	5,808	4,590	3,441
2,000	1,790	6,153	5,110	3,757	2,634
2,500	1,538	5,022	3,757	2,428	1,686
2,750	1,403	4,462	3,135	2,006	1,393

ELEMENTS OF SECTION P1100/P1101 *(METRIC)*

Parameter	P1100	P1101
Area of Section	2.69 cm^2	5.38 cm^2
Axis 1-1		
Moment of Inertia (I)	6.2 cm^4	30.8 cm^4
Section Modulus (S)	2.72 cm^3	7.47 cm^3
Radius of Gyration (r)	1.5 cm	2.4 cm
Axis 2-2		
Moment of Inertia (I)	7.6 cm^4	15.2 cm^4
Section Modulus (S)	3.69 cm^3	7.39 cm^3
Radius of Gyration (r)	1.7 cm	1.7 cm

Notes:

* Load limited by spot weld shear.

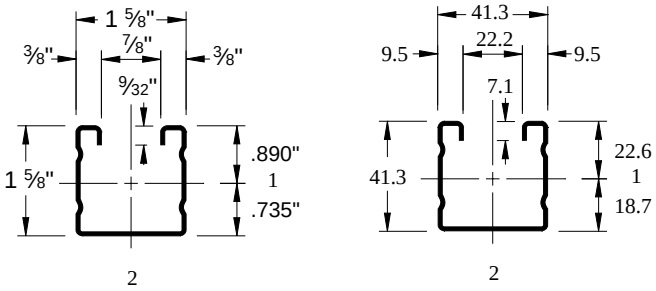
** $^{KL}/_{r}$ > 200

NR = Not Recommended.

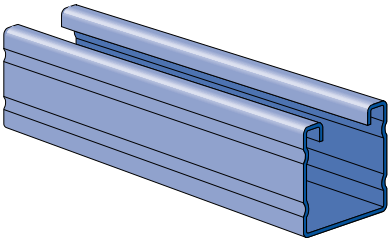
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

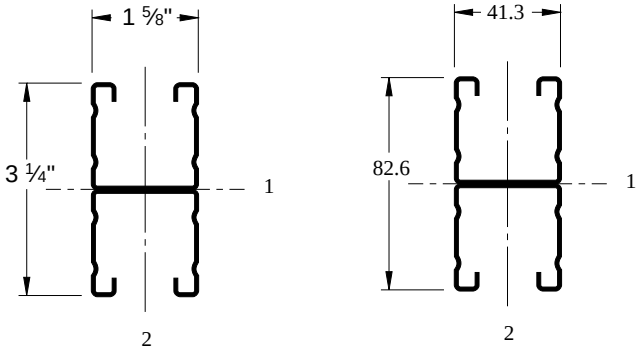
P2000



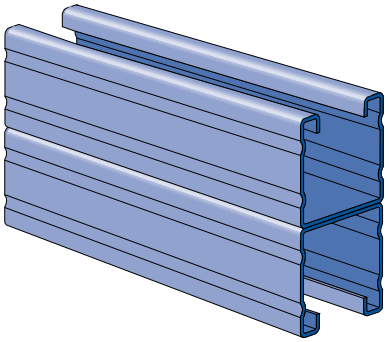
Wt/100 Ft: 116 Lbs (173 kg/100 m)
Allowable Moment 3,520 In-Lbs (570 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)



P2001



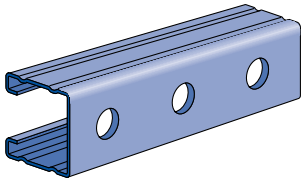
Wt/100 Ft: 232 Lbs (345 kg/100 m)
Allowable Moment 9,530 In-Lbs (1,080 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)



P2000 HS

Wt/100 Ft: 113 Lbs (168 kg/100 m)

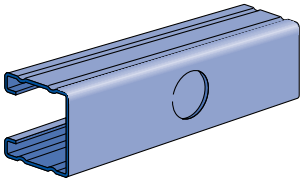
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P2000 KO

Wt/100 Ft: 117 Lbs (174 kg/100 m)

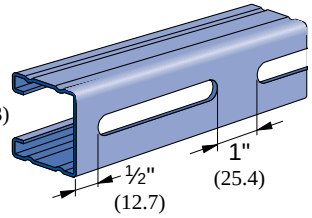
7/8" (22.2) Knockouts
6" (152.4) on Center



P2000 SL

Wt/100 Ft: 113 Lbs (168 kg/100 m)

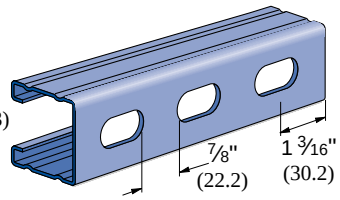
Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P2000 T

Wt/100 Ft: 113 Lbs (168 kg/100 m)

Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010

P1008T
P1006T1420
P1010T

P1024
P1012S
P1023S

P1012
P1023
P1024S

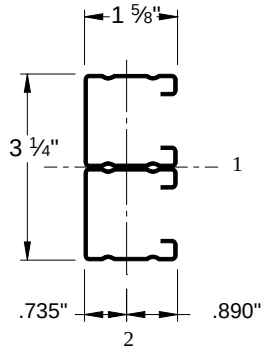
P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

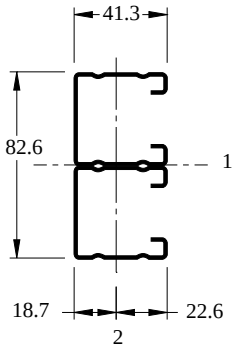
P3016-0632
P3016-0832
P3016-1024
P3016-1420

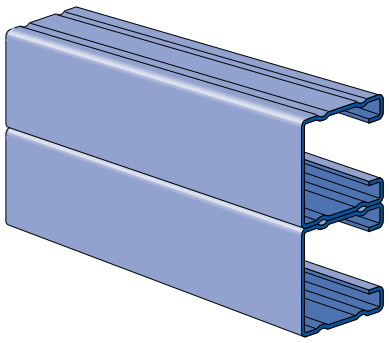
Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

P2001 A

Wt/100 Ft: 232 Lbs (345 kg/100 m)
Allowable Moment 11,640 In-Lbs (1,320 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

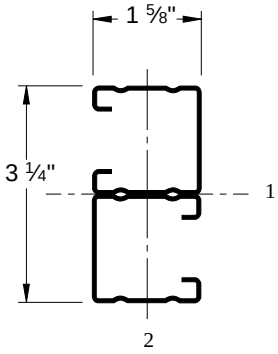


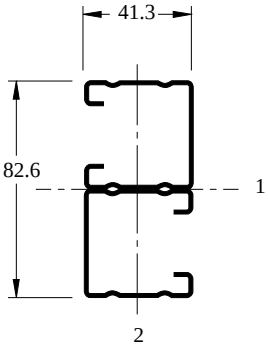


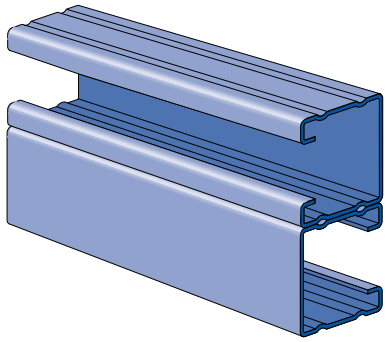


P2001 B

Wt/100 Ft: 232 Lbs (345 kg/100 m)
Allowable Moment 11,640 In-Lbs (1,320 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

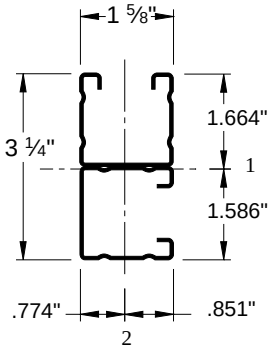


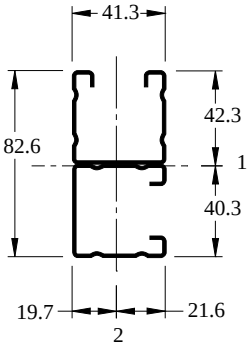


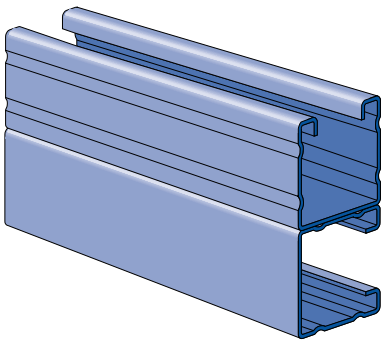


P2001 C

Wt/100 Ft: 232 Lbs (345 kg/100 m)
Allowable Moment 10,340 In-Lbs (1,170 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)







Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P2000

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
24	1,170	0.06	1,170	1,170	1,170
36	780	0.13	780	780	600
48	590	0.23	590	510	340
60	470	0.36	430	330	220
72	390	0.52	300	230	150
84	340	0.71	220	170	110
96	290	0.92	170	130	80
108	260	1.17	130	100	70
120	230	1.44	110	80	50
144	200	2.08	80	60	40
168	170	2.83	60	40	30
192	150	3.70	40	30	20
216	130	4.68	30	30	NR
240	120	5.78	30	NR	NR

BEAM LOADING – P2001 CHANNEL

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
24	1,370 *	0.03	1,370 *	1,370 *	1,370 *
36	1,370 *	0.07	1,370 *	1,370 *	1,370 *
48	1,370 *	0.13	1,370 *	1,370 *	1,370 *
60	1,270	0.20	1,270	1,270	1,080
72	1,060	0.28	1,060	1,060	750
84	910	0.39	910	820	550
96	790	0.50	790	630	420
108	710	0.64	660	500	330
120	640	0.79	540	400	270
144	530	1.13	370	280	190
168	450	1.54	270	210	140
192	400	2.01	210	160	110
216	350	2.55	170	120	80
240	320	3.15	130	100	70

COLUMN LOADING – P2000

Unbraced Height In	Maximum 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	2,320	6,600	6,000	5,130	4,230
36	1,950	5,240	4,230	2,970	2,060
48	1,490	3,790	2,610	1,670	1,160
60	1,120	2,530	1,670	1,070	740
72	860	1,750	1,160	740	510
84	680	1,290	850	540	380
96	540	990	650	420	290
108	440	780	510	330	**
120	370	630	420	270	**

COLUMN LOADING – P2001

Unbraced Height In	Maximum 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	4,180	15,370	15,110	14,700	14,200
36	4,040	14,750	14,200	13,330	12,330
48	3,870	13,920	13,010	11,620	10,130
60	3,660	12,930	11,620	9,750	7,860
72	3,420	11,800	10,130	7,860	5,760
84	3,150	10,600	8,610	6,090	4,230
96	2,870	9,370	7,140	4,660	3,240
108	2,580	8,140	5,760	3,680	2,560
120	2,300	6,960	4,660	2,980	**

ELEMENTS OF SECTION P2000/P2001

Parameter	P2000	P2001
Area of Section	0.340 In^2	0.681 In^2
Axis 1-1		
Moment of Inertia (I)	0.124 In^4	0.616 In^4
Section Modulus (S)	0.140 In^3	0.379 In^3
Radius of Gyration (r)	0.605 In	0.951 In
Axis 2-2		
Moment of Inertia (I)	0.151 In^4	0.303 In^4
Section Modulus (S)	0.186 In^3	0.373 In^3
Radius of Gyration (r)	0.667 In	0.667 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r} > 200$

NR = Not Recommended.

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

BEAM LOADING – P2000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	541	1	541	541	541
750	433	2	433	433	406
1,000	325	4	325	325	228
1,250	260	6	260	219	146
1,500	216	9	203	152	102
1,750	185	12	149	112	75
2,000	162	16	114	86	57
2,500	130	25	73	55	37
3,000	108	36	51	38	25
3,500	93	48	37	28	19
4,000	81	63	29	21	14
4,500	72	80	23	17	11
5,000	65	99	18	14	NR
6,000	54	142	13	NR	NR

BEAM LOADING – P2001 CHANNEL *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	621 *	1	621 *	621 *	621 *
750	621 *	1	621 *	621 *	621 *
1,000	621 *	2	621 *	621 *	621 *
1,250	621 *	3	621	621	621
1,500	586	5	586	586	504
1,750	502	7	502	502	370
2,000	439	9	439	425	284
2,500	351	13	351	272	182
3,000	293	19	252	189	126
3,500	251	26	185	139	93
4,000	220	34	142	106	71
4,500	195	44	112	84	56
5,000	176	54	91	68	45
6,000	146	77	63	47	32

COLUMN LOADING – P2000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,056	3,010	2,746	2,358	1,958
750	981	2,722	2,358	1,859	1,389
1,000	830	2,191	1,697	1,125	781
1,250	657	1,658	1,125	720	500
1,500	520	1,183	781	500	347
1,750	417	869	574	367	255
2,000	341	666	439	281	195
2,500	237	426	281	180	125
2,750	201	352	232	149	**

COLUMN LOADING – P2001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,896	6,981	6,867	6,682	6,463
750	1,869	6,856	6,682	6,403	6,078
1,000	1,814	6,595	6,300	5,840	5,324
1,250	1,746	6,273	5,840	5,189	4,490
1,500	1,667	5,901	5,324	4,490	3,646
1,750	1,579	5,490	4,772	3,785	2,850
2,000	1,483	5,051	4,206	3,107	2,184
2,500	1,276	4,136	3,107	2,012	1,398
2,750	1,165	3,680	2,599	1,663	1,155

ELEMENTS OF SECTION P2000/P2001 *(METRIC)*

Parameter	P2000	P2001
Area of Section	2.19 cm^2	4.39 cm^2
Axis 1-1		
Moment of Inertia (I)	5.2 cm^4	25.6 cm^4
Section Modulus (S)	2.29 cm^3	6.21 cm^3
Radius of Gyration (r)	1.5 cm	2.4 cm
Axis 2-2		
Moment of Inertia (I)	6.3 cm^4	12.6 cm^4
Section Modulus (S)	3.05 cm^3	6.11 cm^3
Radius of Gyration (r)	1.7 cm	1.7 cm

Notes:

* Load limited by spot weld shear.

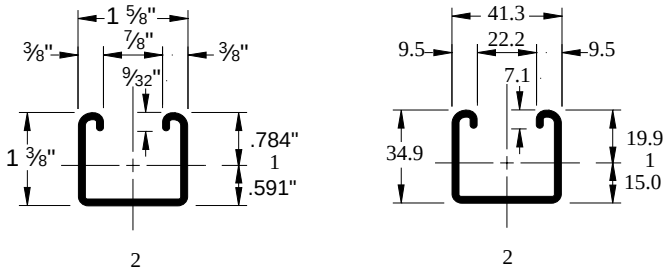
** $^{KL}/_{r}$ > 200

NR = Not Recommended.

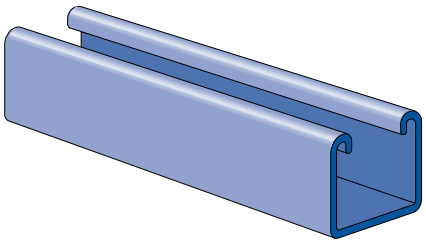
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% **"KO" Series .. 95%**
"SL" Series ... 85% **"HS" Series .. 90%**

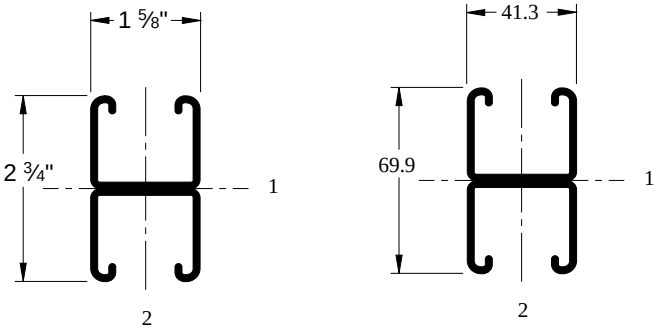
P3000



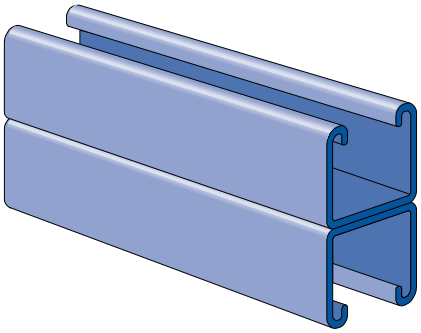
Wt/100 Ft: 170 Lbs (253 kg/100 m)
Allowable Moment 3,870 In-Lbs (440 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



P3001



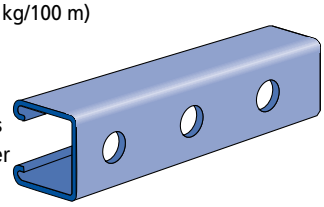
Wt/100 Ft: 340 Lbs (506 kg/100 m)
Allowable Moment 10,840 In-Lbs (1,220 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



P3000 HS

Wt/100 Ft: 165 Lbs (246 kg/100 m)

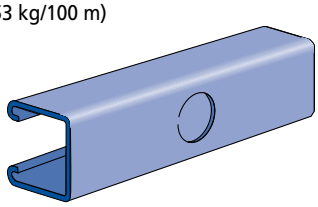
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P3000 KO

Wt/100 Ft: 170 Lbs (253 kg/100 m)

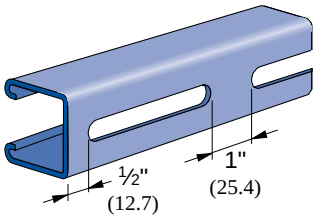
7/8" (22.2) Knockouts
6" (152.4) on Center



P3000 SL

Wt/100 Ft: 165 Lbs (246 kg/100 m)

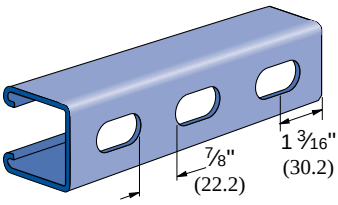
Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P3000 T

Wt/100 Ft: 165 Lbs (246 kg/100 m)

Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010

P1008T
P1006T1420
P1010T

P1024
P1012S
P1023S

P1012
P1023
P1024S

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P3000

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
24	1,290	0.07	1,290	1,290	1,290
36	860	0.15	860	860	590
48	650	0.26	650	500	330
60	520	0.41	420	320	210
72	430	0.59	290	220	150
84	370	0.80	220	160	110
96	320	1.04	170	120	80
108	290	1.32	130	100	70
120	260	1.63	110	80	50
144	220	2.34	70	60	40
168	180	3.19	50	40	30
192	160	4.17	40	30	NR
216	140	5.27	NR	NR	NR
240	130	6.51	NR	NR	NR

BEAM LOADING – P3001

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
24	2,660 *	0.04	2,660 *	2,660 *	2,660 *
36	2,410	0.08	2,410	2,410	2,410
48	1,810	0.15	1,810	1,810	1,620
60	1,450	0.23	1,450	1,450	1,040
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	520	1.82	260	200	130
192	450	2.38	200	150	100
216	400	3.01	160	120	80
240	360	3.72	130	100	60

COLUMN LOADING – P3000

Unbraced Height In	Maximum 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	3,070	9,790	9,090	8,190	7,370
36	2,730	8,300	7,370	6,320	5,440
48	2,400	7,000	6,010	4,930	4,050
60	2,090	5,930	4,930	3,860	3,120
72	1,820	5,060	4,050	3,120	2,290
84	1,590	4,300	3,390	2,430	**
96	1,400	3,690	2,880	1,860	**
108	1,200	3,220	2,290	**	**
120	1,040	2,820	1,860	**	**

COLUMN LOADING – P3001

Unbraced Height In	Maximum 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	5,720	22,670	22,250	21,580	20,780
36	5,500	21,670	20,780	19,400	17,830
48	5,220	20,350	18,890	16,710	14,390
60	4,880	18,760	16,710	13,800	10,92
72	4,510	17,000	14,390	10,920	7,810
84	4,120	15,120	12,050	8,270	5,740
96	3,710	13,210	9,820	6,330	4,400
108	3,300	11,340	7,810	5,000	**
120	2,940	9,560	6,330	4,050	**

ELEMENTS OF SECTION P3000/P3001

Parameter	P3000	P3001
Area of Section	0.503 In^2	1.007 In^2
Axis 1-1		
Moment of Inertia (I)	0.121 In^4	0.593 In^4
Section Modulus (S)	0.154 In^3	0.431 In^3
Radius of Gyration (r)	0.490 In	0.767 In
Axis 2-2		
Moment of Inertia (I)	0.205 In^4	0.411 In^4
Section Modulus (S)	0.253 In^3	0.506 In^3
Radius of Gyration (r)	0.639 In	0.639 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

NR = Not Recommended.

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

BEAM LOADING – P3000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	595	2	595	595	595
750	476	3	476	476	396
1,000	357	4	357	334	223
1,250	286	7	285	214	143
1,500	238	10	198	149	99
1,750	204	14	146	109	73
2,000	179	18	111	84	56
2,500	143	28	71	54	36
3,000	119	40	50	37	25
3,500	102	55	36	27	18
4,000	89	71	28	21	14
4,500	79	90	22	17	NR
5,000	71	111	18	NR	NR
6,000	60	160	NR	NR	NR

BEAM LOADING – P3001 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	1207 *	1	1207 *	1207 *	1207 *
750	1207 *	1	1207	1207	1207
1,000	999	3	999	999	999
1,250	799	4	799	799	699
1,500	666	6	666	666	485
1,750	571	8	571	535	357
2,000	500	10	500	410	273
2,500	400	16	350	262	175
3,000	333	23	243	182	121
3,500	286	31	178	134	89
4,000	250	41	137	102	68
4,500	222	51	108	81	54
5,000	200	64	87	66	44
6,000	167	91	61	46	30

COLUMN LOADING – P3000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	1,397	4,464	4,151	3,746	3,377
750	1,322	4,125	3,746	3,291	2,900
1,000	1,194	3,588	3,154	2,671	2,272
1,250	1,073	3,121	2,671	2,183	1,785
1,500	961	2,726	2,272	1,785	1,443
1,750	857	2,389	1,930	1,492	1,137
2,000	766	2,097	1,658	1,253	870
2,500	616	1,628	1,253	**	**
2,750	543	1,455	1,036	**	**

COLUMN LOADING – P3001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	2,597	10,293	10,110	9,814	9,464
750	2,553	10,093	9,814	9,369	8,852
1,000	2,462	9,674	9,204	8,475	7,662
1,250	2,352	9,161	8,475	7,450	6,364
1,500	2,227	8,571	7,662	6,364	5,072
1,750	2,091	7,923	6,801	5,282	3,871
2,000	1,947	7,235	5,927	4,261	2,963
2,500	1,646	5,819	4,261	2,731	1,897
2,750	1,494	5,124	3,527	2,257	**

ELEMENTS OF SECTION P3000/P3001 *(METRIC)*

Parameter	P3000	P3001
Area of Section	3.25 cm^2	6.50 cm^2
Axis 1-1		
Moment of Inertia (I)	5.0 cm^4	24.7 cm^4
Section Modulus (S)	2.52 cm^3	7.06 cm^3
Radius of Gyration (r)	1.2 cm	1.9 cm
Axis 2-2		
Moment of Inertia (I)	8.5 cm^4	17.1 cm^4
Section Modulus (S)	4.15 cm^3	8.29 cm^3
Radius of Gyration (r)	1.6 cm	1.6 cm

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

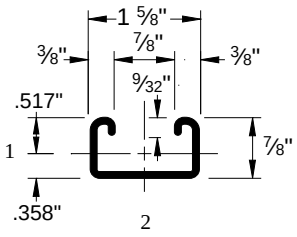
NR = Not Recommended.

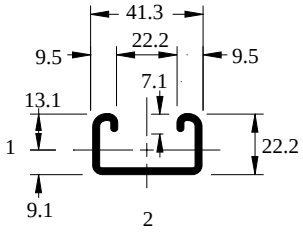
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

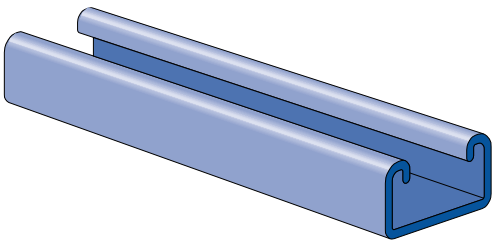
"T" Series ... 85% **"KO" Series .. 95%**
"SL" Series ... 85% **"HS" Series .. 90%**

P3300

Wt/100 Ft: 135 Lbs (201 kg/100 m)
Allowable Moment 1,810 In-Lbs (200 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

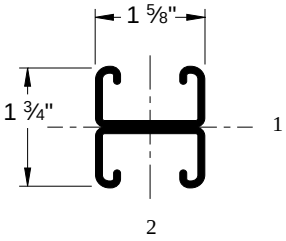


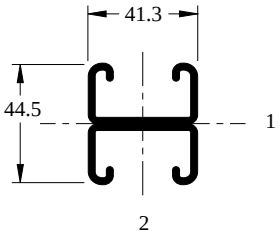


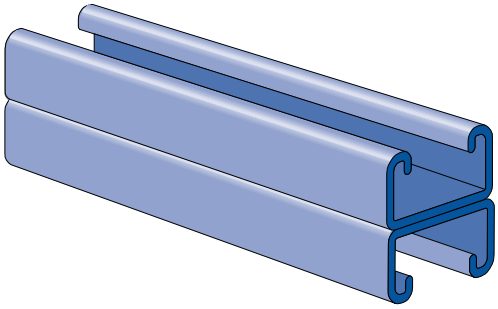


P3301

Wt/100 Ft: 270 Lbs (402 kg/100 m)
Allowable Moment 5,080 In-Lbs (570 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



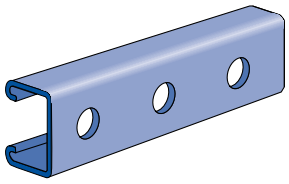




P3300 HS

Wt/100 Ft: 130 Lbs (193 kg/100 m)

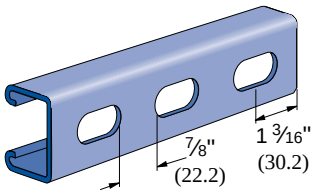
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P3300 T

Wt/100 Ft: 130 Lbs (193 kg/100 m)

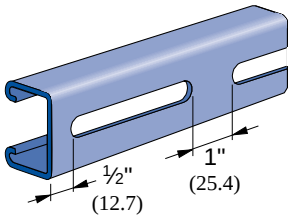
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (51) on Center



P3300 SL

Wt/100 Ft: 130 Lbs (193 kg/100 m)

Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



Channel Nuts (Refer to Hardware Section for Details)

P4006-0832
P4006-1024
P4006-1420
P4007
P4008
P4009
P4010

P4006T1420
P4008T
P4010T

P4012S
P4023S

P4012
P4023

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3013

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P3300

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
24	600	0.10	600	600	400
36	400	0.22	360	270	180
48	300	0.40	200	150	100
60	240	0.62	130	100	60
72	200	0.90	90	70	40
84	170	1.22	70	50	30
96	150	1.59	50	40	30
108	130	2.02	40	30	20
120	120	2.49	30	20	20

BEAM LOADING – P3301

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
24	1,660 *	0.06	1,660 *	1,660 *	1,660 *
36	1,130	0.13	1,130	1,130	860
48	850	0.23	850	730	480
60	680	0.36	620	460	310
72	560	0.53	430	320	210
84	480	0.72	320	240	160
96	420	0.93	240	180	120
108	380	1.18	190	140	100
120	340	1.46	150	120	80

COLUMN LOADING – P3300

Unbraced Height In	Maximum 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	2,120	7,710	7,190	6,410	5,440
36	1,760	6,520	5,440	4,030	2,830
48	1,380	4,960	3,590	2,290	1,590
60	1,060	3,480	2,290	1,470	**
72	840	2,410	1,590	**	**
84	KL/r>200	1,770	**	**	**

COLUMN LOADING – P3301

Unbraced Height In	Maximum 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	4,130	17,400	16,820	15,900	14,840
36	3,810	16,020	14,840	13,070	11,190
48	3,420	14,270	12,450	9,930	7,540
60	3,000	12,290	9,930	6,970	4,840
72	2,590	10,250	7,540	4,840	3,360
84	2,200	8,260	5,550	3,550	**
96	1,890	6,440	4,250	**	**
108	1,630	5,090	3,360	**	**
120	KL/r>200	4,120	**	**	**

ELEMENTS OF SECTION P3300/P3301

Parameter	P3300	P3301
Area of Section	0.398 In^2	0.797 In^2
Axis 1-1		
Moment of Inertia (I)	0.037 In^4	0.177 In^4
Section Modulus (S)	0.072 In^3	0.202 In^3
Radius of Gyration (r)	0.306 In	0.471 In
Axis 2-2		
Moment of Inertia (I)	0.145 In^4	0.289 In^4
Section Modulus (S)	0.178 In^3	0.356 In^3
Radius of Gyration (r)	0.603 In	0.603 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

BEAM LOADING – P3300 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	278	2	278	278	189
750	223	4	223	182	121
1,000	167	7	136	102	68
1,250	134	11	87	65	44
1,500	111	15	61	45	30
1,750	95	21	45	33	22
2,000	84	27	34	26	17
2,500	67	43	22	16	11
3,000	56	61	15	11	8

BEAM LOADING – P3301 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	753 *	1	753 *	753 *	753 *
750	624	2	624	624	580
1,000	468	4	468	468	326
1,250	375	6	375	313	209
1,500	312	9	290	217	145
1,750	268	12	213	160	106
2,000	234	16	163	122	82
2,500	187	25	104	78	52
3,000	156	36	72	54	36

COLUMN LOADING – P3300 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	968	3,512	3,282	2,939	2,509
750	891	3,263	2,939	2,401	1,875
1,000	747	2,761	2,222	1,547	1,074
1,250	608	2,178	1,547	990	688
1,500	491	1,627	1,074	688	**
1,750	403	1,196	789	**	**

COLUMN LOADING – P3301 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,878	7,911	7,654	7,247	6,778
750	1,811	7,631	7,247	6,653	5,99
1,000	1,680	7,058	6,439	5,532	4,595
1,250	1,533	6,385	5,532	4,364	3,262
1,500	1,378	5,649	4,595	3,262	2,265
1,750	1,223	4,887	3,690	2,397	1,664
2,000	1,072	4,135	2,867	1,835	**
2,500	831	2,780	1,835	**	**
2,750	738	2,297	1,517	**	**

ELEMENTS OF SECTION P3300/P3301 *(METRIC)*

Parameter	P3300	P3301
Area of Section	2.57 cm^2	5.14 cm^2
Axis 1-1		
Moment of Inertia (I)	1.5 cm^4	7.4 cm^4
Section Modulus (S)	1.18 cm^3	3.31 cm^3
Radius of Gyration (r)	0.8 cm	1.2 cm
Axis 2-2		
Moment of Inertia (I)	6.0 cm^4	12.0 cm^4
Section Modulus (S)	2.92 cm^3	5.83 cm^3
Radius of Gyration (r)	1.5 cm	1.5 cm

Notes:

* Load limited by spot weld shear.

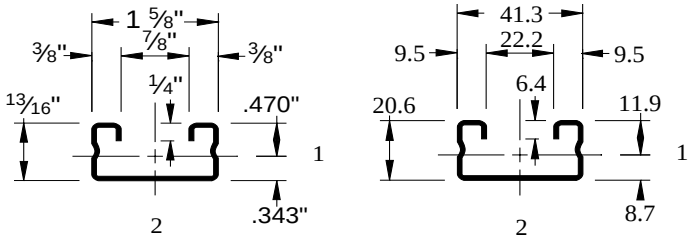
** $^{KL}/_{r}$ > 200

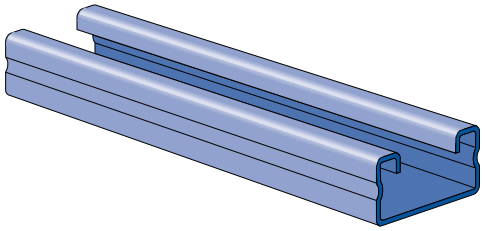
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

P4000

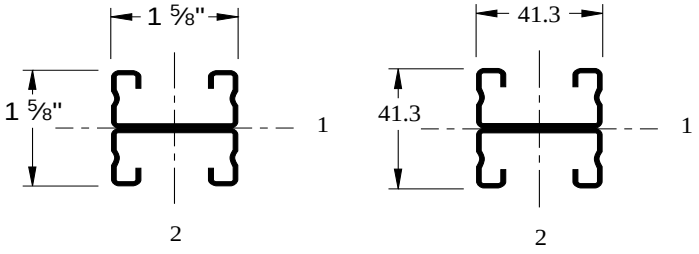
Wt/100 Ft: 82 Lbs (122 kg/100 m)
Allowable Moment 1,210 In-Lbs (140 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

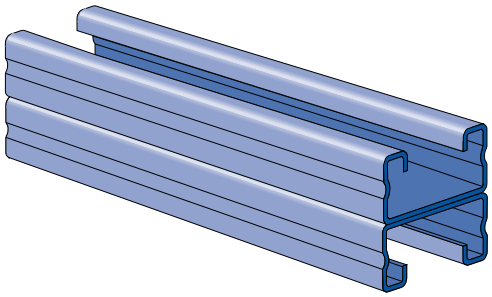




P4001

Wt/100 Ft: 164 Lbs (244 kg/100 m)
Allowable Moment 3,140 In-Lbs (350 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

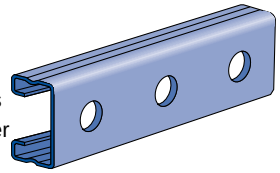




P4000 HS

Wt/100 Ft: 79 Lbs (118 kg/100 m)

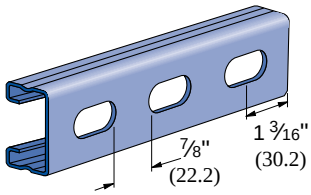
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P4000 T

Wt/100 Ft: 79 Lbs (118 kg/100 m)

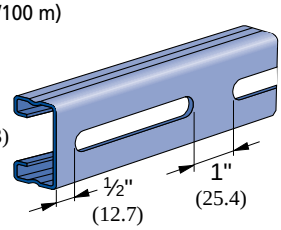
Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



P4000 SL

Wt/100 Ft: 79 Lbs (118 kg/100 m)

Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



Channel Nuts (Refer to Hardware Section for Details)

P4006-0832
P4006-1024
P4006-1420
P4007
P4008
P4009
P4010

P4006T1420
P4008T
P4010T

P4012S
P4023S

P4012
P4023

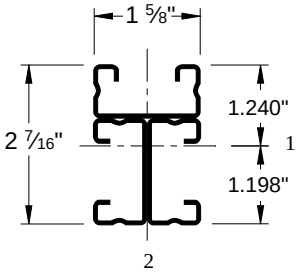
P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3013

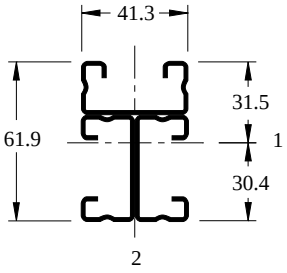
P3016-0632
P3016-0832
P3016-1024
P3016-1420

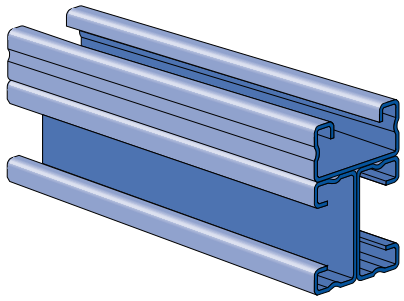
Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

P4003

Wt/100 Ft: 246 Lbs (366 kg/100 m)
Allowable Moment 8,450 In-Lbs (950 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

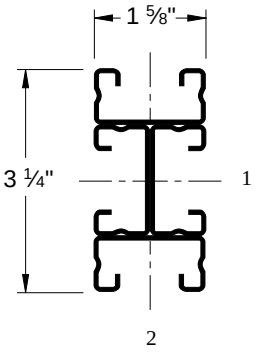


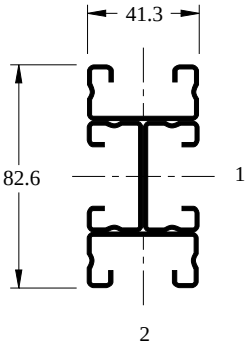


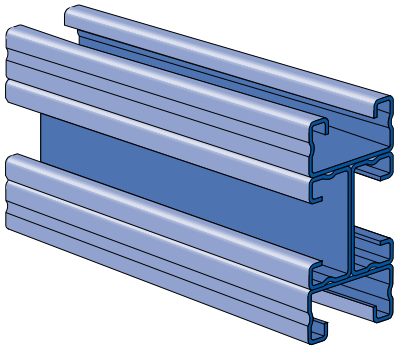


P4004

Wt/100 Ft: 328 Lbs (488 kg/100 m)
Allowable Moment 13,380 In-Lbs (1,510 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)







BEAM LOADING – P4000

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
24	400	0.11	400	380	250
36	270	0.24	220	170	110
48	200	0.43	130	90	60
60	160	0.67	80	60	40
72	130	0.96	60	40	30
84	110	1.31	40	30	20
96	100	1.71	30	20	20
108	90	2.16	20	20	10
120	80	2.67	20	20	10

BEAM LOADING – P4001

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
24	690 *	0.06	690 *	690 *	690 *
36	690 *	0.14	690 *	690 *	490
48	520	0.25	520	410	280
60	420	0.40	350	260	180
72	350	0.57	250	180	120
84	300	0.78	180	140	90
96	260	1.01	140	100	70
108	230	1.28	110	80	50
120	210	1.58	90	70	40

COLUMN LOADING – P4000

Unbraced Height In	Maximum 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	1,420	4,480	4,000	3,320	2,640
36	1,110	3,410	2,640	1,760	1,220
48	810	2,320	1,540	990	690
60	600	1,500	990	630	**
72	470	1,040	690	**	**

COLUMN LOADING – P4001

Unbraced Height In	Maximum 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	2,660	10,270	9,950	9,460	8,800
36	2,430	9,540	8,800	7,710	6,550
48	2,160	8,450	7,320	5,780	4,320
60	1,880	7,230	5,780	3,990	2,770
72	1,600	5,970	4,320	2,770	1,920
84	1,350	4,760	3,180	2,030	**
96	1,150	3,680	2,430	**	**
108	980	2,910	1,920	**	**

ELEMENTS OF SECTION P4000/P4001

Parameter	P4000	P4001
Area of Section	0.239 In^2	0.478 In^2
Axis 1-1		
Moment of Inertia (I)	0.023 In^4	0.101 In^4
Section Modulus (S)	0.048 In^3	0.125 In^3
Radius of Gyration (r)	0.308 In	0.460 In
Axis 2-2		
Moment of Inertia (I)	0.091 In^4	0.182 In^4
Section Modulus (S)	0.112 In^3	0.224 In^3
Radius of Gyration (r)	0.617 In	0.617 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r} > 200$

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Reduce Beam Load Values as Follows:

"T" Series ... 85% **"SL" Series .. 85%**
"HS" Series ... 90%

BEAM LOADING – P4000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	185	3	185	177	118
750	148	4	148	113	75
1,000	111	7	85	64	42
1,250	89	11	54	41	27
1,500	74	16	38	28	19
1,750	64	22	28	21	14
2,000	56	29	21	16	11
2,500	45	46	14	10	7
3,000	37	66	9	7	5

BEAM LOADING – P4001 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	313 *	2	313 *	313 *	313 *
750	313 *	2	313 *	313 *	313 *
1,000	290	4	290	279	186
1,250	232	7	232	179	119
1,500	193	10	*310	124	83
1,750	166	13	122	91	61
2,000	145	17	93	70	47
2,500	116	27	60	45	30
3,000	97	39	41	31	21

COLUMN LOADING – P4000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	648	2,046	1,835	1,531	1,228
750	580	1,816	1,531	1,155	822
1,000	462	1,403	1,036	666	462
1,250	356	1,008	666	426	296
1,500	280	701	462	296	**

COLUMN LOADING – P4001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	1,207	4,669	4,527	4,314	4,023
750	1,163	4,515	4,314	3,945	3,536
1,000	1,070	4,197	3,812	3,251	2,676
1,250	967	3,778	3,251	2,535	1,866
1,500	861	3,323	2,676	1,866	1,296
1,750	757	2,855	2,126	1,371	952
2,000	657	2,396	1,640	1,050	**
2,500	503	1,590	1,050	**	**

ELEMENTS OF SECTION P4000/P4001 *(METRIC)*

Parameter	P4000	P4001
Area of Section	1.54 cm^2	3.08 cm^2
Axis 1-1		
Moment of Inertia (I)	1.0 cm^4	4.2 cm^4
Section Modulus (S)	0.79 cm^3	2.05 cm^3
Radius of Gyration (r)	0.8 cm	1.2 cm
Axis 2-2		
Moment of Inertia (I)	3.8 cm^4	7.6 cm^4
Section Modulus (S)	1.84 cm^3	3.67 cm^3
Radius of Gyration (r)	1.6 cm	1.6 cm

Notes:

* Load limited by spot weld shear.

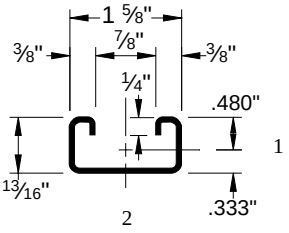
** $^{KL}/_{r}$ > 200

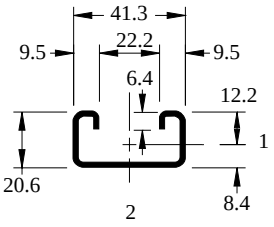
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Reduce Beam Load Values as Follows:

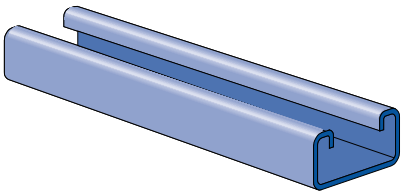
"T" Series ... 85% **"SL" Series .. 85%**
"HS" Series ... 90%

P4100

Wt/100 Ft: 97 Lbs (144 kg/100 m)
Allowable Moment 1,330 In-Lbs (150 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

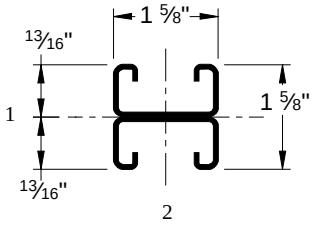


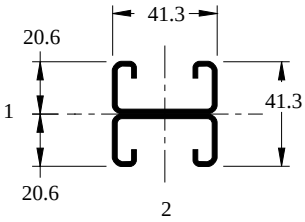


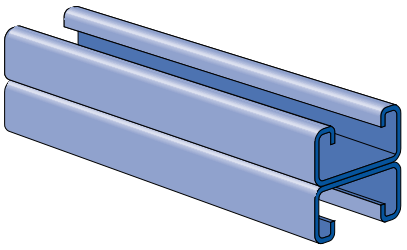


P4101

Wt/100 Ft: 194 Lbs (289 kg/100 m)
Allowable Moment 3,550 In-Lbs (400 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)



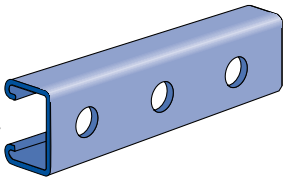




P4100 HS

Wt/100 Ft: 87 Lbs (129 kg/100 m)

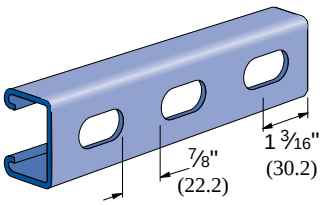
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P4100 T

Wt/100 Ft: 87 Lbs (129 kg/100 m)

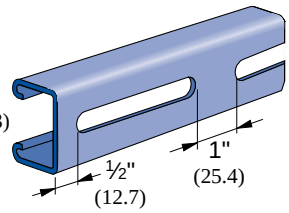
Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



P4100 SL

Wt/100 Ft: 87 Lbs (129 kg/100 m)

Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



Channel Nuts (Refer to Hardware Section for Details)

P4006-0832
P4006-1024
P4006-1420
P4007
P4008
P4009
P4010

P4006T1420
P4008T
P4010T

P4012S
P4023S

P4012
P4023

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3013

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P4100

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
24	440	0.11	440	410	270
36	300	0.24	240	180	120
48	220	0.43	140	100	70
60	180	0.68	90	70	40
72	150	0.98	60	50	30
84	130	1.33	40	30	20
96	110	1.74	30	30	20
108	100	2.20	30	20	10
120	90	2.71	20	20	10

BEAM LOADING – P4101

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
24	910 *	0.06	910 *	910 *	910 *
36	790	0.14	790	790	550
48	590	0.25	590	470	310
60	470	0.40	400	300	200
72	390	0.57	280	210	140
84	340	0.77	200	150	100
96	300	1.01	160	120	80
108	260	1.28	120	90	60
120	240	1.58	100	70	50

COLUMN LOADING – P4100

Unbraced Height In	Maximum 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	1,620	5,670	5,210	4,530	3,810
36	1,300	4,620	3,810	2,770	1,940
48	1,000	3,450	2,450	1,570	1,090
60	760	2,380	1,570	**	**
72	600	1,650	1,090	**	**

COLUMN LOADING – P4101

Unbraced Height In	Maximum 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	3,040	12,440	11,980	11,250	10,420
36	2,780	11,350	10,420	9,050	7,620
48	2,460	9,980	8,580	6,680	4,900
60	2,130	8,460	6,680	4,520	3,140
72	1,800	6,910	4,900	3,140	2,180
84	1,520	5,440	3,600	2,310	**
96	1,290	4,180	2,760	**	**

ELEMENTS OF SECTION P4100/P4101

Parameter	P4100	P4101
Area of Section	0.287 In^2	0.574 In^2
Axis 1-1		
Moment of Inertia (I)	0.025 In^4	0.114 In^4
Section Modulus (S)	0.053 In^3	0.141 In^3
Radius of Gyration (r)	0.298 In	0.447 In
Axis 2-2		
Moment of Inertia (I)	0.106 In^4	0.212 In^4
Section Modulus (S)	0.131 In^3	0.261 In^3
Radius of Gyration (r)	0.609 In	0.609 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% **"SL" Series .. 85%**
"HS" Series ... 90%

BEAM LOADING – P4100 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	205	3	205	192	128
750	164	4	164	123	82
1,000	123	7	92	69	46
1,250	98	12	59	44	30
1,500	82	17	41	31	21
1,750	70	23	30	23	15
2,000	61	30	23	17	12
2,500	49	46	15	11	7
3,000	41	67	10	8	5

BEAM LOADING – P4101 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	413 *	2	413 *	413 *	413 *
750	413 *	2	413	413	373
1,000	327	4	327	315	210
1,250	262	7	262	202	134
1,500	218	10	187	140	93
1,750	187	13	137	103	69
2,000	163	17	105	79	53
2,500	131	27	67	50	34
3,000	109	39	47	35	23

COLUMN LOADING – P4100 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	737	2,580	2,383	2,079	1,759
750	669	2,365	2,079	1,679	1,294
1,000	552	1,946	1,547	1,058	735
1,250	442	1,515	1,058	677	470
1,500	354	1,113	735	470	**

COLUMN LOADING – P4101 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	1,384	5,657	5,454	5,133	4,766
750	1,329	5,435	5,133	4,668	4,157
1,000	1,220	4,984	4,502	3,803	3,095
1,250	1,101	4,459	3,803	2,922	2,116
1,500	978	3,892	3,095	2,116	1,470
1,750	856	3,314	2,426	1,555	1,080
2,000	743	2,753	1,860	1,190	**

ELEMENTS OF SECTION P4100/P4101

Parameter	P4100	P4101
Area of Section	1.85 cm^2	3.70 cm^2
Axis 1-1		
Moment of Inertia (I)	1.0 cm^4	4.7 cm^4
Section Modulus (S)	0.87 cm^3	2.31 cm^3
Radius of Gyration (r)	0.8 cm	1.1 cm
Axis 2-2		
Moment of Inertia (I)	4.4 cm^4	8.8 cm^4
Section Modulus (S)	2.15 cm^3	4.28 cm^3
Radius of Gyration (r)	1.5 cm	1.5 cm

Notes:

* Load limited by spot weld shear.

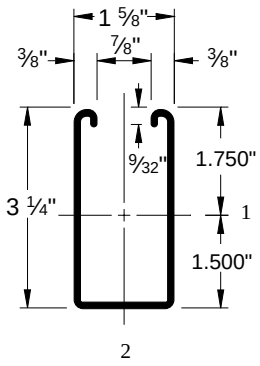
** $^{KL}/_{r}$ > 200

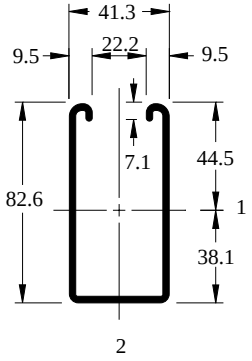
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% **"SL" Series .. 85%**
"HS" Series ... 90%

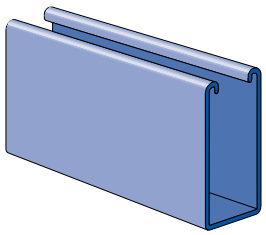
Pierced channels are found on pages 60 and 61.

P5000

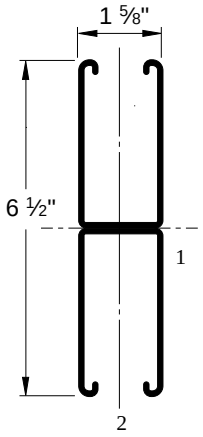


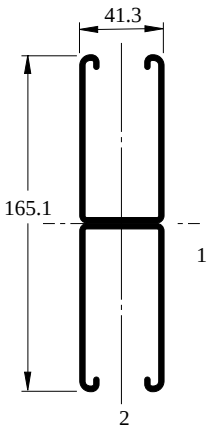


Wt/100 Ft: 305 Lbs (454 kg/100 m)
Allowable Moment 15,790 In-Lbs (1,780 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

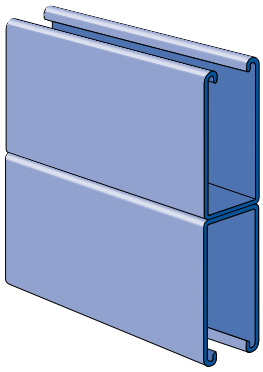


P5001





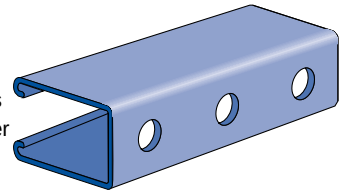
Wt/100 Ft: 610 Lbs (908 kg/100 m)
Allowable Moment 33,910 In-Lbs (3,830 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



P5000 HS

Wt/100 Ft: 300 Lbs (446 kg/100 m)

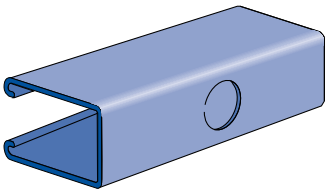
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P5000 KO

Wt/100 Ft: 305 Lbs (454 kg/100 m)

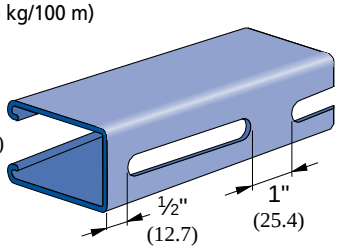
7/8" (22.2) Knockouts
6" (152.4) on Center



P5000 SL

Wt/100 Ft: 300 Lbs (446 kg/100 m)

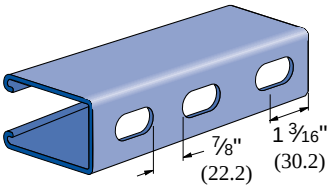
Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P5000 T

Wt/100 Ft: 300 Lbs (446 kg/100 m)

Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P1006T1420
P1008T
P1010T

P1012
P1023
P1024

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P5000

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
24	5,260	0.03	5,260	5,260	5,260
36	3,510	0.07	3,510	3,510	3,510
48	2,630	0.12	2,630	2,630	2,630
60	2,110	0.18	2,110	2,110	1,920
72	1,750	0.26	1,750	1,750	1,330
84	1,500	0.36	1,500	1,470	980
96	1,320	0.47	1,320	1,130	750
108	1,170	0.59	1,170	890	590
120	1,050	0.73	960	720	480
144	880	1.05	670	500	330
168	750	1.43	490	370	250
192	660	1.87	380	280	190
216	580	2.37	300	220	150
240	530	2.92	240	180	120

BEAM LOADING – P5001

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
24	6,170 *	0.01	6,170 *	6,170 *	6,170 *
36	6,170 *	0.03	6,170 *	6,170 *	6,170 *
48	5,650	0.05	5,650	5,650	5,650
60	4,520	0.08	4,520	4,520	4,520
72	3,770	0.11	3,770	3,770	3,770
84	3,230	0.15	3,230	3,230	3,230
96	2,830	0.20	2,830	2,830	2,830
108	2,510	0.25	2,510	2,510	2,510
120	2,260	0.31	2,260	2,260	2,260
144	1,880	0.45	1,880	1,880	1,690
168	1,610	0.61	1,610	1,610	1,240
192	1,410	0.79	1,410	1,410	950
216	1,260	1.00	1,260	1,130	750
240	1,130	1.24	1,130	910	610

COLUMN LOADING – P5000

Unbraced Height In	Maximum 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	4,430	13,050	12,000	11,180	9,590
36	4,030	11,380	9,590	7,390	5,560
48	3,400	8,830	6,730	4,700	3,560
60	2,780	6,580	4,700	3,360	2,620
72	2,330	4,890	3,560	2,620	2,090
84	2,010	3,860	2,870	2,160	1,750
96	1,770	3,180	2,410	1,850	1,510
108	1,590	2,710	2,090	1,620	1,330
120	1,440	2,370	1,850	1,450	**

COLUMN LOADING – P5001

Unbraced Height In	Maximum 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	8,360	30,190	29,820	29,220	28,500
36	8,230	29,300	28,500	27,220	25,740
48	8,050	28,100	26,750	24,660	22,320
60	7,810	26,630	24,660	23,090	19,770
72	7,530	24,930	22,320	19,770	15,800
84	7,340	23,070	21,110	16,450	12,100
96	6,950	22,440	18,430	13,300	9,260
108	6,510	20,270	15,800	10,540	7,320
120	6,010	18,100	13,300	8,540	**

ELEMENTS OF SECTION P5000/P5001

Parameter	P5000	P5001
Area of Section	0.897 In^2	1.794 In^2
Axis 1-1		
Moment of Inertia (I)	1.099 In^4	5.578 In^4
Section Modulus (S)	0.628 In^3	1.716 In^3
Radius of Gyration (r)	1.107 In	1.864 In
Axis 2-2		
Moment of Inertia (I)	0.359 In^4	0.719 In^4
Section Modulus (S)	0.442 In^3	0.884 In^3
Radius of Gyration (r)	0.695 In	0.695 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r} > 200$

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

BEAM LOADING – P5000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	2426	1	2426	2426	2426
750	1941	1	1941	1941	1941
1,000	1456	2	1456	1456	1456
1,250	1165	3	1165	1165	1165
1,500	971	4	971	971	900
1,750	832	6	832	832	661
2,000	728	8	728	728	506
2,500	582	12	582	486	324
3,000	485	18	450	337	225
3,500	416	24	330	248	165
4,000	364	32	253	190	127
4,500	324	40	200	150	100
5,000	291	50	162	121	81
6,000	243	72	112	84	56

BEAM LOADING – P5001 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	2799 *	0	2799 *	2799 *	2799 *
750	2799 *	0	2799 *	2799 *	2799 *
1,000	2799 *	1	2799	2799	2799
1,250	2500	1	2500	2500	2500
1,500	2084	2	2084	2084	2084
1,750	1786	3	1786	1786	1786
2,000	1563	3	1563	1563	1563
2,500	1250	5	1250	1250	1250
3,000	1042	8	1042	1042	1042
3,500	893	10	893	893	839
4,000	781	14	781	781	642
4,500	695	17	695	695	507
5,000	625	21	625	616	411
6,000	521	30	521	428	285

COLUMN LOADING – P5000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	2,015	5,948	5,485	5,130	4,418
750	1,959	5,445	5,130	4,244	3,426
1,000	1,752	4,831	3,961	2,939	2,184
1,250	1,513	3,892	2,939	2,049	1,560
1,500	1,281	3,056	2,184	1,560	1,214
1,750	1,105	2,379	1,725	1,260	999
2,000	971	1,929	1,424	1,061	854
2,500	784	1,393	1,061	815	668
2,750	718	1,225	945	733	603

COLUMN LOADING – P5001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G. K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	3,795	13,703	13,540	13,276	12,959
750	3,769	13,525	13,276	12,873	12,397
1,000	3,714	13,150	12,722	12,043	11,263
1,250	3,642	12,683	12,043	11,055	10,592
1,500	3,554	12,134	11,263	10,592	9,110
1,750	3,450	11,516	10,406	9,360	7,624
2,000	3,400	10,842	10,104	8,115	6,208
2,500	3,113	9,980	8,115	5,756	3,997
2,750	2,947	9,173	7,141	4,757	3,303

ELEMENTS OF SECTION P5000/P5001 *(METRIC)*

Parameter	P5000	P5001
Area of Section	5.79 cm^2	11.57 cm^2
Axis 1-1		
Moment of Inertia (I)	45.7 cm^4	232.2 cm^4
Section Modulus (S)	10.29 cm^3	28.12 cm^3
Radius of Gyration (r)	2.8 cm	4.7 cm
Axis 2-2		
Moment of Inertia (I)	14.9 cm^4	29.9 cm^4
Section Modulus (S)	7.24 cm^3	14.49 cm^3
Radius of Gyration (r)	1.8 cm	1.8 cm

Notes:

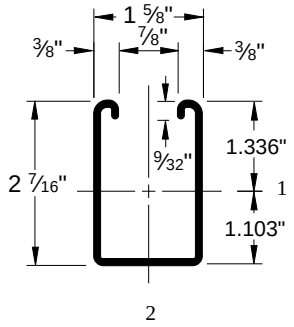
* Load limited by spot weld shear.

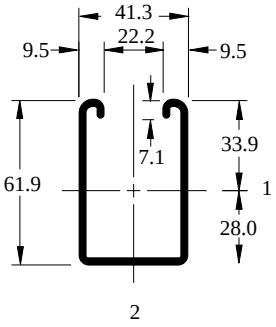
** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

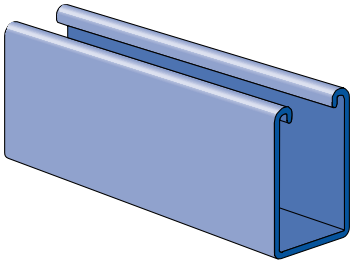
"T" Series ... 85% **"KO" Series .. 95%**
"SL" Series ... 85% **"HS" Series .. 90%**

P5500

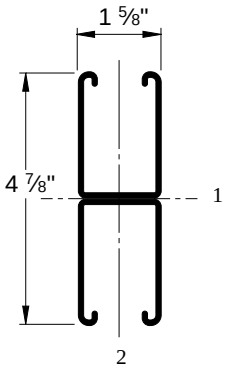


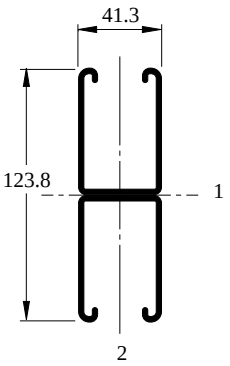


Wt/100 Ft: 247 Lbs (368 kg/100 m)
Allowable Moment 9,830 In-Lbs (1,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

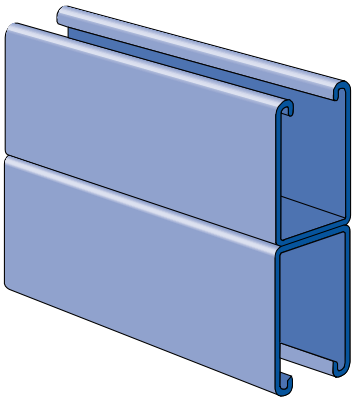


P5501





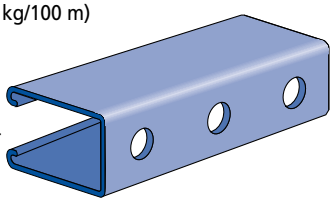
Wt/100 Ft: 494 Lbs (735 kg/100 m)
Allowable Moment 29,000 In-Lbs (3,280 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



P5500 HS

Wt/100 Ft: 242 Lbs (360 kg/100 m)

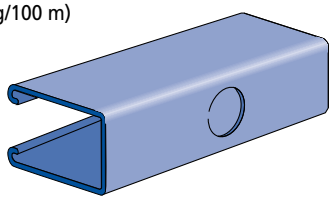
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



P5500 KO

Wt/100 Ft: 247 Lbs (368 kg/100 m)

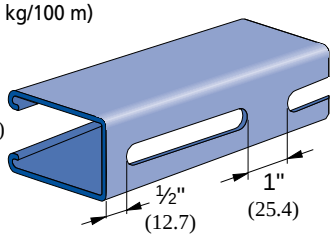
7/8" (22.2) Knockouts
6" (152.4) on Center



P5500 SL

Wt/100 Ft: 242 Lbs (360 kg/100 m)

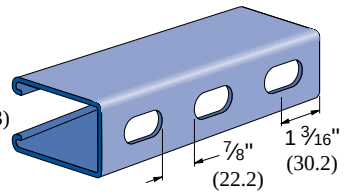
Slots are
3" (76.2) x 13/32" (10.3)
4" (101.6) on Center



P5500 T

Wt/100 Ft: 242 Lbs (360 kg/100 m)

Slots are
1⅛" (28.6) x 9/16" (14.3)
2" (51) on Center



Channel Nuts (Refer to Hardware Section for Details)

P5506-0832
P5506-1024
P5506-1420
P5507
P5508
P5509
P5510

P1006T1420
P1008T
P1010T

P1012
P1023
P1024

P3006-0832
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010

P3016-0632
P3016-0832
P3016-1024
P3016-1420

Channel Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

BEAM LOADING – P5500

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
24	3,280	0.04	3,280	3,280	3,280
36	2,190	0.09	2,190	2,190	2,190
48	1,640	0.15	1,640	1,640	1,430
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	540	360
108	730	0.77	560	420	280
120	660	0.96	460	340	230
144	550	1.38	320	240	160
168	470	1.87	230	170	120
192	410	2.45	180	130	90
216	360	3.10	140	110	70
240	330	3.82	110	90	60

BEAM LOADING – P5501

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
24	4,680 *	0.02	4,680 *	4,680 *	4,680 *
36	4,680 *	0.05	4,680 *	4,680 *	4,680 *
48	4,680 *	0.08	4,680 *	4,680 *	4,680 *
60	3,870	0.13	3,870	3,870	3,870
72	3,220	0.19	3,220	3,220	3,220
84	2,760	0.26	2,760	2,760	2,510
96	2,420	0.34	2,420	2,420	1,920
108	2,150	0.42	2,150	2,150	1,520
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	1.34	960	720	480
216	1,070	1.70	760	570	380
240	970	2.10	610	460	310

COLUMN LOADING – P5500

Unbraced Height In	Maximum 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	4,580	13,860	12,610	10,910	9,300
36	4,010	11,120	9,300	7,190	5,550
48	3,370	8,550	6,580	4,800	3,800
60	2,810	6,430	4,800	3,610	2,920
72	2,410	4,970	3,800	2,920	2,390
84	2,120	4,060	3,160	2,460	2,020
96	1,900	3,450	2,720	2,130	1,740
108	1,720	3,000	2,390	1,870	1,520
120	1,570	2,670	2,130	1,660	**

COLUMN LOADING – P5501

Unbraced Height In	Maximum 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	8,650	32,840	32,310	31,440	30,410
36	8,450	31,560	30,410	28,610	26,550
48	8,180	29,850	27,950	25,070	21,960
60	7,830	27,780	25,070	21,160	17,200
72	7,420	25,450	21,960	17,200	12,730
84	6,940	22,950	18,770	13,460	9,350
96	6,410	20,360	15,660	10,310	7,160
108	5,810	17,780	12,730	8,150	5,660
120	5,220	15,280	10,310	6,600	**

ELEMENTS OF SECTION P5500/P5501

Parameter	P5500	P5501
Area of Section	0.726 In^2	1.453 In^2
Axis 1-1		
Moment of Inertia (I)	0.523 In^4	2.811 In^4
Section Modulus (S)	0.391 In^3	1.153 In^3
Radius of Gyration (r)	0.848 In	1.391 In
Axis 2-2		
Moment of Inertia (I)	0.335 In^4	0.669 In^4
Section Modulus (S)	0.412 In^3	0.824 In^3
Radius of Gyration (r)	0.679 In	0.679 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% **"KO" Series .. 95%**
"SL" Series ... 85% **"HS" Series .. 90%**

BEAM LOADING – P5500 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	1511	1	1511	1511	1511
750	1209	1	1209	1209	1209
1,000	906	3	906	906	906
1,250	725	4	725	725	616
1,500	604	6	604	604	428
1,750	518	8	518	472	315
2,000	453	10	453	361	241
2,500	363	16	308	231	154
3,000	302	24	214	161	107
3,500	259	32	157	118	79
4,000	227	42	120	90	60
4,500	201	53	95	71	48
5,000	181	65	77	58	39
6,000	151	94	54	40	27

BEAM LOADING – P5501 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	2123 *	1	2123 *	2123 *	2123 *
750	2123 *	1	2123 *	2123 *	2123 *
1,000	2123 *	1	2123 *	2123 *	2123 *
1,250	2123 *	2	2123	2123	2123
1,500	1782	3	1782	1782	1782
1,750	1527	4	1527	1527	1527
2,000	1336	6	1336	1336	1294
2,500	1069	9	1069	1069	828
3,000	891	13	891	863	575
3,500	764	18	764	634	423
4,000	668	23	647	485	324
4,500	594	29	511	384	256
5,000	535	36	414	311	207
6,000	446	52	288	216	144

COLUMN LOADING – P5500 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	2,087	6,323	5,768	5,009	4,283
750	1,966	5,721	5,009	4,111	3,329
1,000	1,738	4,700	3,836	2,877	2,224
1,250	1,498	3,770	2,877	2,105	1,670
1,500	1,290	2,987	2,224	1,670	1,348
1,750	1,135	2,393	1,819	1,392	1,136
2,000	1,016	1,999	1,545	1,199	982
2,500	844	1,517	1,199	939	767

COLUMN LOADING – P5501 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	3,925	14,911	14,676	14,295	13,842
750	3,885	14,654	14,295	13,719	13,047
1,000	3,802	14,114	13,505	12,553	11,481
1,250	3,695	13,450	12,553	11,199	9,740
1,500	3,567	12,680	11,481	9,740	7,967
1,750	3,417	11,826	10,331	8,259	6,283
2,000	3,248	10,913	9,146	6,828	4,828
2,500	2,854	8,998	6,828	4,449	3,090

ELEMENTS OF SECTION P5500/P5501 *(METRIC)*

Parameter	P5500	P5501
Area of Section	4.68 cm^2	9.37 cm^2
Axis 1-1		
Moment of Inertia (I)	21.8 cm^4	117.0 cm^4
Section Modulus (S)	6.41 cm^3	18.89 cm^3
Radius of Gyration (r)	2.2 cm	3.5 cm
Axis 2-2		
Moment of Inertia (I)	13.9 cm^4	27.8 cm^4
Section Modulus (S)	6.75 cm^3	13.50 cm^3
Radius of Gyration (r)	1.7 cm	1.7 cm

Notes:

* Load limited by spot weld shear.

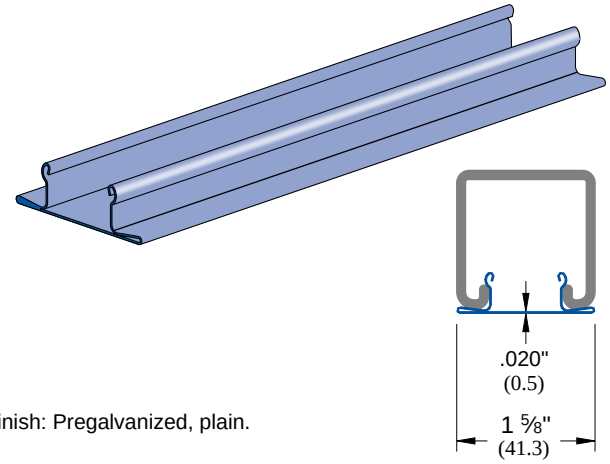
** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. See page 61 for lateral bracing reduction charts.
5. For Pierced Channel, Beam Load Values in the tables are multiplied by the following factor:

"T" Series ... 85% "KO" Series .. 95%
"SL" Series ... 85% "HS" Series .. 90%

P1184

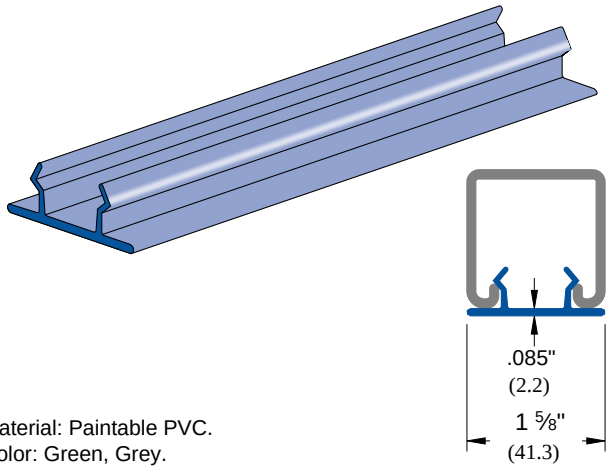
Wt/100 Ft: 27 Lbs (40.2 kg/100 m)
Standard length: 10' (3m)



Finish: Pregalvanized, plain.

P1184 P

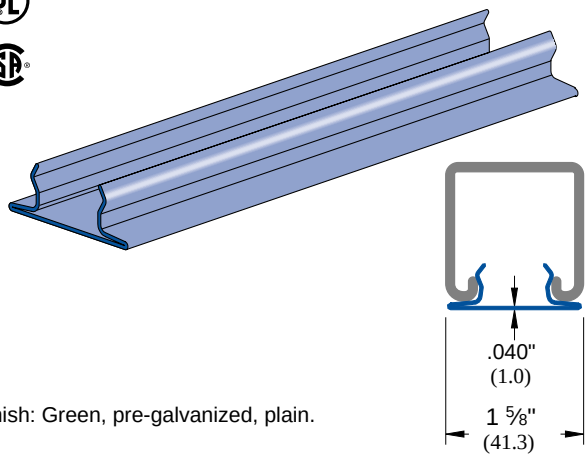
Wt/100 Ft: 11 Lbs (16.5 kg/100 m)
Standard length: 10' (3m)



Material: Paintable PVC.
Color: Green, Grey.

P3184

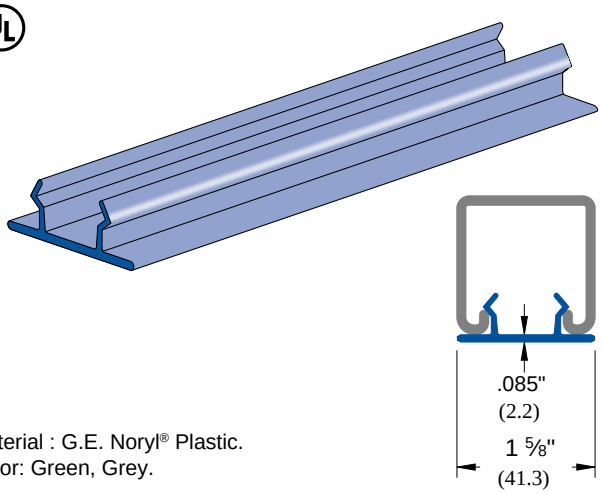
Wt/100 Ft: 47 Lbs (69.9 kg/100 m)
Standard length: 10' (3m)



Finish: Green, pre-galvanized, plain.

P3184 P

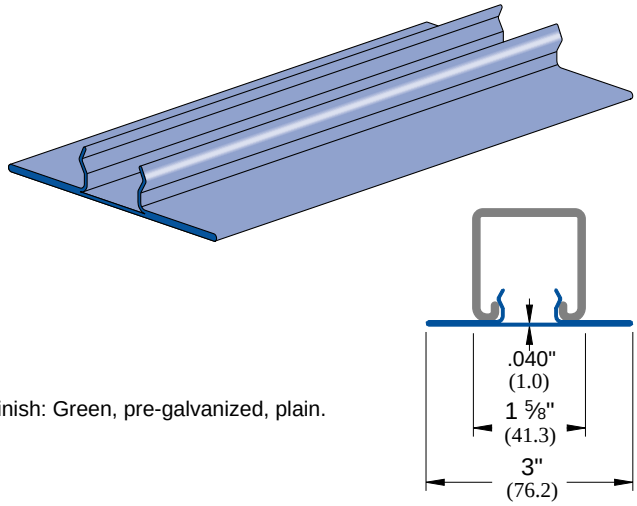
Wt/100 Ft: 9.4 Lbs (14.0 kg/100 m)
Standard length: 10' (3m)



Material : G.E. Noryl® Plastic.
Color: Green, Grey.

P3184 F

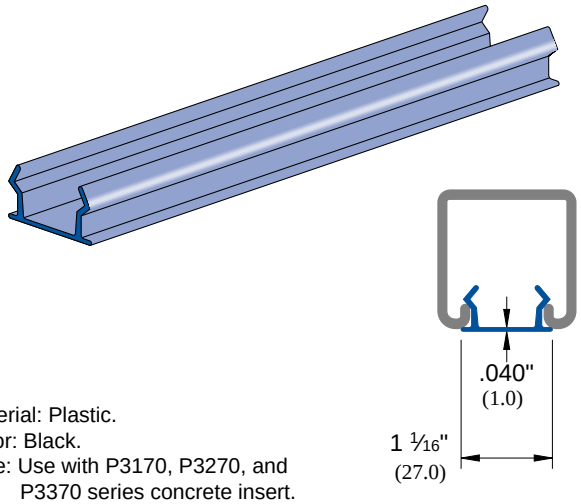
Wt/100 Ft: 90 Lbs (134 kg/100 m)
Standard length: 16' (4.9m)



Finish: Green, pre-galvanized, plain.

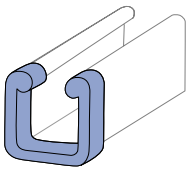
P3712 P

Wt/100 Ft: 5.4 Lbs (8.0 kg/100 m)
Standard length: 10' (3m)



Material: Plastic.
Color: Black.
Note: Use with P3170, P3270, and P3370 series concrete insert.

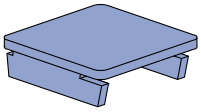
P2859 Frame Caps



Part Number*	Use With Channel	Wt/100 pcs Lbs *(kg)*
P2859-10	P1000	12 *5.4*
P2859-11	P1001	12 *5.4*
P2859-12	P3300	5 *2.3*
P2859-13	P5000	22 *10.0*
P2859-14	P5500	17 *7.7*

** Add color suffix:*
GR - Green **WH** - White **GY** - Grey
"A" series frame caps available

P1180, P2280,P4280, P5280, P5580

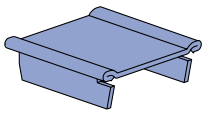


Part Number	Use With Channel	Wt/100 pcs Lbs (kg)
P1180	P1100	12 *5.4*
P2280	P2000	11 *5.0*
P4280	P4000	5 *2.3*
P5280	P5000	22 *10.0*
P5580	P5500	17 *7.7*

Material: .075" (1.9)

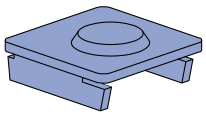
P1280

Wt/100 pcs: 11 Lbs (5.0 Kg.)



Use with P1000
Material: .060" (1.5)

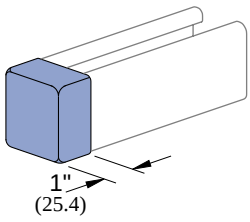
P1280 A, P2280 A



Part Number	Use With Channel	Wt/100 pcs Lbs *(kg)*
P1280A	P1000	11 *5.0*
P2280A	P2000	11 *5.0*

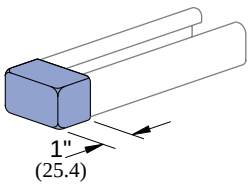
Material: .075" (1.9)

P2860 PLASTIC WHITE END CAPS



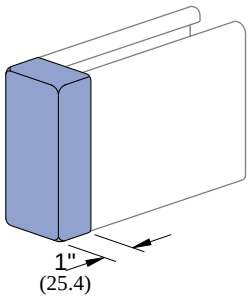
P2860-10

Use with P1000, P1100, P2000 channels & P9000 Telestrut.
Wt/100 pcs 3.4 Lbs (1.5 kg)



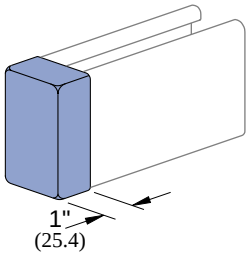
P2860-33

Use with P3300 channel.
Wt/100 pcs 2.5 Lbs (1.1 kg)



P2860-50

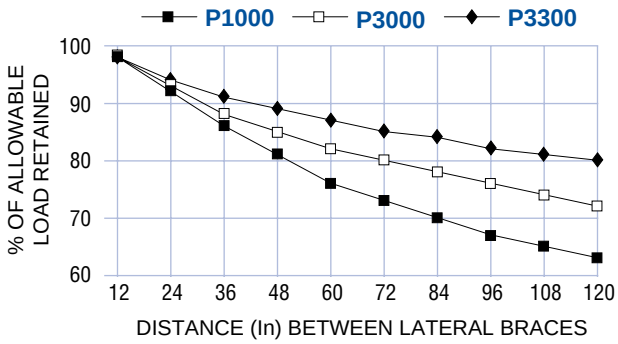
Use with P5000 & P1001 channels.
Wt/100 pcs 5 Lbs (2.3 kg)

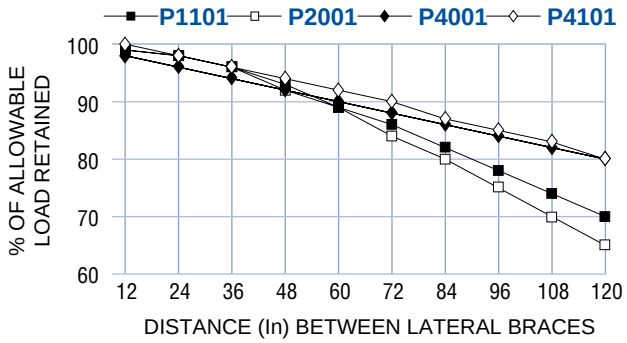


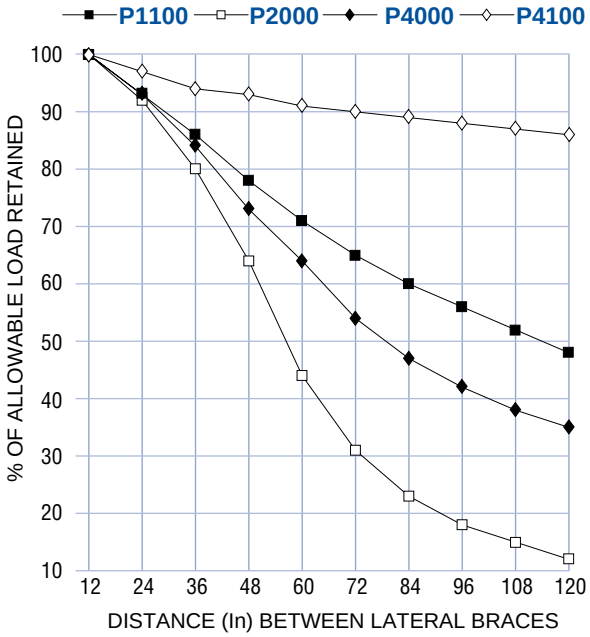
P2860-55

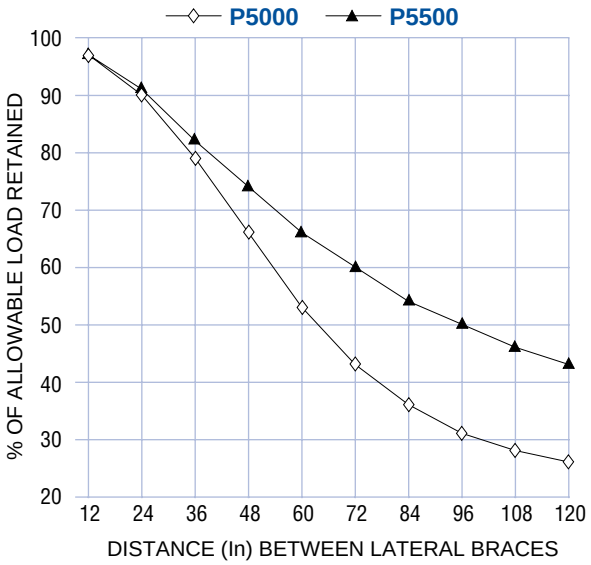
Use with P5500 channel.
Wt/100 pcs 4.7 Lbs (2.1 kg)

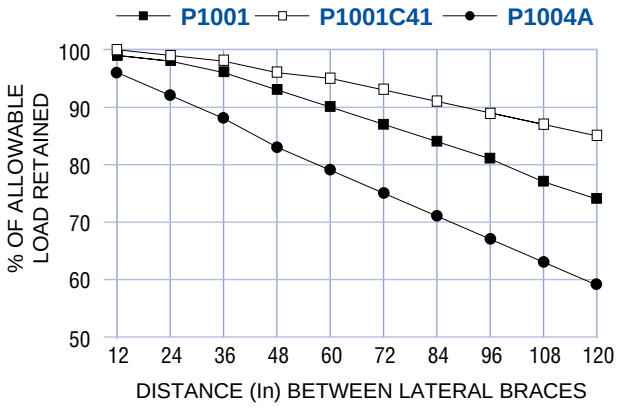
Lateral Bracing Load Reduction Charts

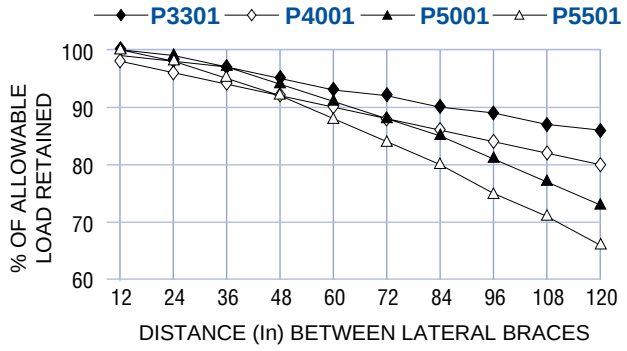




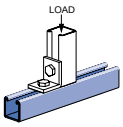
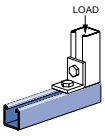
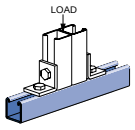




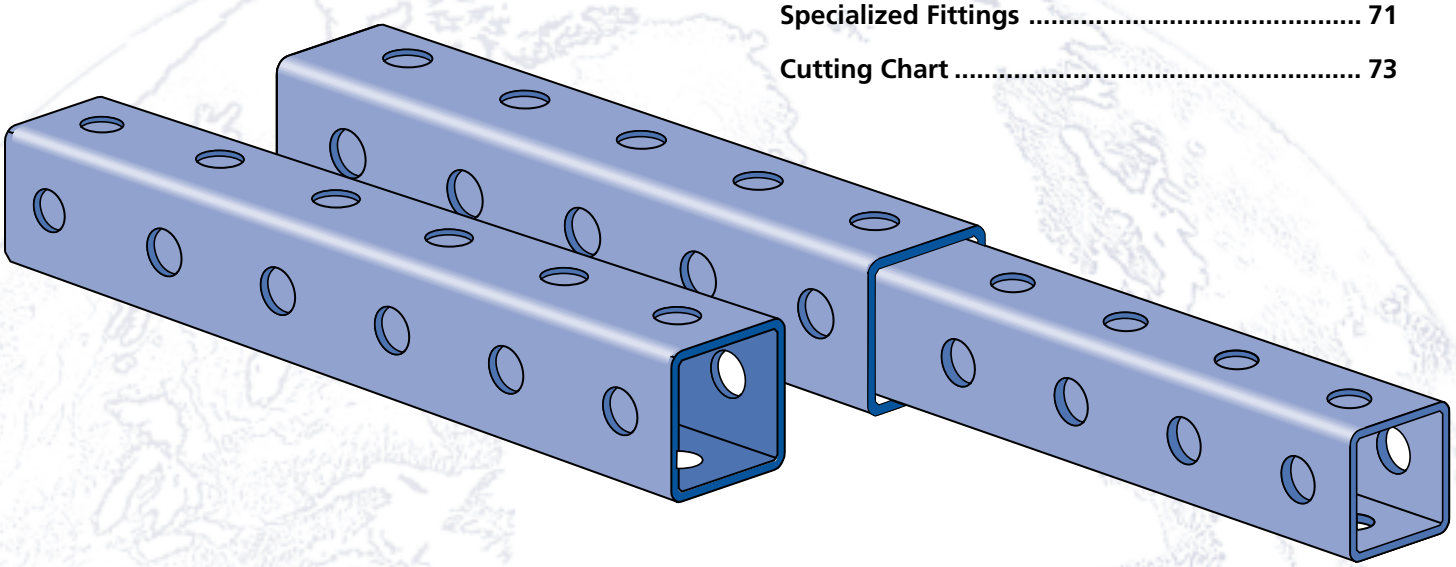




Bearing Loads on Unistrut Channel

Safety Factor — 2½			
Channel	**Bearing Length 1⅝" (41 mm) Maximum Allowable Loads Lbs *(kg)***	**Bearing Length 1⅝" (41 mm) Maximum Allowable Loads Lbs *(kg)***	**Bearing Length 3¼" (82 mm) Maximum Allowable Loads Lbs *(kg)***
P1000	**5,000** (2,268)	**3,500** (1,588)	**8,000** (3,629)
P1100	**3,500** (1,588)	**2,500** (1,134)	**5,500** (2,495)
P2000	**2,000** (907)	**1,500** (680)	**3,000** (1,361)
P3000	**5,000** (2,268)	**3,500** (1,588)	**8,000** (3,629)
P3300	**6,000** (2,722)	**4,000** (1,814)	**9,000** (4,082)
P4000	**2,200** (998)	**1,700** (771)	**3,500** (1,588)
P4100	**3,400** (1,542)	**2,600** (1,179)	**4,800** (2,177)
P5000	**4,000** (1,814)	**2,000** (907)	**5,500** (2,495)
P5500	**5,000** (2,268)	**3,500** (1,588)	**8,000** (3,629)

TELESTRUT® SYSTEM



MATERIAL

Unistrut channels are accurately and carefully cold formed to size from low-carbon strip steel.

All spot-welded combination members, except P1001T, are welded 3" (76 mm) maximum on center.

STEEL: PLAIN

12 Ga. (2.7 mm), 14 Ga.(1.9 mm) and 16 Ga. (1.5 mm) ASTM A1011 SS GR 33.

STEEL: PRE-GALVANIZED

12 Ga. (2.7 mm), 14 Ga. (1.9 mm) and 16 Ga. (1.5mm) ASTM A653 GR 33.

FINISHES

Fittings are available in: Perma-Green II (GR), electro-galvanized (EG), conforming to ASTM B633 Type III SC1; Hot-dipped galvanized (HG), conforming to ASTM A123 or A153 and plain (PL).

DESIGN BOLT TORQUE

BOLT SIZE	¼" 20	5/16" 18	⅜" 16	½" 13	⅝" 11	¾" 10
FOOT LBS.	6	11	19	50	100	125
N·m	8	15	25	70	135	170

DIMENSIONS

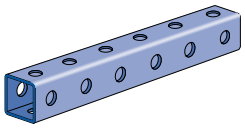
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

DESIGN LOAD

Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 2.5, unless otherwise noted.

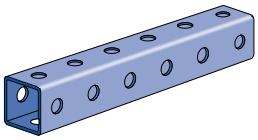
Telestrut Telescoping Tubing

1⅝" x 1⅝"
12 Ga.



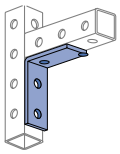
P9000-Pg 67

1⅞" x 1⅞"
12 Ga.

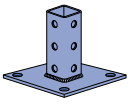


P9200-Pg 67

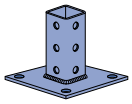
Special Fittings and Connection Hardware for Telestrut Telescoping Tubing



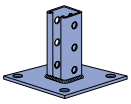
P9324-Pg 71



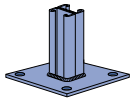
P9011-Pg 72



P9012-Pg 72

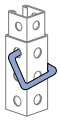


P9013-Pg 72



P9014-Pg 72

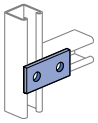
P9207-Pg 71



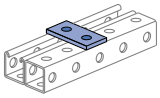
P9209-Pg 70

P9010-Pg 70

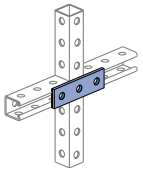
Standard 1⅝" Metal Framing – Flat Plate Fittings



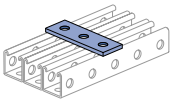
P1065-Pg 90



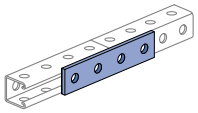
P1924-Pg 90



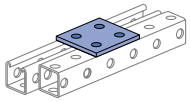
P1066-Pg 91



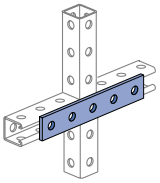
P1925-Pg 91



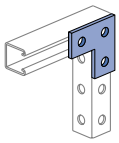
P1067-Pg 91



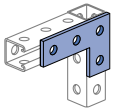
P2079-Pg 91



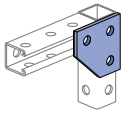
P1941-Pg 91



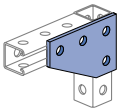
P1036-Pg 92



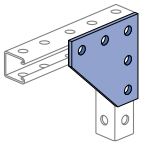
P1380A-Pg 92



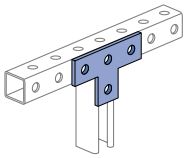
P1334-Pg 92



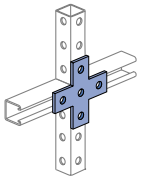
P1380-Pg 92



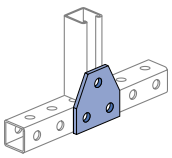
P1873-Pg 92



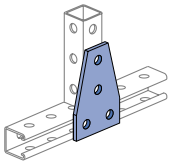
P1031-Pg 92



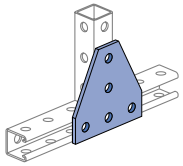
P1028-Pg 93



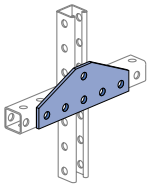
P1356-Pg 93



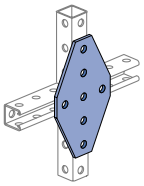
P1358-Pg 93



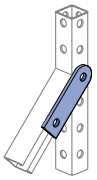
P1726-Pg 93



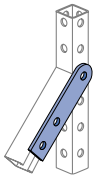
P1953-Pg 93



P1950-Pg 93



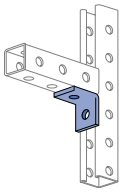
P2325-Pg 90

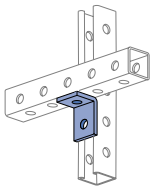


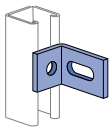
P2324-Pg 91

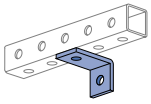
Many of the standard metal framing components are compatible with the Telestrut telescoping tubing. Refer to the appropriate page in other sections of the catalog for information on the particular fittings shown here.

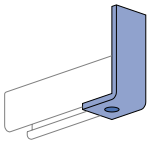
Standard 1⅝" Metal Framing – Ninety Degree Fittings

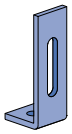

P1026-Pg 94

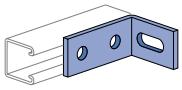

P1068-Pg 94

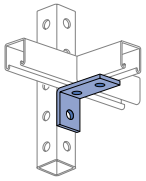

P1750-Pg 95

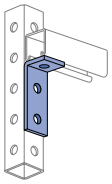

P1281-Pg 94

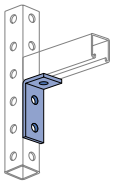

P1538A-Pg 95

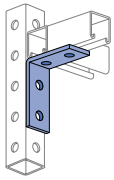

P1498-Pg 95

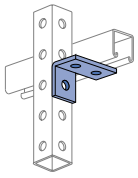

P1747-Pg 95

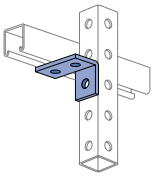

P1458-Pg 95

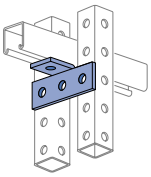

P1326-Pg 96

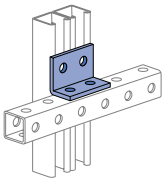

P1346-Pg 96

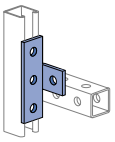

P1325-Pg 96

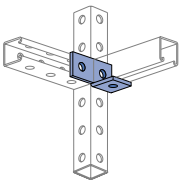

P1822-Pg 96

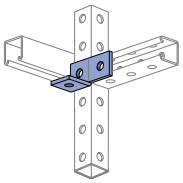

P1823-Pg 96

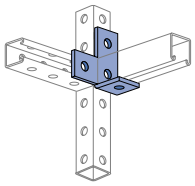

P1821-Pg 96

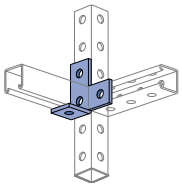

P1934-Pg 99

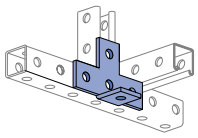

P1033-Pg 97

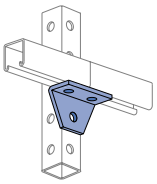

P1037-Pg 97

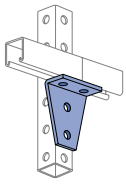

P1038-Pg 97

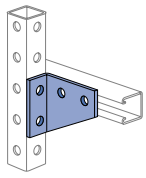

P1034-Pg 97

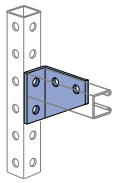

P1035-Pg 97

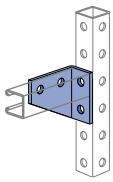

P1029-Pg 97

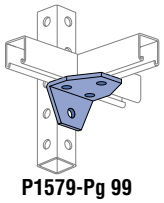

P1357-Pg 98

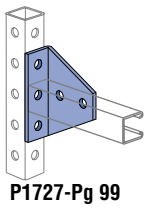

P1359-Pg 98

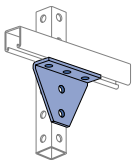

P1381-Pg 98

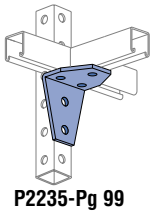

P1290-Pg 98

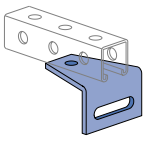

P1291-Pg 98

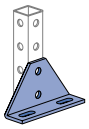

P1579-Pg 99

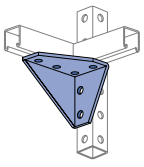

P1727-Pg 99

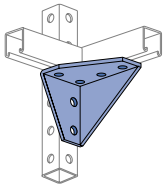

P1728-Pg 99


P2235-Pg 99

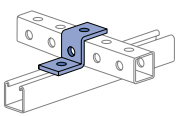

P1713-Pg 99

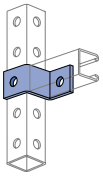

P1130-Pg 100

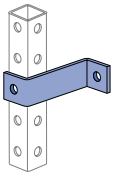

P1956-Pg 100

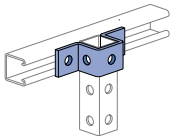

P1957-Pg 100

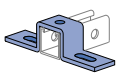
Standard 1⅝" Metal Framing – "Z" and "U" Shape Fittings

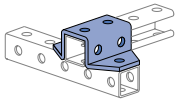

P1045-Pg 102


P1347-Pg 102

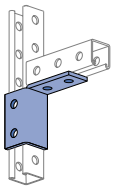

P1479-Pg 103

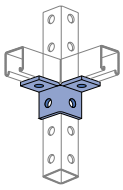

P1047-Pg 106

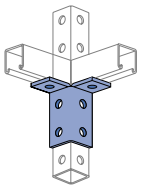

P1048-Pg 107

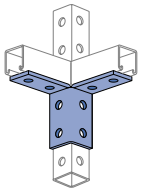

P2326-Pg 109

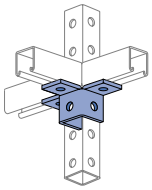
Standard 1⅝" Metal Framing – Wing Shape Fittings

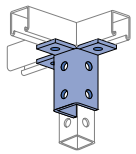

P2343-Pg 110

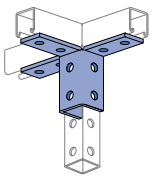

P2223-Pg 110

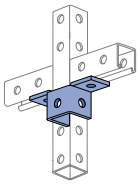

P2224-Pg 110

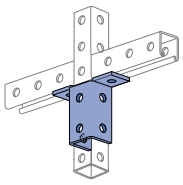

P2225-Pg 110

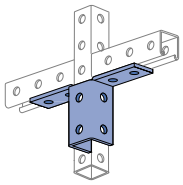

P2227-Pg 110

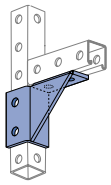

P2228-Pg 110

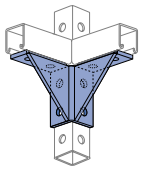

P2229-Pg 111

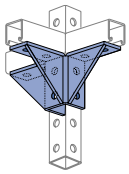

P2345-Pg 111

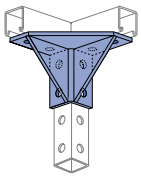

P2346-Pg 111

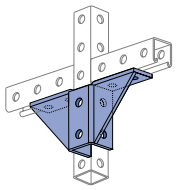

P2347-Pg 111

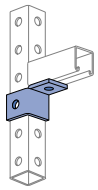

P2344-Pg 111

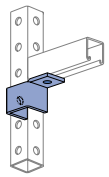

P2226-Pg 111


P2230-Pg 112


P2245-Pg 112


P2348-Pg 112

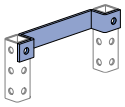

P2341-Pg 109

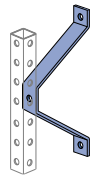

P2472-Pg 109

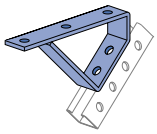
Standard 1⅝" Metal Framing – Misc. Fittings

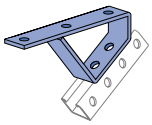

P1843-Pg 135

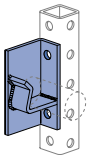

P1354-Pg 135

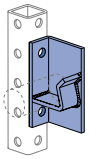

P1201-Pg 135

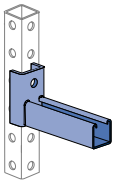

P1204-Pg 136

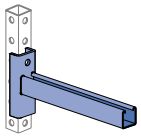

P1944-Pg 136

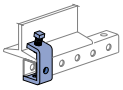

P2655-Pg 136

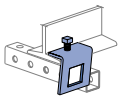

P2354L-Pg 135

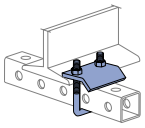

P2354R-Pg 135

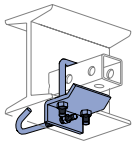

P2231-Pg 118

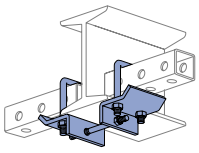

P2233-Pg 118

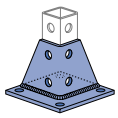

P1271S-Pg 126

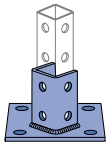

P1796S-Pg 126

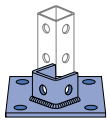

P2785-Pg 127

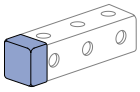

P2867-Pg 127


P2868-Pg 128


P1887-Pg 112

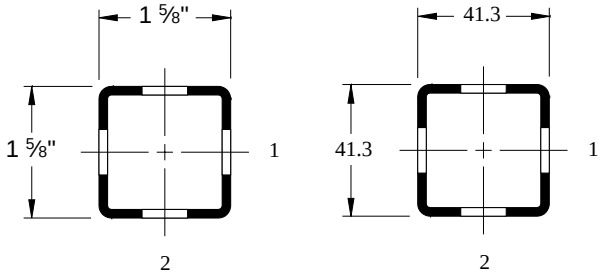

P2072A-Pg 113

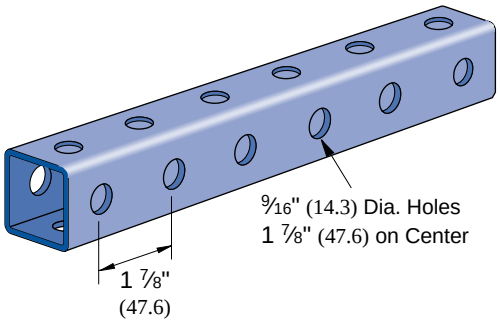

P2072-Pg 113


P2860-10-Pg 60

P9000

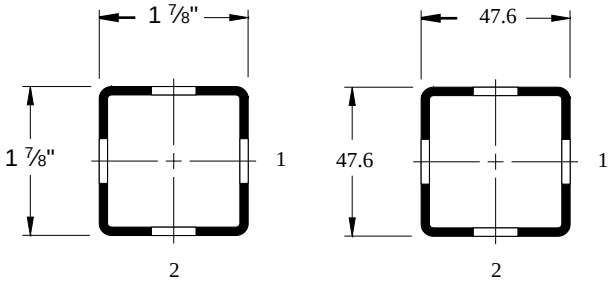
Wt/100 Ft: 190 Lbs (283 kg/100 m)
Allowable Moment 5,080 In-Lbs (570 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

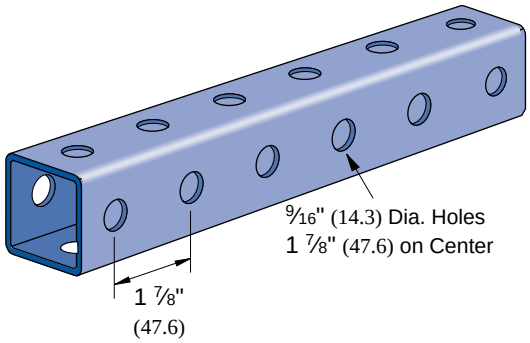




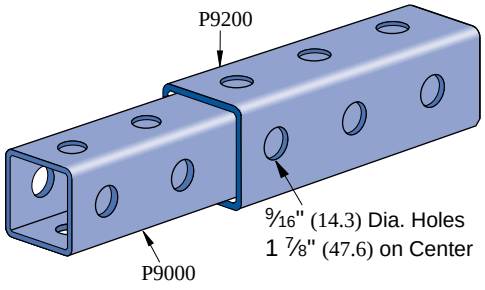
P9200

Wt/100 Ft: 380 Lbs (566 kg/100 m)
Allowable Moment 14,390 In-Lbs (1,630 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

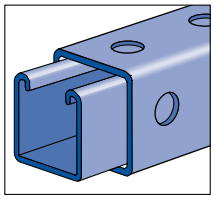




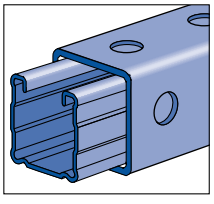
Telestrut's Telescoping Power



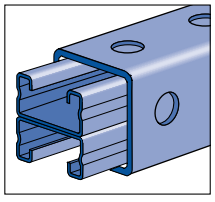
Telestrut can be combined with metal framing channel



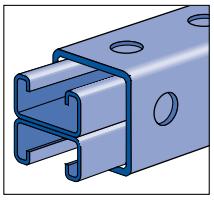
P1000 Series



P1100 Series



P4001 Series



P4101 Series

Channel Finishes: PL, GR, PG; Standard Length: 20'

BEAM LOADING – P9000

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
24	1,690	0.06	1,690	1,690	1,690
36	1,120	0.14	1,120	1,120	800
48	840	0.25	840	670	450
60	670	0.39	570	430	290
72	560	0.56	400	300	200
84	480	0.77	290	220	150
96	420	1.00	220	170	110
108	370	1.27	180	130	90
120	340	1.57	140	110	70
144	280	2.26	100	70	50
168	240	3.07	70	50	40
192	210	4.02	60	40	NR
216	190	5.08	40	NR	NR
240	170	6.28	NR	NR	NR

BEAM LOADING – P9200

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
24	2,490	0.05	2,490	2,490	2,490
36	1,660	0.12	1,660	1,660	1,350
48	1,250	0.22	1,250	1,140	760
60	1,000	0.34	970	730	490
72	830	0.49	670	510	340
84	710	0.67	500	370	250
96	620	0.87	380	280	190
108	550	1.11	300	220	150
120	500	1.37	240	180	120
144	420	1.97	170	130	80
168	360	2.68	120	90	60
192	310	3.50	90	70	50
216	280	4.43	70	60	NR
240	250	5.47	60	50	NR

COLUMN LOADING – P9000

Unbraced Height In	Maximum 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	3,490	8,660	8,500	8,260	7,970
36	3,270	8,290	7,970	7,460	6,880
48	3,000	7,810	7,270	6,470	5,600
60	2,710	7,220	6,470	5,380	4,300
72	2,410	6,570	5,600	4,300	3,110
84	2,120	5,870	4,730	3,290	2,290
96	1,840	5,160	3,890	2,520	1,750
108	1,590	4,460	3,110	1,990	1,380
120	1,380	3,790	2,520	1,610	**

COLUMN LOADING – P9200

Unbraced Height In	Maximum 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	4,510	11,120	10,970	10,730	10,450
36	4,300	10,770	10,450	9,940	9,360
48	4,020	10,290	9,760	8,930	8,020
60	3,710	9,710	8,930	7,780	6,580
72	3,380	9,040	8,020	6,580	5,160
84	3,050	8,310	7,060	5,390	3,880
96	2,730	7,550	6,100	4,280	2,970
108	2,420	6,760	5,160	3,380	2,350
120	2,130	5,980	4,280	2,740	1,900

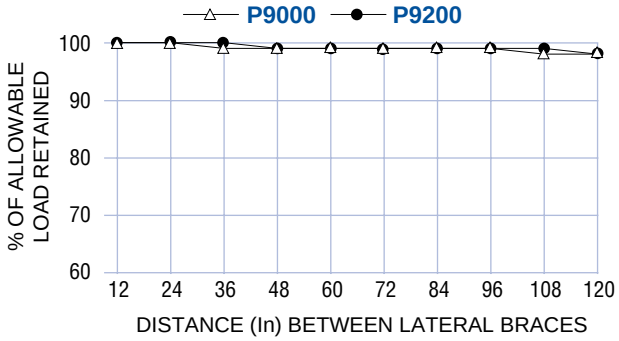
NR = Not Recommended. ** $^{KL}/_{r} > 200$

Notes:
1. Above loads include the weight of the member. This must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. Refer to chart for lateral bracing reduction.

ELEMENTS OF SECTION P9000/P9200

Parameter	P9000	P9200
Area of Section	0.384 In^2	2.477 cm^2
Axis 1-1		
Moment of Inertia (I)	0.164 In^4	6.826 cm^4
Section Modulus (S)	0.203 In^3	3.327 cm^3
Radius of Gyration (r)	0.653 In	1.659 cm
Axis 2-2		
Moment of Inertia (I)	0.164 In^4	6.826 cm^4
Section Modulus (S)	0.203 In^3	3.327 cm^3
Radius of Gyration (r)	0.653 In	1.659 cm

LATERAL BRACING REDUCTION



BEAM LOADING – P9000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	777	2	777	777	777
750	622	2	622	622	537
1,000	466	4	466	453	302
1,250	373	7	373	290	193
1,500	311	10	269	201	134
1,750	267	13	197	148	99
2,000	233	17	151	113	76
2,500	187	27	97	73	48
3,000	156	39	67	50	34
3,500	133	53	49	37	25
4,000	117	69	38	28	19
4,500	104	87	30	22	NR
5,000	93	107	24	18	NR
6,000	78	154	NR	NR	NR

BEAM LOADING – P9200 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	*kg*	*mm*	*kg*	*kg*	*kg*
600	1148	1	1148	1148	1148
750	918	2	918	918	910
1,000	689	4	689	689	512
1,250	551	6	551	492	328
1,500	459	8	455	341	228
1,750	393	11	334	251	167
2,000	344	15	256	192	128
2,500	275	23	164	123	82
3,000	230	34	114	85	57
3,500	197	46	84	63	42
4,000	172	60	64	48	32
4,500	153	76	51	38	25
5,000	138	93	41	31	21
6,000	115	134	28	21	NR

COLUMN LOADING – P9000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	1,584	3,931	3,864	3,755	3,627
750	1,540	3,858	3,755	3,592	3,402
1,000	1,452	3,704	3,532	3,263	2,963
1,250	1,350	3,516	3,263	2,884	2,480
1,500	1,240	3,299	2,963	2,480	1,996
1,750	1,128	3,059	2,643	2,075	1,541
2,000	1,017	2,805	2,317	1,689	1,180
2,500	812	2,277	1,689	1,088	755
2,750	719	2,016	1,404	899	624

COLUMN LOADING – P9200 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Maximum Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	*kg*	*kg*	*kg*	*kg*	*kg*
600	2,048	5,048	4,983	4,878	4,752
750	2,005	4,977	4,878	4,718	4,529
1,000	1,916	4,828	4,658	4,390	4,083
1,250	1,811	4,643	4,390	4,002	3,574
1,500	1,695	4,426	4,083	3,574	3,036
1,750	1,573	4,183	3,748	3,126	2,504
2,000	1,449	3,919	3,396	2,679	2,004
2,500	1,208	3,351	2,679	1,847	1,282
2,750	1,095	3,059	2,333	1,526	1,060

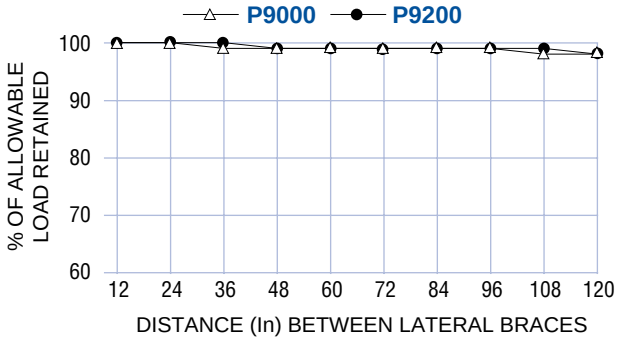
NR = Not Recommended.

Notes:
1. Above loads include the weight of the member. This must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. Refer to chart for lateral bracing reduction.

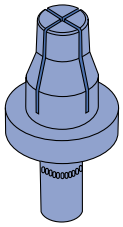
ELEMENTS OF SECTION P9000/P9200 *(METRIC)*

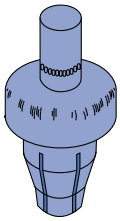
Parameter	P9000	P9200
Area of Section	4.68 cm^2	3.15 cm^2
Axis 1-1		
Moment of Inertia (I)	21.8 cm^4	11.6 cm^4
Section Modulus (S)	6.41 cm^3	4.87 cm^3
Radius of Gyration (r)	2.2 cm	1.9 cm
Axis 2-2		
Moment of Inertia (I)	13.9 cm^4	11.6 cm^4
Section Modulus (S)	6.75 cm^3	4.87 cm^3
Radius of Gyration (r)	1.7 cm	1.9 cm

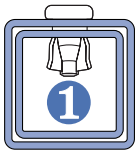
LATERAL BRACING REDUCTION



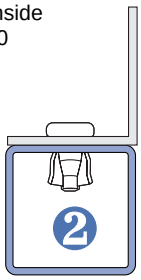
P9010 Multi-grip Rivet



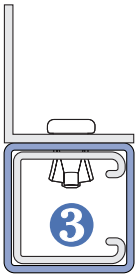




P9000 Inside
P9200

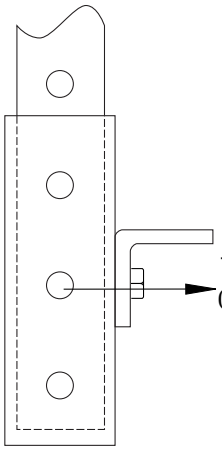


Fitting Attached
to Tube Section
or Channel



Fitting Attached
to Tube Section
with Tube Section
or Channel Inside

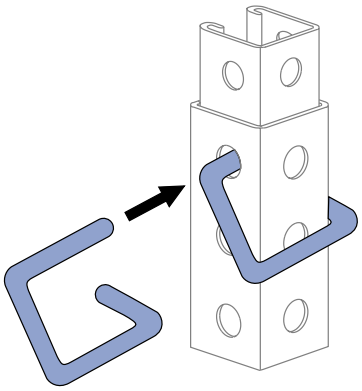
Wt/100 pcs: 10 Lbs (4.5 kg)



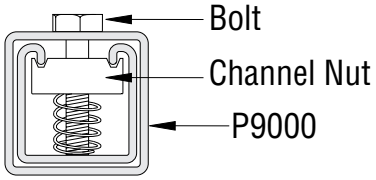
750 Lbs.
(340 Kg)
Pullout

P9209 Gravity Pin

Wt/100 pcs: 47 Lbs (21.3 kg)

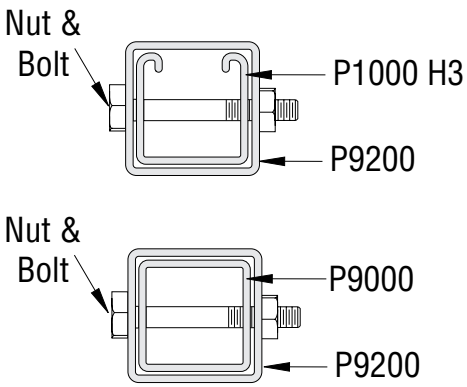


Channel Nut Connection
Infinite Adjustment



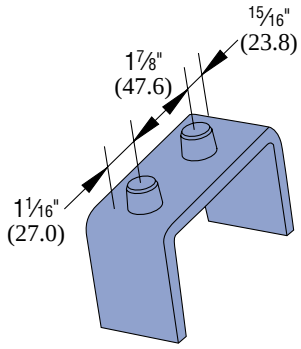
Any of the 1⅝" (41 mm) channel can be connected to the P9000 using standard channel nuts.

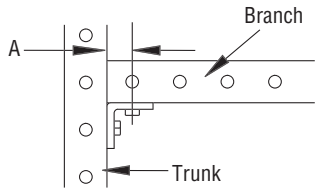
Through-Bolt Connection
Incremental Adjustment



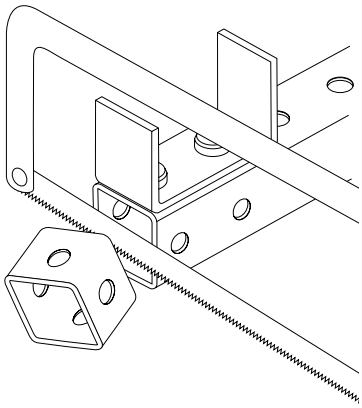
Standard Dimensions for 1⅝" (41 mm) width series channel Fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P9207 Cutting Alignment Gauge



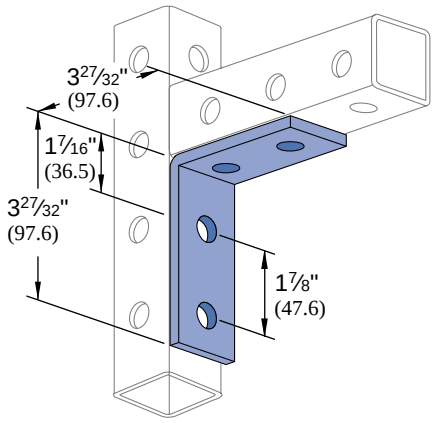


The cutting alignment guide ensures correct cutting of branch members when used with fittings to make connections. Refer to the table of page 73 for the appropriate value for "A" for cutting.



P9324

Wt/100 pcs: 78 Lbs (35.0 kg)

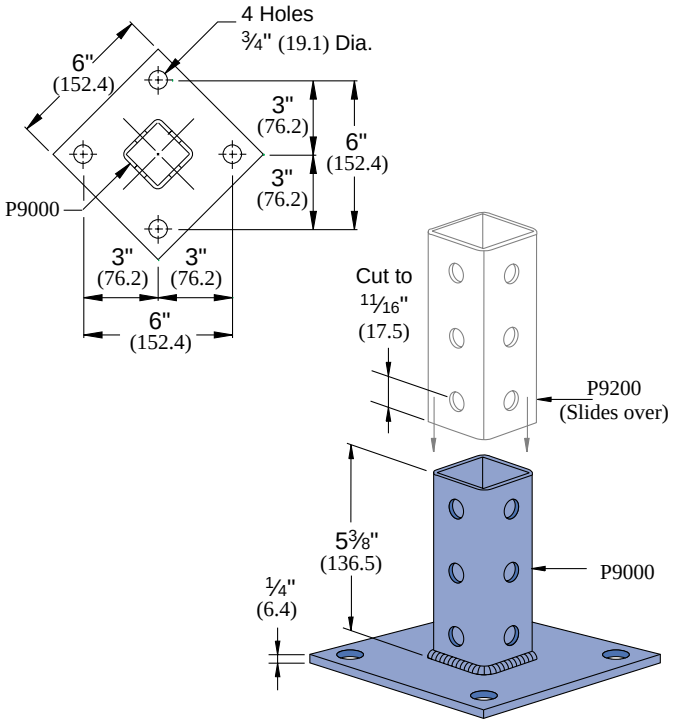


Standard Dimensions for 1⅝" (41 mm) width series channel Fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

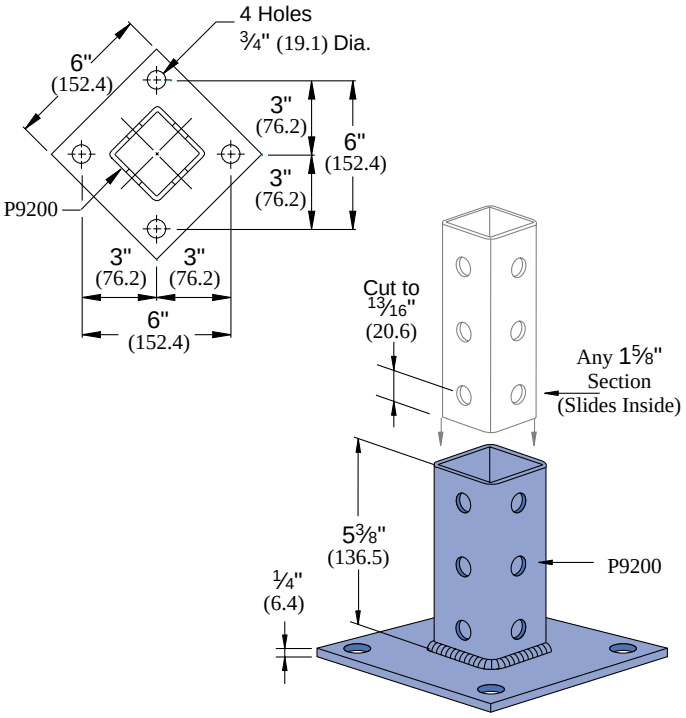
P9011

Wt/100 pcs: 332 Lbs (150.7 kg)



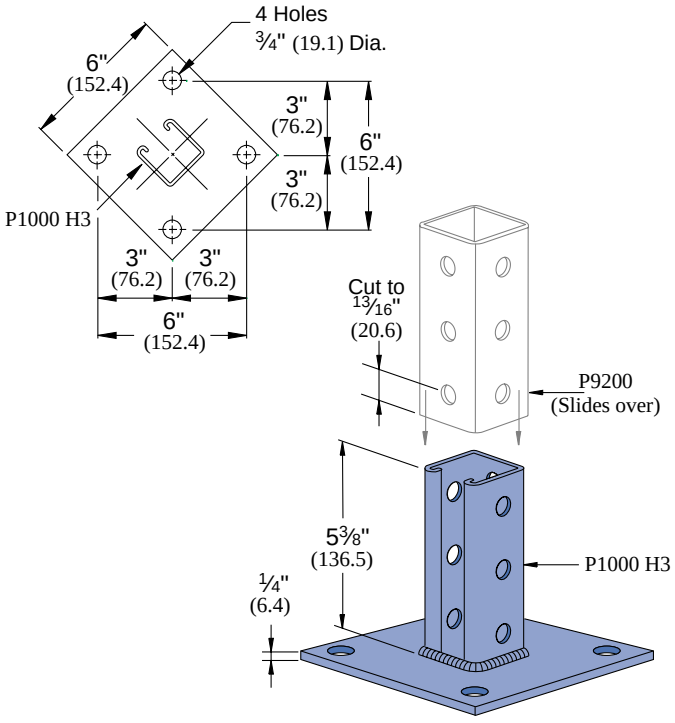
P9012

Wt/100 pcs: 340 Lbs (154 kg)



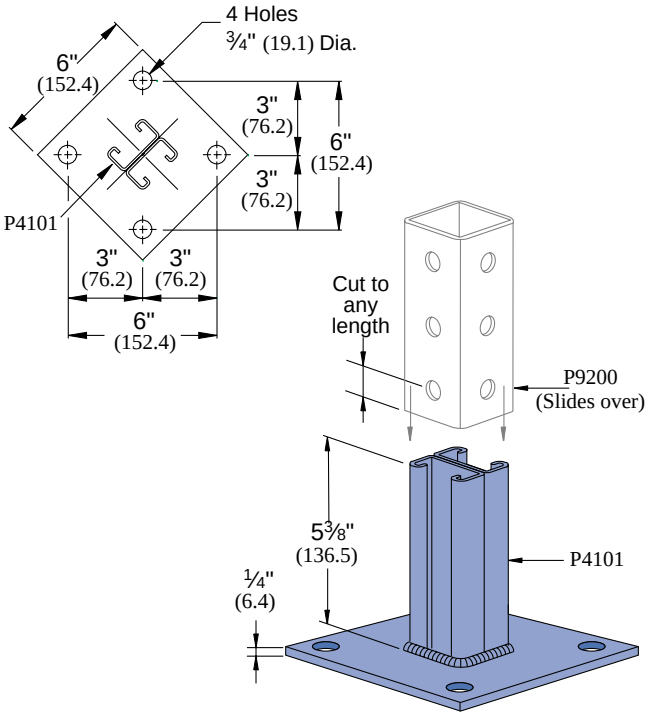
P9013

Wt/100 pcs: 318 Lbs (144.7 kg)



P9014

Wt/100 pcs: 303 Lbs (137.5 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel Fittings *(Unless Otherwise Shown on Drawing)*

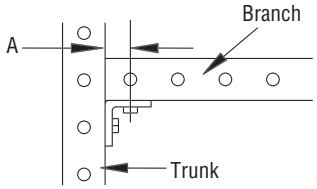
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

Cutting Chart

Fitting	1⅝" (41.3) Branch Trunk 1⅝" (41.3)	1⅝" (41.3) Branch Trunk 1⅞" (47.6)	1⅞" (47.6) Branch Trunk 1⅝" (41.3)	1⅞" (47.6) Branch Trunk 1⅞" (47.6)
P1026	A	A	A	B
P1028	A	A	A	B
P1029	†	†	†	†
P1031	A	A	A	B
P1033	B	A	A	B
P1034	†	†	†	†
P1035	A	†	†	†
P1036	A	A	A	B
P1037	†	†	†	†
P1038	†	†	†	†
P1045	†	†	†	†
P1047	†	†	†	†
P1048	†	†	†	†
P1049	†	†	†	†
P1050	†	†	†	†
P1065	A	A	A	B
P1066	A	A	A	B
P1068	C	NR	NR	NR
P1130	A	A	A	C
P1131	A	A	A	C
P1290	A	NR	NR	NR
P1291	A	NR	NR	NR
P1325	A	NR	NR	NR
P1326	C	NR	NR	NR
P1334	A	A	A	B
P1346	A	A	A	B
P1347	C	NR	NR	NR
P1354	D	D	D	D
P1356	A	A	A	B
P1357	A	NR	NR	NR
P1358	A	A	A	B
P1359	A	NR	NR	NR
P1380	A	A	A	B
P1380 A	A	A	A	B
P1381	†	†	†	†
P1382	†	†	†	†
P1458	A	NR	NR	NR
P1498	†	†	†	†
P1499	†	†	†	†
P1538 A	C	A	A	C
P1538 B	C	A	A	C
P1538 C	C	A	A	C
P1538 D	C	A	A	C
P1579	A	NR	NR	NR
P1713	†	†	†	†

Fitting	1⅝" (41.3) Branch Trunk 1⅝" (41.3)	1⅝" (41.3) Branch Trunk 1⅞" (47.6)	1⅞" (47.6) Branch Trunk 1⅝" (41.3)	1⅞" (47.6) Branch Trunk 1⅞" (47.6)
P1726	A	A	A	B
P1727	B	NR	NR	NR
P1728	†	†	†	†
P1747	†	†	†	†
P1750	†	†	†	†
P1821	†	†	†	†
P1822	†	†	†	†
P1823	†	†	†	†
P1843	D	D	D	D
P1873	†	†	†	†
P1834	†	NR	NR	NR
P1941	A	A	A	B
P1950	A	A	A	B
P1953	A	A	A	B
P1956	†	†	†	†
P1957	†	†	†	†
P2223	A	NR	A	NR
P2224	A	NR	A	NR
P2225	A	NR	A	NR
P2226	A	NR	A	NR
P2227	A	NR	A	NR
P2228	A	NR	A	NR
P2229	A	NR	A	NR
P2230	A	NR	A	NR
P2235	A	NR	NR	NR
P2245	A	NR	A	NR
P2324	E	NR	NR	F
P2325	E	A	A	F
P2326	E	NR	NR	F
P2341 R-L	A	NR	A	NR
P2343 R-L	A	NR	A	NR
P2344 R-L	A	NR	A	NR
P2345	A	NR	A	NR
P2346	A	NR	A	NR
P2347	A	NR	A	NR
P2348	A	NR	A	NR
P2472 R-L	C	NR	A	NR
P2815	C	NR	NR	NR
P2815 D	C	NR	NR	NR
P9324	G	G	G	G
P9325	A	A	A	A
P9484	A	A	A	A

This table shows the value for "A" when using the specified fitting to connect the branch and trunk. Sizes "A" and "B" can be cut with the cutting alignment gauge (P9207). Other sizes require special cutting. Those marked NR are not recommended.

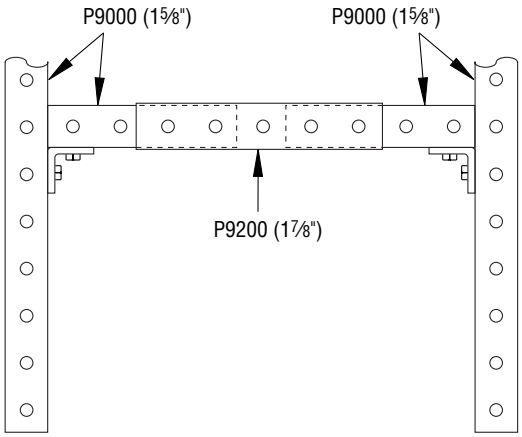


Legend

Designator	"A"
A	11/16" 26.9
B	15/16" 23.8
C	13/16" 20.6
D	1¼" 31.8
E	⅝" * 15.9
F	7/16" * 11.1
G	1 5/32" 26.6
NR	Not Recommended
†	Special Cutting Req'd (See part dwg)

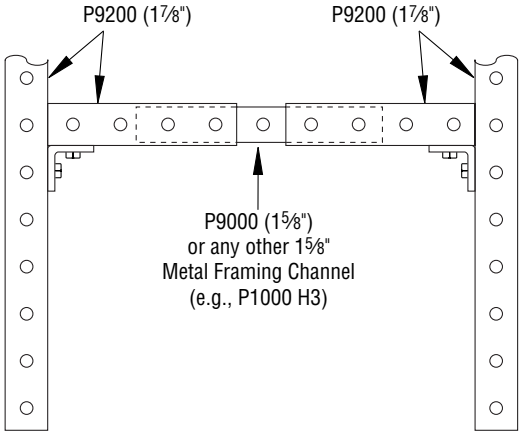
Preferred Three-Piece Assembly

In most applications, telescoping assemblies should be made from three sections of Telestrut material. The simplest construction utilizes a center section of 1⅞" material (P9200) into which a 1⅝" member (P9000) is telescoped from each end. In this way, all intersecting verticals and horizontals are formed from 1⅝" members assuring maximum compatibility and ease of assembly



Alternate Three-Piece Assembly

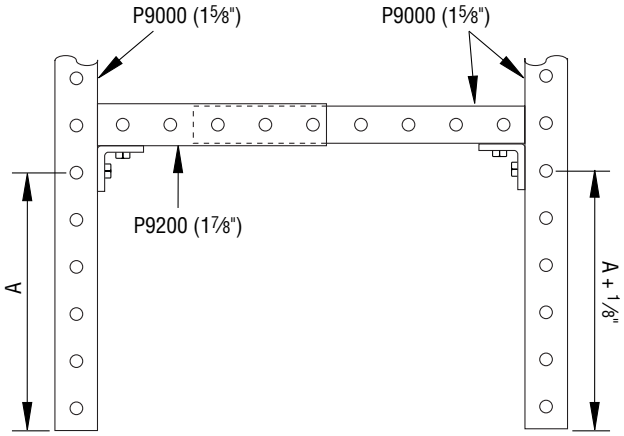
A similar technique is to use a center 1⅝" center member (P9000) which can be telescoped into 1⅞" members used at both ends. With this method, all intersecting connections should be formed from compatible 1⅞" members.



Two-Piece Assembly

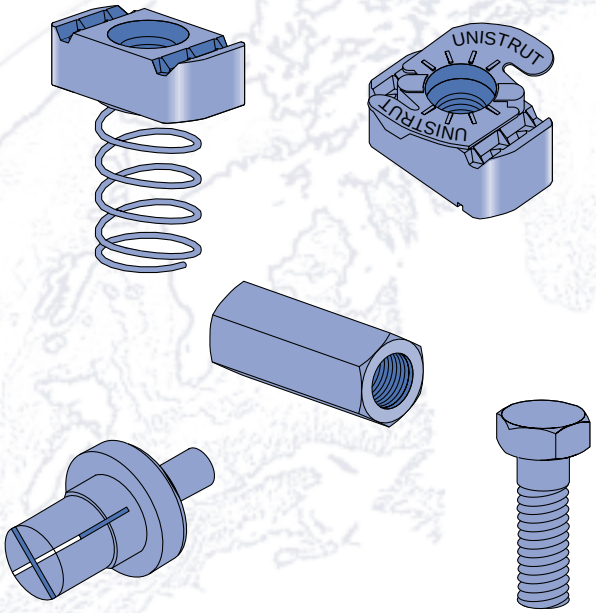
Two-piece telescoping assemblies can be used, but special cutting of one or both telescoping members is needed to achieve proper alignment of fittings at the intersecting connections.

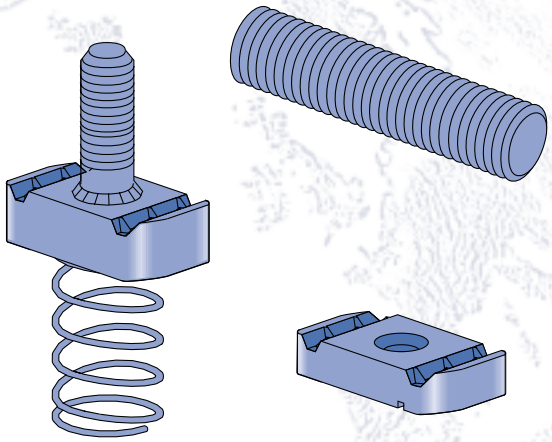
In addition, the right-angle members to which telescoping pieces are attached must be cut according to the illustration at right to insure smooth movement of telescoping members.



NUTS & HARDWARE

UNISTRUT®





MATERIAL

Unistrut channel nuts are manufactured from mild steel bars, and after machining operations are completed, they are case hardened, assuring positive biting action into the inturned edge of the Unistrut channel.

The standard channel nut conforms to ASTM A576 GR 1015 modified and A1011 SS GR 45.

Screws conform to SAE J429 GR 2 (also meets and exceeds ASTM A307).

FINISHES

Nuts, bolts and washers are electro-galvanized (EG), ASTM B633 Type III SC1 finish, unless otherwise noted.

Many hardware items are also available in stainless steel. Consult factory for ordering information.

THREADS

All threads on the nuts and bolts are Unified and American coarse screw threads.

DESIGN BOLT TORQUE

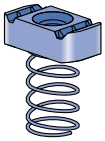
BOLT SIZE	¼" 20	5/16" 18	⅜" 16	½" 13	5/8" 11	¾" 10
FOOT LBS.	6	11	19	50	100	125
N·m	8	15	25	70	135	170

DIMENSIONS

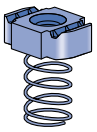
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

Many Unistrut nuts, bolts and hardware items are also available in standard metric dimensions. Consult factory for ordering information.

Channel Nuts With Spring

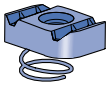


P1006 - P1010
Pg 78

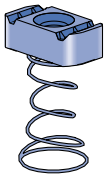


P1012S - P1024S
Pg 78

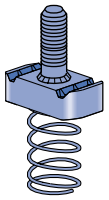
P4006 - P4010
Pg 78



P4012S - P4023S
Pg 78

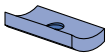


P5506 - P5510
Pg 78

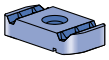


P2378 - P2382
Pg 80

Channel Nuts Without Spring

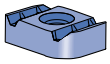


P3016
Pg 79

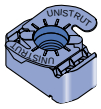


P3006 - P3013
Pg 79

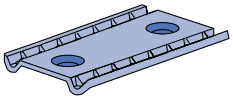
P1012 - P1024
Pg 79



P4012 - P4023
Pg 79

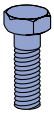


P1006T - P1010T, P4010T
Pg 79

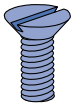


P4908
Pg 79

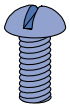
Hardware



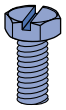
HHCS
Pg 81



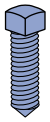
HFMS
Pg 81



HRMS
Pg 81



HSHS
Pg 81



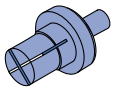
HCSS
Pg 81

HSQN
Pg 82

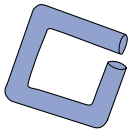
HFLW
Pg 82

HHXN
Pg 82

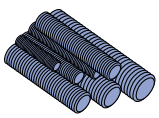
HLKW
Pg 82



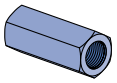
P9010
Pg 82



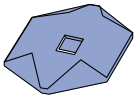
P9209
Pg 82



HTHR
Pg 83



HRCN
Pg 84



P2485
Pg 84

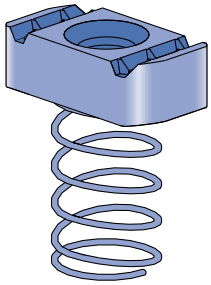
Maximum Allowable Pull-out And Slip Loads

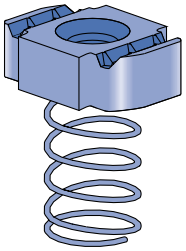
Channel Nut Size-Thread	Gauge	Channel	Allowable Pull-Out Strength Lbs *(kg)*	Resistance to Slip Lbs *(kg)*	Torque Ft-Lbs *(N•m)*
¾" -10	12	P1000 P3000 P5000 P5500	2,500 *1,134*	1,700 *771*	*125 *170*
⅝" -11	12		2,500 *1,134*	1,500 *680*	*100 *135*
½" -13	12		2,000 *907*	1,500 *680*	50 *70*
7/16" -14	12		1,400 *635*	1,000 *454*	35 *50*
⅜" -16	12		1,000 *454*	800 *363*	19 *25*
5/16" -18	12		800 *363*	500 *227*	11 *15*
¼" -20	12		600 *272*	300 *136*	6 *8*
½" -13	12	P3300	1,500 *680*	1,500 *680*	50 *70*
⅜" -16	12		1,000 *454*	800 *363*	19 *25*
5/16" -18	12		800 *363*	500 *227*	11 *15*
¼" -20	12		600 *272*	300 *136*	6 *8*
½" -13	14	P1100 & P4100	1,400 *635*	1,000 *454*	50 *70*
⅜" -16	14		1,000 *454*	750 *340*	19 *25*
5/16" -18	14		800 *363*	400 *181*	11 *15*
¼" -20	14		600 *272*	300 *136*	6 *8*
½" -13	16	P2000 & P4000	1,000 *454*	1,000 *454*	50 *70*
⅜" -16	16		1,000 *454*	750 *340*	19 *25*
5/16" -18	16		800 *363*	400 *181*	11 *15*
¼" -20	16		600 *272*	300 *136*	6 *8*

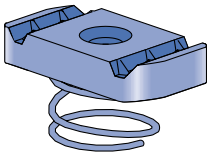
* May require ⅜" or ½" thick fitting.

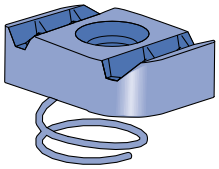
Nut design loads include a minimum safety factor of 3.

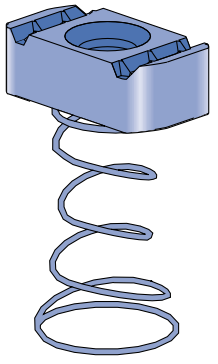
Note: Refer to the Channel Nut Selection Chart on the following two pages for the part number.











■ Acceptable for use

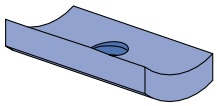
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000			
P1006-0832	#8 -32	7 *3.2*	■	–	–	–
P1006-1024	#10 -24	7 *3.2*	■	–	–	–
P1006-1420	¼" -20	7 *3.2*	■	–	–	–
P1007	5⁄16" -18	6 *2.7*	■	–	–	–
P1008	⅜" -16	10 *4.5*	■	–	–	–
P1009	7⁄16" -14	9 *4.1*	■	–	–	–
P1010	½" -13	12 *5.4*	■	–	–	–

Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000			
P1012S	⅝" -11	21 *9.5*	■	–	–	–
P1023S	¾" -10	21 *9.5*	■	–	–	–
P1024S	⅞" -9	21 *9.5*	■	–	–	–

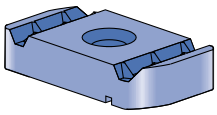
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*		For Use With Channel P3300, P4000, P4100		
P4006-0832	# 8 -32	7 *3.2*	–	■	–	–
P4006-1024	#10 -24	7 *3.2*	–	■	–	–
P4006-1420	¼" -20	7 *3.2*	–	■	–	–
P4007	5⁄16" -18	6 *2.7*	–	■	–	–
P4008	⅜" -16	9 *4.1*	–	■	–	–
P4009	7⁄16" -14	9 *4.1*	–	■	–	–
P4010	½" -13	8 *3.6*	–	■	–	–

Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*		For Use With Channel P3300, P4000, P4100		
P4012S	⅝" -11	10 *4.5*	–	■	–	–
P4023S	¾" -10	10 *4.5*	–	■	–	–

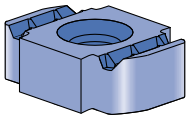
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*				For Use With P5500
P5506-0832	#8 -32	7 *3.2*	–	–	–	■
P5506-1024	#10 -24	7 *3.2*	–	–	–	■
P5506-1420	¼" -20	7 *3.2*	–	–	–	■
P5507	5⁄16" -18	6 *2.7*	–	–	–	■
P5508	⅜" -16	10 *4.5*	–	–	–	■
P5509	7⁄16" -14	10 *4.5*	–	–	–	■
P5510	½" -13	12 *5.4*	–	–	–	■



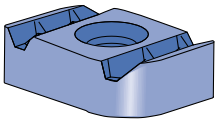
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
P3016-0632	#6 -32	2 *0.9*	■	■	■	■
P3016-0832	#8 -32	2 *0.9*	■	■	■	■
P3016-1024	#10 -24	4 *1.8*	■	■	■	■
P3016-1420	¼" -20	4 *1.8*	■	■	■	■



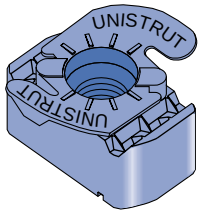
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
P3006-0832	#8 -32	6 *2.7*	■	■	■	■
P3006-1024	#10 -24	6 *2.7*	■	■	■	■
P3006-1420	¼" -20	6 *2.7*	■	■	■	■
P3007	5⁄16" -18	6 *2.7*	■	■	■	■
P3008	⅜" -16	9 *4.1*	■	■	■	■
P3009	7⁄16" -14	9 *4.1*	■	■	■	■
P3010	½" -13	11 *5.0*	■	–	■	■
P3013	½" -13	8 *3.6*	–	■	–	–



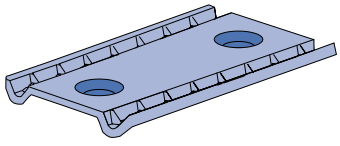
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000		P5000	P5500
P1012	⅝" -11	20 *9.1*	■	–	■	■
P1023	¾" -10	20 *9.1*	■	–	■	■
P1024	⅞" -9	20 *9.1*	■	–	■	■



Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P3300, P4000, P4100			
P4012	⅝" -11	11 *5.0*	–	■	–	–
P4023	¾" -10	11 *5.0*	–	■	–	–



Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
P1006T1420	¼" -20	7 *3.2*	■	■	■	■
P1008T	⅜" -16	10 *4.5*	■	■	■	■
P1010T	½" -13	12 *5.4*	■	–	■	■
P4010T	½" -13	8 *3.6*	–	■	–	–

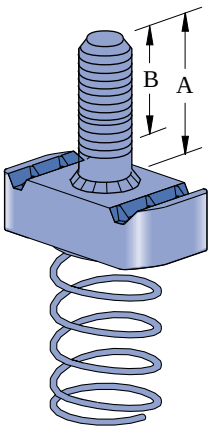


Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
P4908	⅜" -16	17.5 *7.9*	■	■	■	■

Double Conveyor Adjusting Nut

■ Acceptable for use

Channel Stud Nut With Spring



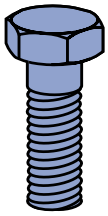
All Stud Nut grooves are serrated.

Special stud lengths and thread lengths can be supplied upon request.

■ Acceptable for use

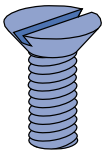
Channel nut Part number	Nut Size Thread	"A" Stud In *(mm)*	"B" Thread In *(mm)*	Wt/100 pcs Lbs *(kg)*	For Use With Channel P1000, P1100, P2000, P3000
P2378-1	¼" -20	⅞ *22.2*	⅝ *15.9*	8 *3.6*	■
P2378-2		1⅛ *28.6*	⅞ *22.2*	9 *4.1*	■
P2378-3		1⅜ *34.9*	1⅛ *28.6*	9 *4.1*	■
P2379-1	5/16" -18	⅞ *22.2*	⅝ *15.9*	12 *5.4*	■
P2379-2		1⅛ *28.6*	⅞ *22.2*	12 *5.4*	■
P2379-3		1⅜ *34.9*	1⅛ *28.6*	13 *5.9*	■
P2380-1	⅜" -16	⅞ *22.2*	⅝ *15.9*	13 *5.9*	■
P2380-2		1⅛ *28.6*	⅞ *22.2*	13 *5.9*	■
P2380-3		1⅜ *34.9*	1⅛ *28.6*	13 *5.9*	■
P2380-4		1 ⅝ *41.3*	1⅜ *34.9*	15 *6.8*	■
P2380-5		1 ⅞ *47.6*	1⅝ *41.3*	16 *7.3*	■
P2380-6		2⅛ *54.0*	1⅞ *47.6*	16 *7.3*	■
P2381-2	½" -13	⅞ *22.2*	½ *12.7*	14 *6.4*	■
P2381-3		1⅛ *28.6*	¾ *19.1*	15 *6.8*	■
P2381-4		1⅜ *34.9*	1 *25.4*	17 *7.7*	■
P2381-5		1⅝ *41.3*	1¼ *31.8*	18 *8.2*	■
P2381-6		1⅞ *47.6*	1½ *38.1*	19 *8.6*	■
P2381-7		2⅛ *54.0*	1¾ *44.5*	20 *9.1*	■
P2382-2	⅝" -11	1⅛ *28.6*	⅝ *15.9*	18 *8.2*	■
P2382-3		1⅜ *34.9*	⅞ *22.2*	20 *9.1*	■

Hex Head Cap Screws



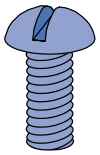
Part No.	Size	Wt/100 pcs Lbs (kg)
HHCS025044EG	1/4" x 7/16"	1.0 *0.5*
HHCS025075EG	1/4" x 3/4"	1.3 *0.6*
HHCS025150EG	1/4" x 1 1/2"	2.6 *1.2*
HHCS031125EG	5/16" x 1 1/4"	3.6 *1.6*
HHCS037075EG	3/8" x 3/4"	4.0 *1.8*
HHCS037087EG	3/8" x 7/8"	4.4 *2.0*
HHCS037100EG	3/8" x 1"	4.5 *2.0*
HHCS037125EG	3/8" x 1 1/4"	5.3 *2.4*
HHCS037150EG	3/8" x 1 1/2"	6.0 *2.7*
HHCS037200EG	3/8" x 2"	7.6 *3.4*
HHCS037225EG	3/8" x 2 1/4"	8.4 *3.8*
HHCS037250EG	3/8" x 2 1/2"	9.2 *4.2*
HHCS050094EG	1/2" x 15/16"	9.1 *4.1*
HHCS050119EG	1/2" x 1 3/16"	10.2 *4.6*
HHCS050150EG	1/2" x 1 1/2"	11.6 *5.3*
HHCS050175EG	1/2" x 1 3/4"	13.1 *5.9*
HHCS050200EG	1/2" x 2"	14.6 *6.6*
HHCS050225EG	1/2" x 2 1/4"	16 *7.3*
HHCS050250EG	1/2" x 2 1/2"	17.5 *7.9*

Flat Head Machine Screws



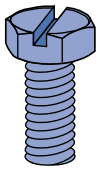
Part No.	Size	Wt/100 pcs Lbs *(kg)*
HFMS025062EG	1/4" x 5/8"	1.2 *0.5*
HFMS031100EG	5/16" x 1"	2.6 *1.2*
HFMS050100EG	1/2" x 1"	9.3 *4.2*

Round Head Machine Screws



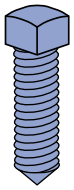
Part No.	Size	Wt/100 pcs Lbs (kg)
HRMS025050EG	1/4" x 1/2"	1 *0.5*
HRMS025075EG	1/4" x 3/4"	1.2 *0.5*
HRMS025100EG	1/4" x 1"	1.5 *0.7*
HRMS031100EG	5/16" x 1"	2.6 *1.2*
HRMS031125EG	5/16" x 1 1/4"	3 *1.4*
HRMS037100EG	3/8" x 1"	4.1 *1.9*
HRMS037125EG	3/8" x 1 1/4"	4.7 *2.1*
HRMS037150EG	3/8" x 1 1/2"	5.3 *2.4*

Hex Slotted Machine Screws



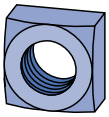
Part No.	Size	Wt/100 pcs Lbs *(kg)*
HSHS025050EG	1/4" x 1/2"	1.4 *0.6*
HSHS025062EG	1/4" x 5/8"	1.5 *0.7*
HSHS025075EG	1/4" x 3/4"	1.7 *0.8*
HSHS031100EG	5/16" x 1"	2.6 *1.2*
HSHS031125EG	5/16" x 1 1/4"	3 *1.4*
HSHS031150EG	5/16" x 1 1/2"	3.4 *1.5*
HSHS037125EG	3/8" x 1 1/4"	5.3 *2.4*

Cone Point Set Screws



Part No.	Size	Wt/100 pcs Lbs *(kg)*
HCSS025100EG	1/4" x 1"	2.8 *1.3*
HCSS031150EG	5/16" x 1 1/2"	3.9 *1.8*
HCSS037150EG	3/8" x 1 1/2"	4.5 *2.0*
HCSS037200EG	3/8" x 2"	6.1 *2.8*
HCSS050150EG	1/2" x 1 1/2"	8.5 *3.9*
HCSS050200EG	1/2" x 2"	11.4 *5.2*
HCSS062150EG	5/8" x 1 1/2"	14.5 *6.6*
HCSS062200EG	5/8" x 2"	23.0 *10.4*

Square Nuts

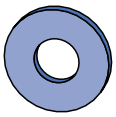


Part No.	Size	Wt/100 pcs Lbs *(kg)*
HSQN025EG	¼"	0.9 *0.4*
HSQN031EG	5/16"	1.6 *0.7*
HSQN037EG	⅜"	2.7 *1.2*
HSQN050EG	½"	5.8 *2.6*
HSQN062EG	⅝"	10.7 *4.9*
HSQN075EG	¾"	15.4 *6.9*
HSQN087EG	⅞"	24.9 *11.3*
HSQN100EG	1"	36.3 *16.5*

Hexagon Nuts

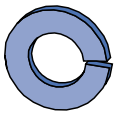
Part No.	Size	Wt/100 pcs Lbs *(kg)*
HHXN025EG	¼"	0.6 *0.3*
HHXN031EG	5/16"	1.2 *0.5*
HHXN037EG	⅜"	1.6 *0.7*
HHXN050EG	½"	4.8 *2.2*
HHXN062EG	⅝"	7.3 *3.3*
HHXN075EG	¾"	11.9 *5.4*
HHXN087EG	⅞"	19 *8.6*
HHXN100EG	1"	28.3 *12.8*

Flat Washers



Part No.	Size	Wt/100 pcs Lbs *(kg)*
HFLW025EG	¼"	0.8 *0.4*
HFLW031EG	5/16"	1 *0.5*
HFLW037EG	⅜"	1.5 *0.7*
HFLW050EG	½"	3.5 *1.6*
HFLW062EG	⅝"	7.7 *3.5*
HFLW075EG	¾"	11 *5.0*
HFLW087EG	⅞"	15.3 *6.9*
HFLW100EG	1"	18.8 *8.5*

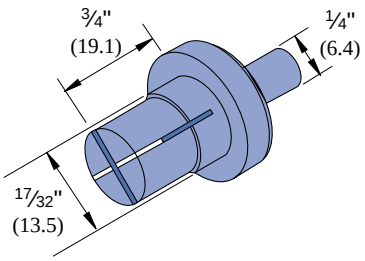
Lock Washers

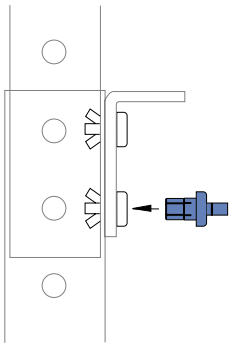


Part No.	Size	Wt/100 pcs Lbs (kg)
HLKW025EG	¼"	0.25 *0.1*
HLKW031EG	5/16"	0.41 *0.2*
HLKW037EG	⅜"	0.63 *0.3*
HLKW050EG	½"	1.32 *0.60*
HLKW062EG	⅝"	2.20 *1.0*
HLKW075EG	¾"	3.80 *1.7*
HLKW087EG	⅞"	6.00 *2.7*
HLKW100EG	1"	8.80 *4.0*

P9010 Rivet

Wt/100 pcs: 10.0 Lbs (4.5 kg)

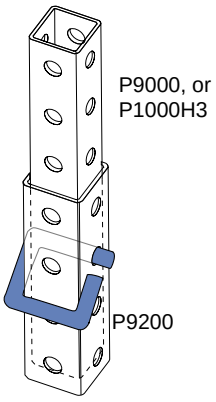


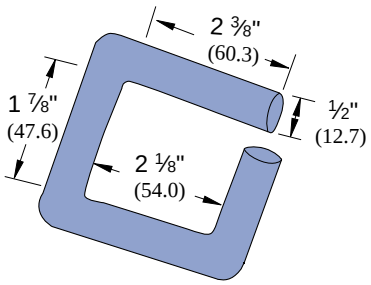


For use with
P9000, P9200 & P1000 H3

P9209 Gravity Pin

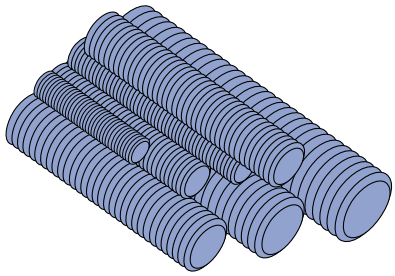
Wt/100 pcs: 10.0 Lbs (4.5 kg)





For use with
P9000, P9200 & P1000 H3.

Steel Threaded Rod



Part No.	Size	Wt/100 Ft. Lbs *(kg)*
HTHR025	¼" x 20	13 *5.9*
HTHR031	5⁄16" x 18	20 *9.1*
HTHR037	⅜" x 16	30 *13.6*
HTHR044	7⁄16" x 14	30 *13.6*
HTHR050	½" x 13	53 *24.0*
HTHR062	⅝" x 11	84 *38.1*
HTHR075	¾" x 10	124 *56.2*
HTHR087	⅞" x 9	170 *77.1*
HTHR100	1" x 8	223 *101.2*

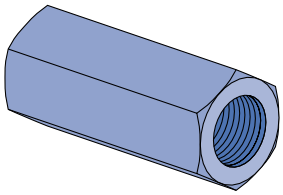
Load Carrying Capacity Of Threaded Hot Rolled Steel Conforming To Astm A575 And A576

Nominal Diameter	Root Area In² *(mm²)*	Maximum Safe Load at 650°F (343°C) Lbs *(kg)*
⅜	0.068 *43.9*	610 *277*
½	0.126 *81.3*	1,130 *513*
⅝	0.202 *130.3*	1,810 *821*
¾	0.302 *194.8*	2,710 *1,229*
⅞	0.419 *270.3*	3,770 *1,710*
1	0.552 *356.1*	4,960 *2,250*
1⅛	0.693 *447.1*	6,230 *2,826*

Nominal Diameter	Root Area In² *(mm²)*	Maximum Safe Load at 650°F (343°C) Lbs *(kg)*
1¼	0.889 *573.5*	8,000 *3,629*
1⅜	1.053 *679.4*	9,470 *4,296*
1½	1.293 *834.2*	11,630 *5,275*
1⅝	1.515 *977.4*	13,630 *6,182*
1¾	1.714 *1,105.8*	15,690 *7,117*
1⅞	2.048 *1,321.3*	18,430 *8,360*
2	2.292 *1,478.7*	20,690 *9,385*

"Extracted from American Standard Code for pressure piping (ASA B31.1-1973, with permission of the publisher, the American Society of Mechanical Engineers, United Engineering Center, 345 E. 47th Street, New York, New York)."

Steel Coupler Nuts

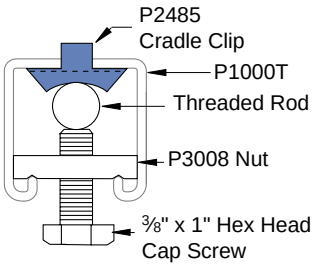


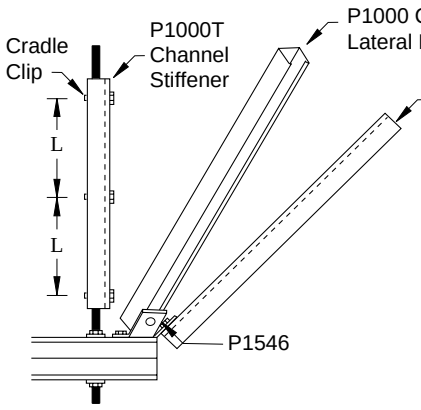
Part No.	Size	Length In *(mm)*	Wt/100 pcs Lbs *(kg)*
HRCN025	¼" - 20	⅞" *22.2*	1.9 *0.9*
HRCN031	5/16" - 18	1¾" *44.5*	7.5 *3.4*
HRCN037	⅜" - 16	1¾" *44.5*	9.0 *4.1*
HRCN044	7/16" - 14	1¾" *44.5*	10.4 *4.7*
HRCN050	½" - 13	1¾" *44.5*	10.0 *4.5*
HRCN062	⅝" - 11	2⅛" *54.0*	18.0 *8.2*
HRCN075	¾" - 10	2¼" *57.2*	28.0 *12.7*
HRCN087	⅞" - 9	2½" *63.5*	55.0 *24.9*
HRCN100	1" - 8	2¾" *69.9*	73.0 *33.1*

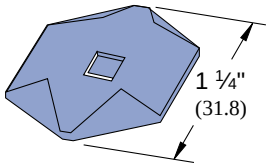
P2485

Cradle Clip

Wt/100 pcs: 3.0 Lbs (1.4 kg)





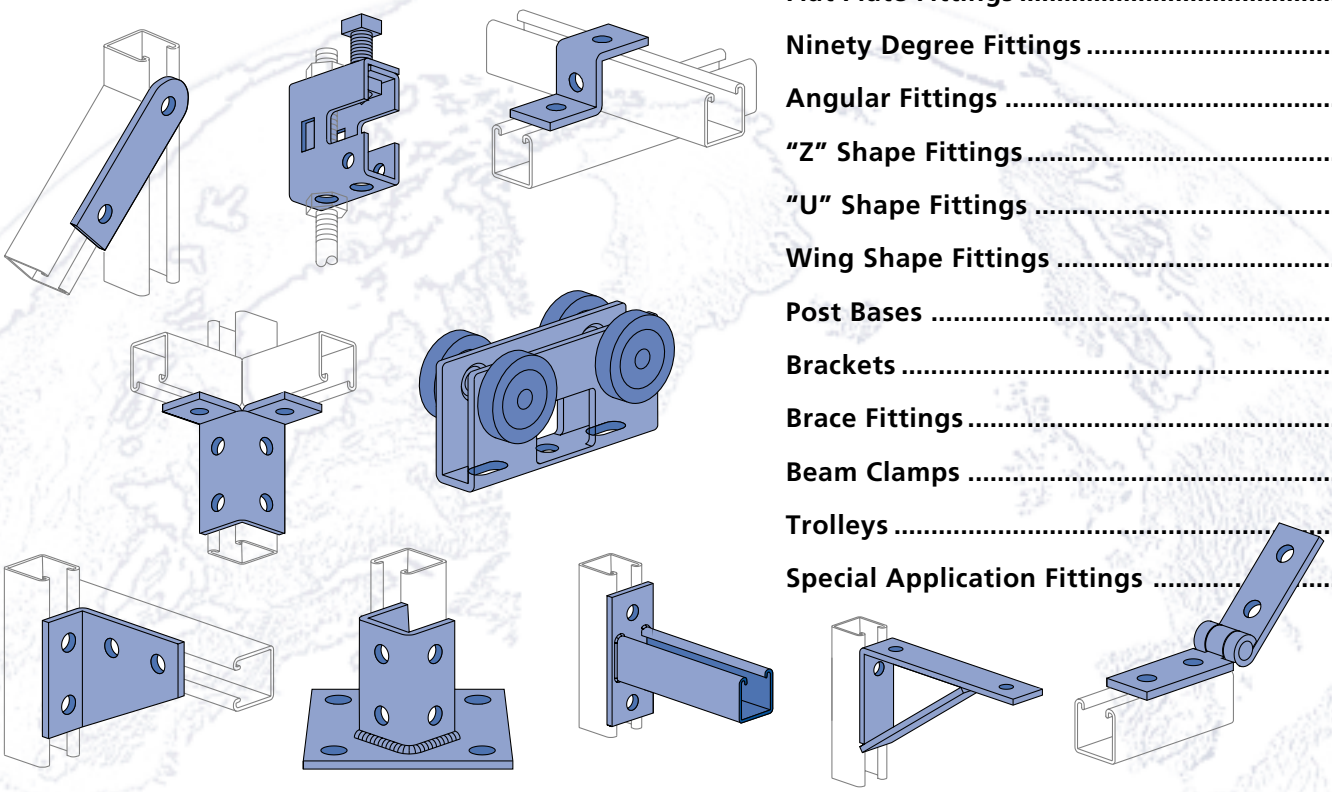


Cradle clip only, order other items seperately.

Refer to seismic bracing systems catalog for more detailed information.

Rod Size In	Root Area In2 *(mm2)*	Root Diameter In *(mm)*	Radius of Gyration In *(mm)*	Max. Allowable Rod Compression @100% Lbs *(kg)*	Clip Spacing (L) Rod Stress @50% 4,500 PSI 31,026 kPa In *(mm)*	Clip Spacing (L) Rod Stress @75% 6,750 PSI 46,539 kPa In *(mm)*	Clip Spacing (L) Rod Stress @100% 9,000 PSI 62,053 kPa In *(mm)*
⅜	0.068 *43.87*	0.314 *7.98*	0.0785 *1.99*	610 *277*	14 *356*	12 *305*	10 *254*
½	0.126 *81.29*	0.425 *10.8*	0.1063 *2.7*	1130 *513*	20 *508*	16 *406*	14 *356*
⅝	0.202 *130.3*	0.536 *13.61*	0.1341 *3.41*	1810 *821*	24 *610*	20 *508*	16 *406*
¾	0.302 *194.8*	0.652 *16.56*	0.163 *4.14*	2710 *1,229*	30 *762*	24 *610*	20 *508*
⅞	0.419 *270.3*	0.73 *18.54*	0.183 *4.65*	3770 *1,710*	35 *889*	28 *711*	25 *635*
1	0.552 *356.1*	0.838 *21.29*	0.21 *5.33*	4960 *2,250*	40 *1,016*	33 *838*	28 *711*

GENERAL FITTINGS



MATERIAL

Fittings, unless noted, are made from hot-rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A575, A576, A635, or A36. The fitting steel also meets the physical requirements of ASTM A1011 SS GR 33. The pickling of the steel produces a smooth surface free from scale.

Many fittings are also available in stainless steel, aluminum and fiberglass. Consult factory for ordering information.

FINISHES

Fittings are available in: Perma-Green II (GR), electro-galvanized (EG), conforming to ASTM B633 Type III SC1; Hot-dipped galvanized (HG), conforming to ASTM A123 or A153 and plain (PL).

APPLICATION

All parts drawings illustrate only one application of each fitting. In most cases many other applications are possible. The channels shown in the illustrations are P1000, 1⅝" square, except where noted otherwise.

All 9⁄16" diameter holes use ½" x 15⁄16" hex head cap screws and ½" nuts – P1010, P4010 or P5510 – depending on the channel used. Nuts and bolts are not included with the fitting and must be ordered separately.

DESIGN BOLT TORQUE

BOLT SIZE	¼" 20	5⁄16" 18	⅜" 16	½" 13	5⁄8" 11	¾" 10
FOOT LBS.	6	11	19	50	100	125
N·m	8	15	25	70	135	170

DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

DESIGN LOAD

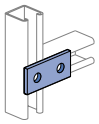
Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 2.5, unless otherwise noted.

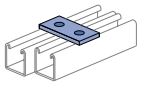
Flat Plate Fittings

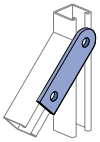

P1062-Pg 90

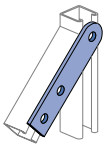

P1959-Pg 90

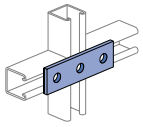

P2862-Pg 90

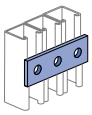

P1065-Pg 90


P1924-Pg 90


P2325-Pg 90


P2324-Pg 91


P1066-Pg 91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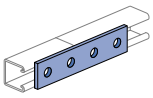
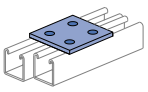

P1067-Pg 91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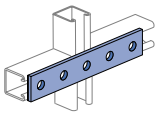
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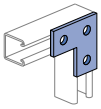
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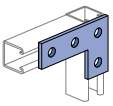
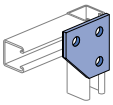

P1380 A-Pg 92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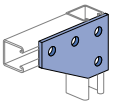
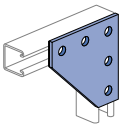

P1380-Pg 92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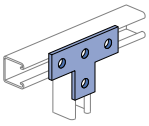
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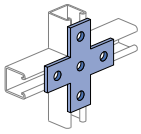
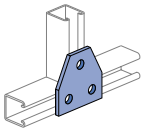

P1028-Pg 93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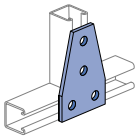
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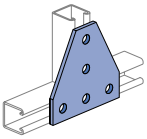
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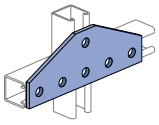
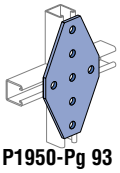

P1953-Pg 93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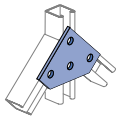
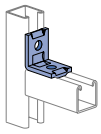

P1962-Pg 94

Angle Fittings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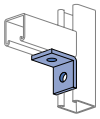
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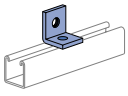
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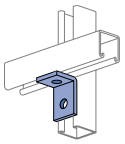
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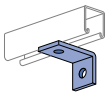
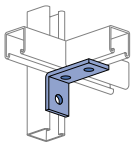
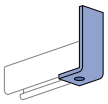

P1281-Pg 94

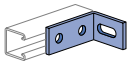

P1315-Pg 95

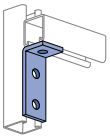

P1458-Pg 95

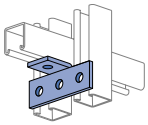

P1538A-Pg 95

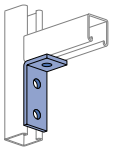

P1750-Pg 95

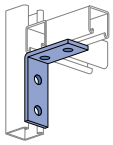

P1498-Pg 95

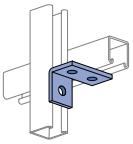

P1747-Pg 95

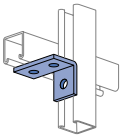

P1326-Pg 96

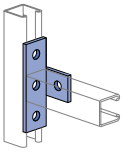

P1821-Pg 96

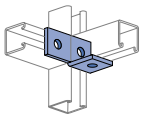

P1346-Pg 96

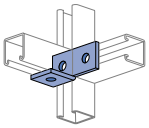

P1325-Pg 96

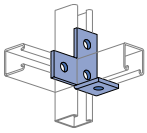

P1822-Pg 96

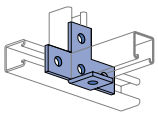

P1823-Pg 96

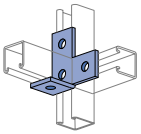

P1033-Pg 97

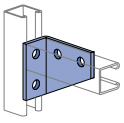

P1037-Pg 97

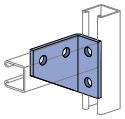

P1038- Pg 97

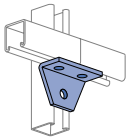

P1034-Pg 97

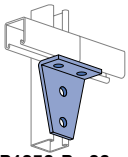

P1029-Pg 97

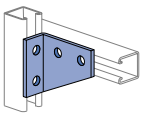

P1035-Pg 97

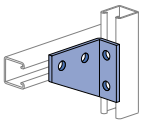

P1290-Pg 98

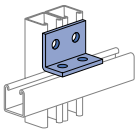

P1291-Pg 98


P1357-Pg 98

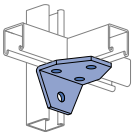

P1359-Pg 98

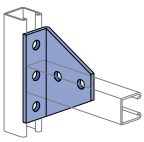

P1381-Pg 98

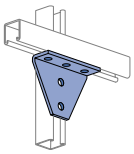

P1382- Pg 98

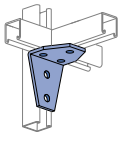

P1934-Pg 99

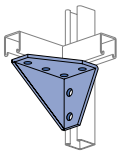

P1713-Pg 99

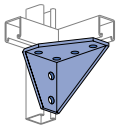

P1579-Pg 99

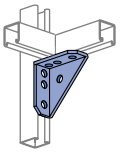

P1727-Pg 99

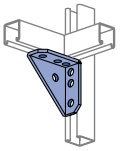

P1728-Pg 99

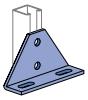

P2235-Pg 99

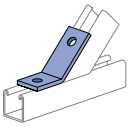

P1956-Pg 100

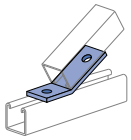

P1957-Pg 100

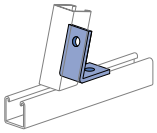

P2484-Pg 100

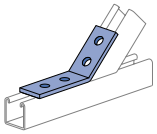

P2484W-Pg 100


P1130-Pg 100

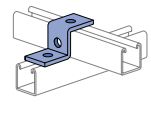

P1546-Pg 101

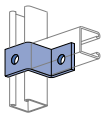

P2101-Pg 101

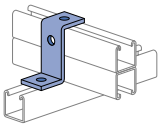

P1186-Pg 101

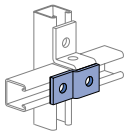

P2260-Pg 102

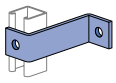
"Z" Shape Fittings

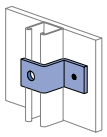

P1045-Pg 102

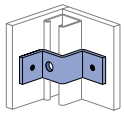

P1347-Pg 102

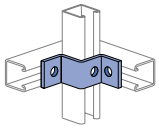

P1453-Pg 102

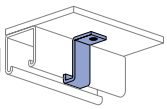

P1454-Pg 102

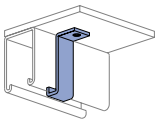

P1479A-Pg 103

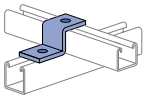

P1730-Pg 103

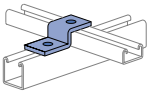

P1734-Pg 103

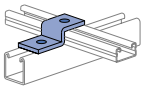

P1736-Pg 103

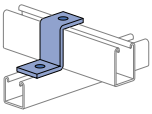

P2360-Pg 103

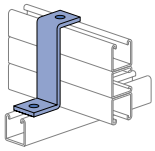

P5560-Pg 103


P3045-Pg 104

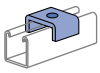

P3345-Pg 104

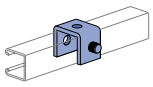

P4045-Pg 104

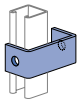

P5545-Pg 104

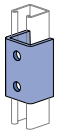

P2469-Pg 104

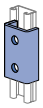
"U" Shape Fittings

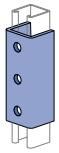

P2800-Pg 104

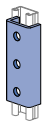

P1320-Pg 105

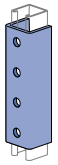

P1363A-Pg 105

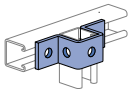

P1376-Pg 105

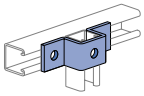

P4376-Pg 105

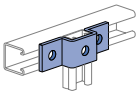

P1376A-Pg 105

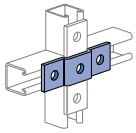

P4376A-Pg 105

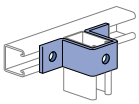

P1377-Pg 106

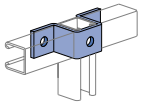

P1047-Pg 106

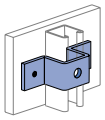

P3047-Pg 106

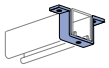

P4047-Pg 106

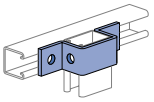

P1455-Pg 106

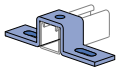

P5547-Pg 107

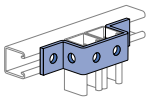

P1383-Pg 107

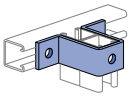

P1732-Pg 107

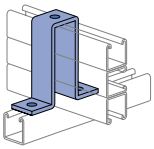

P2237-Pg 107

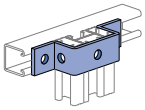

P5543-Pg 107

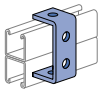

P1048-Pg 107


P1043A-Pg 108

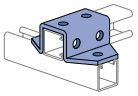

P1737-Pg 108

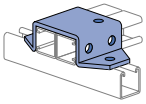

P2473-Pg 108

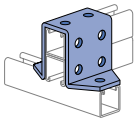

P4043-Pg 108


P1044-Pg 108

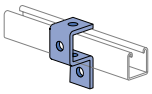

P1973-Pg 108

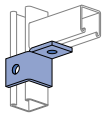

P2326-Pg 109

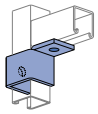

P2328-Pg 109

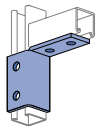

P2329-Pg 109

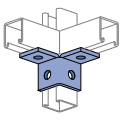
Wing Shape Fittings

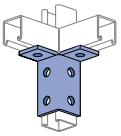

P1046A-Pg 109

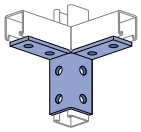

P2341-Pg 109

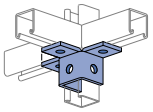

P2472-Pg 109

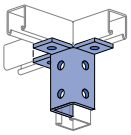

P2343-Pg 110

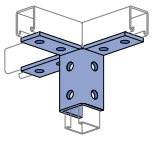

P2223-Pg 110

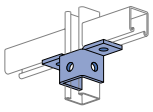

P2224-Pg 110

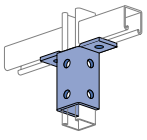

P2225-Pg 110

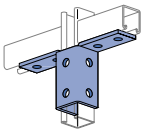

P2227-Pg 110

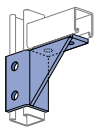

P2228-Pg 110

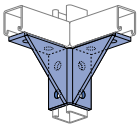

P2229-Pg 111

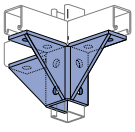

P2345-Pg 111

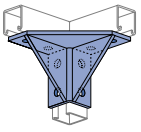

P2346-Pg 111

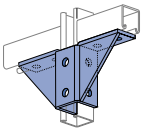

P2347-Pg 111


P2344-Pg 111

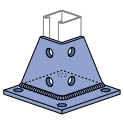

P2226-Pg 111

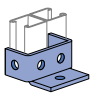

P2230-Pg 112

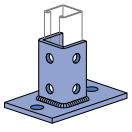

P2245-Pg 112

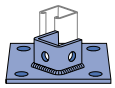

P2348-Pg 112

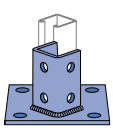
Post Bases

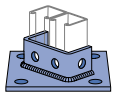

P1887-Pg 112

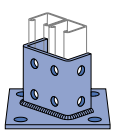

P2453-Pg 112


P2941-Pg 112

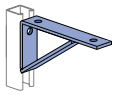

P2072-Pg 113

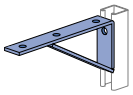

P2072A-Pg 113

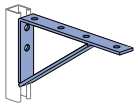

P2073-Pg 113

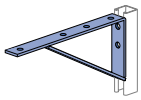

P2073A-Pg 113

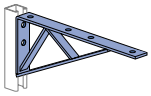
Brackets and Brace Fittings

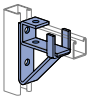

P1769-Pg 114

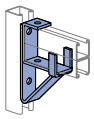

P1771-Pg 114

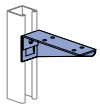

P1773-Pg 114

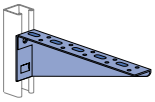

P1775-Pg 114

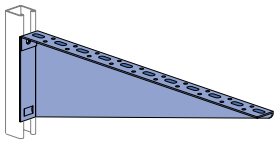

P1777-Pg 115

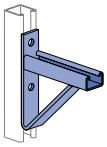

P1075-Pg 115

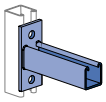

P1593-Pg 115

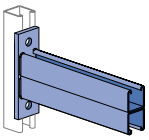

P2491-Pg 116

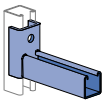

P2494-Pg 116

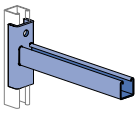

P2500-Pg 116

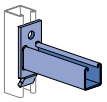

P2547-Pg 117

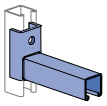

P2944-Pg117

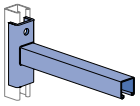

P2542-Pg 117

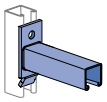

P2231-Pg 118

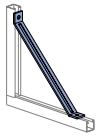

P2233-Pg 118


P2513-Pg 118

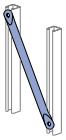

P2231A-Pg 119

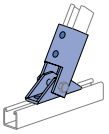

P2233A-Pg 119

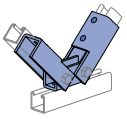

P2513A-Pg 119


P2452-Pg 120


P2458-Pg 120

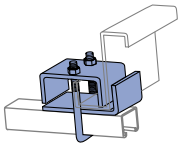

P2459-Pg 121

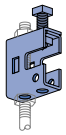

P2815-Pg 121

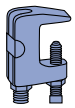

P2815D-Pg 121

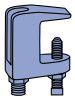
Beam Clamps

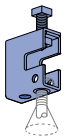

P2897-Pg 122


P2784-Pg 122


P2675-Pg 122


P2898-Pg 123


P2899-Pg 123

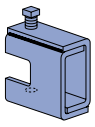

P2676-Pg 123

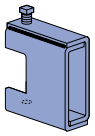

P2682-Pg 124

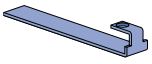

P2677-Pg 124

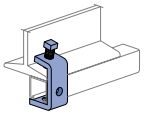

P2674-Pg 124

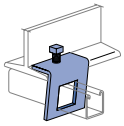

P2679-4-Pg 124

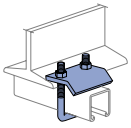

P1648S-Pg 125

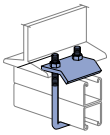

P2398S-Pg 125

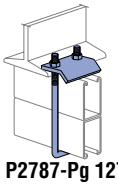

P1654A-Pg 126

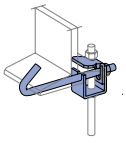

P1271S-Pg 126

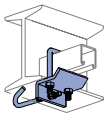

P1796S-Pg 127

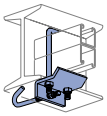

P2785-Pg 127

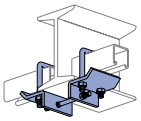

P2786-Pg 127

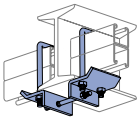

P2787-Pg 127

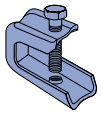

P2824-6-Pg 127


P2867-Pg 127

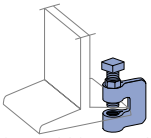

P2867A-Pg 128

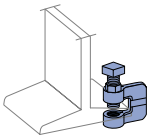

P2868-Pg 128

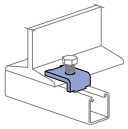

P2868A-Pg 128

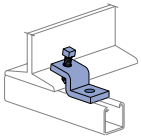

P2893-Pg 128

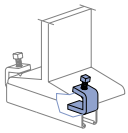

P2894-Pg 129

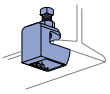

P2895-Pg 129

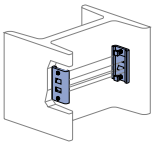

P2896-Pg 129

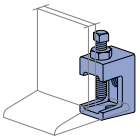

P1386-Pg 129

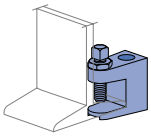

P1379S-Pg 130

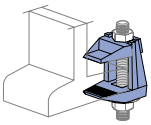

P1272S-Pg 130

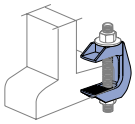

M29-Pg 130


P3087-Pg 130


PLLCO25-Pg131

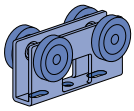

PFLO37-Pg131

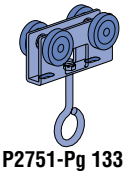

PLF3037-Pg132

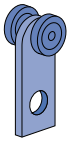

PLF9037-Pg132

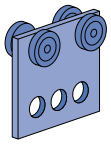
Trolley Assemblies

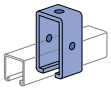

P2749-Pg 133

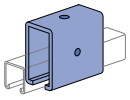

P2750-Pg 133


P2751-Pg 133

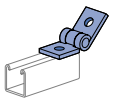

P2949-Pg 134

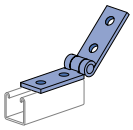

P2950-Pg 134

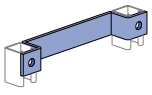

P1834-Pg 134

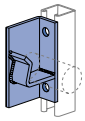

P1834A-Pg 134

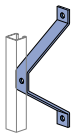
Special Applications Fittings

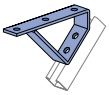

P1843-Pg 135

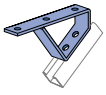

P1354-Pg 135

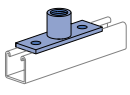

P1201-Pg 135


P2354-Pg 135


P1204-Pg 136


P1944-Pg 136

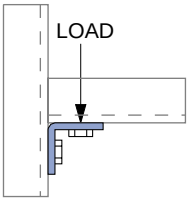

P2655-Pg 136

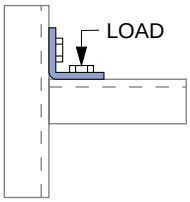

P2470-Pg 136

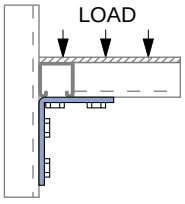

P2454-Pg 136

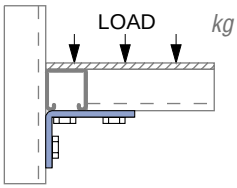
DESIGN LOAD DATA FOR TYPICAL UNISTRUT CHANNEL CONNECTIONS

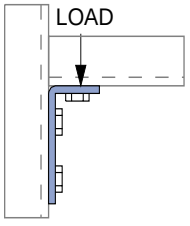
90° Fittings (When used in position shown)

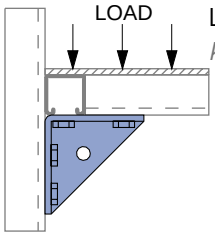
Load – P1026		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	1,500	1,000	750
	kg	*680.4*	*453.6*	*340.2*

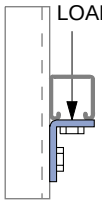
Load – P1026		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	1,000	650	500
	kg	*453.6*	*294.8*	*226.8*

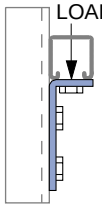
Load – P1325, P2235		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	2,000	2,000	1,500
	kg	*907.2*	*907.2*	*680.4*

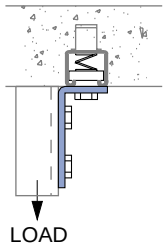
Load – P1458, P1579		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	1,500	1,000	1,000
	kg	*680.4*	*453.6*	*453.6*

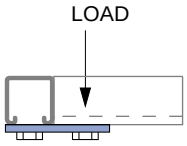
Load – P1346		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	2,000	1,500	900
	kg	*907.2*	*680.4*	*408.2*

Load – P2484		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	3,000	2,000	1,500
	kg	*1,360.8*	*907.2*	*680.4*

Load – P1068		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	500	500	500
	kg	*226.8*	*226.8*	*226.8*

Load – P1326		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	500	500	500
	kg	*226.8*	*226.8*	*226.8*

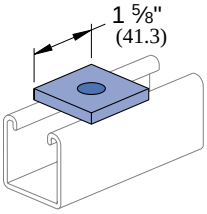
Load – P1346		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	1,200	1,200	1,000
	kg	*544.3*	*544.3*	*453.6*

Load – P1065		Channel Thickness 12 ga.	14 ga.	16 ga.
	Lbs	1,000	800	600
	kg	*453.6*	*362.9*	*272.2*

Note:
(1) Both ends of beams supported.
(2) Load data is based on P1010 nut and ½" bolt.
(3) Safety factor = 2½ based on ultimate strength of connection.

P1062, P1063, P1064, P1964, P2471, P2490

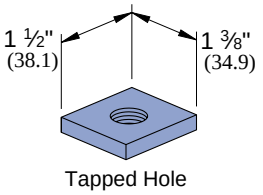
Part Number	Bolt Size	Hole Size	Wt/100 pcs Lbs (kg)
P1062	5/16"	11/32"	18 *8.2*
P1063	3/8"	7/16"	18 *8.2*
P1064	1/2"	9/16"	17 *7.7*
P1964	5/8"	11/16"	16 *7.3*
P2471	3/4"	13/16"	15 *6.8*
P2490	7/8"	15/16"	14 *6.4*



P1959, P1960, P1961

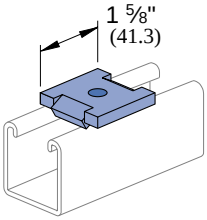
Part Number	U.S. Std. Thd Size	Wt/100 pcs Lbs *(kg)*
P1959	3/8"-16	21 *9.5*
P1960	1/2"-13	20 *9.1*
P1961	5/8"-11	19 *8.6*

MATERIAL: 3/8" (*9.5 mm*) thick



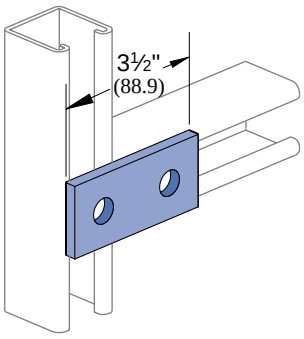
P2862, 2863, 2864

Part Number	Bolt Size	Hole Size	Wt/100 pcs Lbs *(kg)*
P2862	5/16"	11/32"	18 *8.2*
P2863	3/8"	7/16"	18 *8.2*
P2864	1/2"	9/16"	17 *7.7*



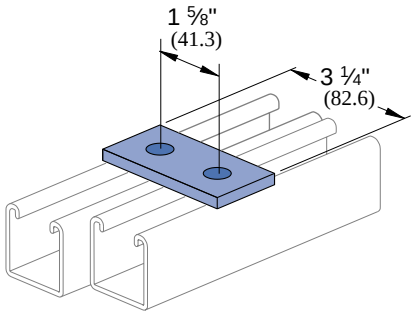
P1065

Wt/100 pcs: 38 Lbs (17.2 kg)



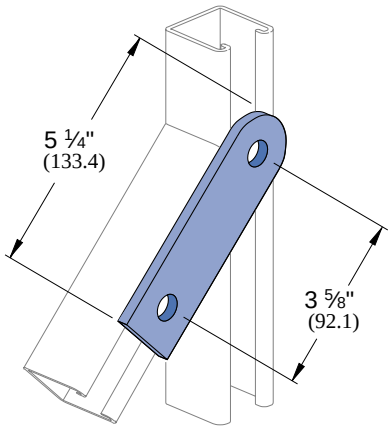
P1924

Wt/100 pcs: 35 Lbs (15.9 kg)



P2325

Wt/100 pcs: 55 Lbs (24.9 kg)

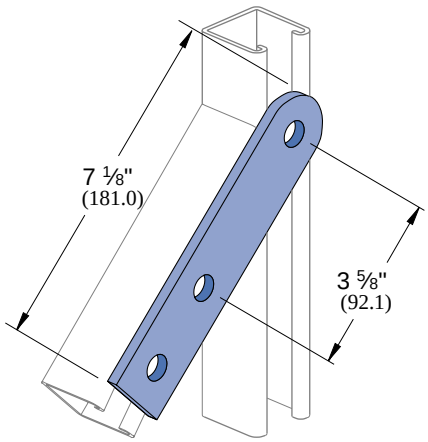


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

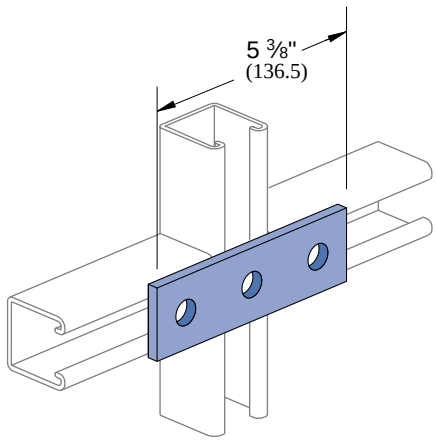
P2324

Wt/100 pcs: 75 Lbs (34.0 kg)



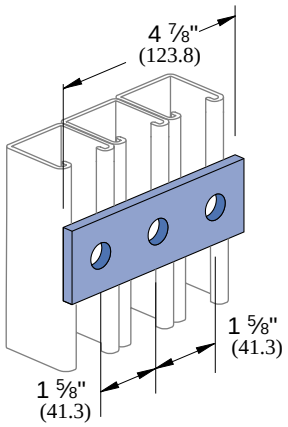
P1066

Wt/100 pcs: 56 Lbs (25.4 kg)



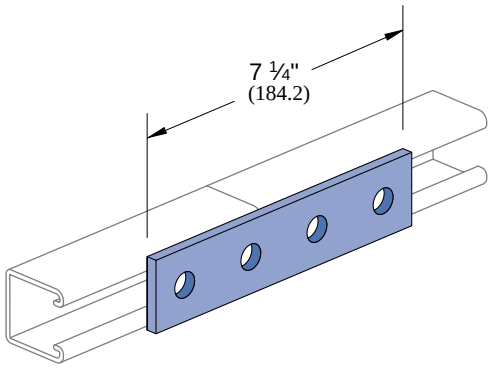
P1925

Wt/100 pcs: 50 Lbs (22.7 kg)



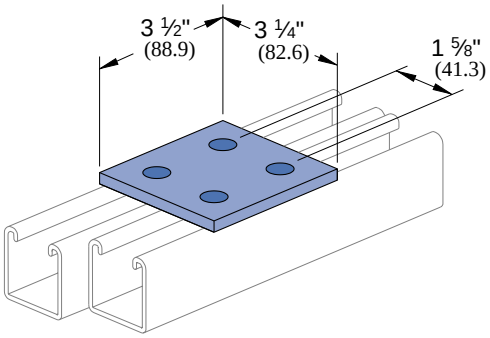
P1067

Wt/100 pcs: 78 Lbs (35.4 kg)



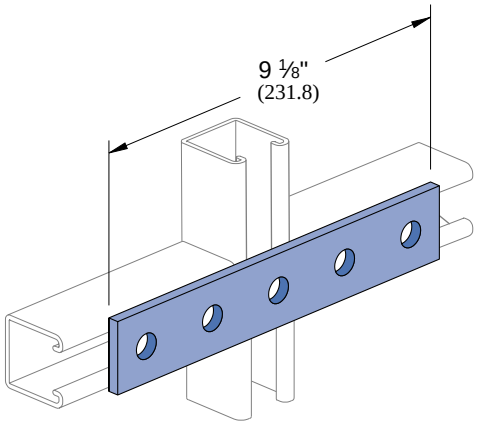
P2079

Wt/100 pcs: 73 Lbs (33.1 kg)



P1941

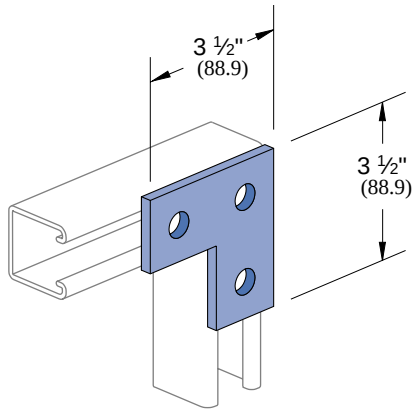
Wt/100 pcs: 94 Lbs (42.6 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

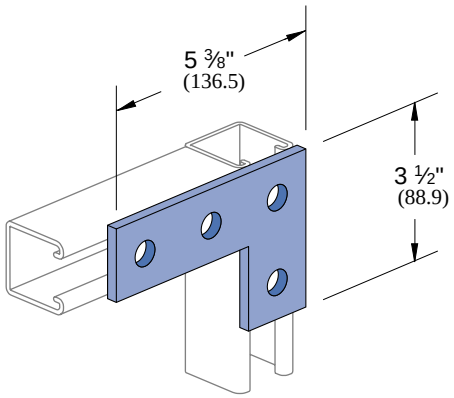
P1036

Wt/100 pcs: 58 Lbs (26.3 kg)



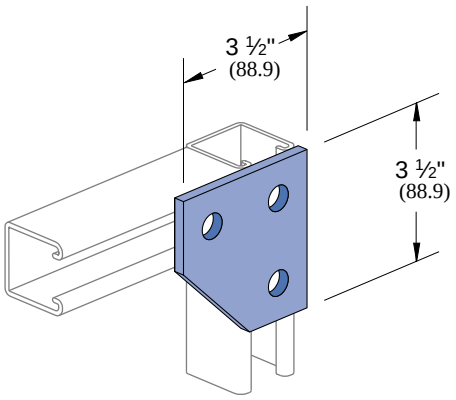
P1380 A

Wt/100 pcs: 80 Lbs (36.3 kg)



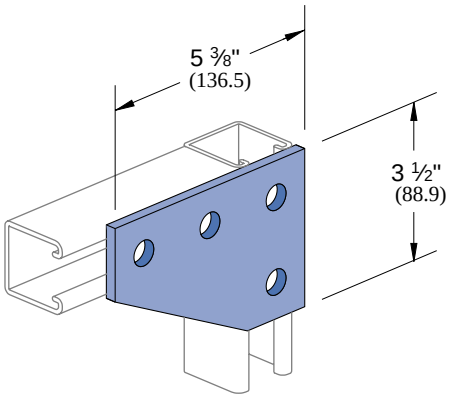
P1334

Wt/100 pcs: 70 Lbs (31.8 kg)



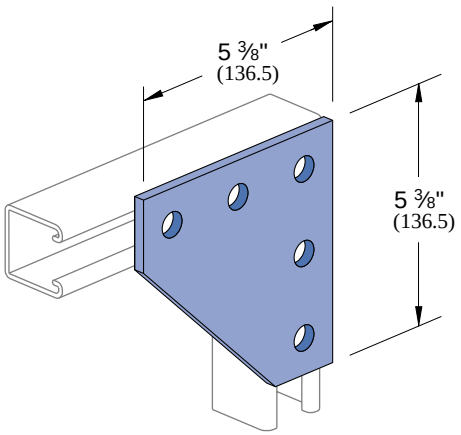
P1380

Wt/100 pcs: 105 Lbs (47.6 kg)



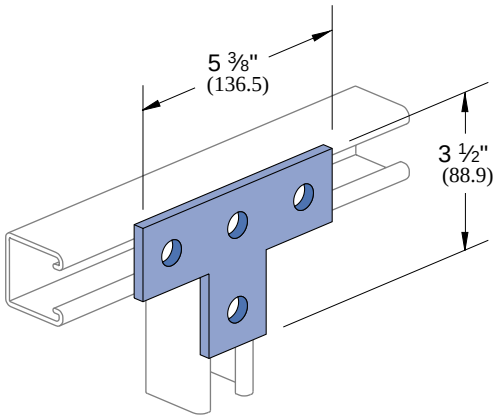
P1873

Wt/100 pcs: 150 Lbs (68.0 kg)



P1031

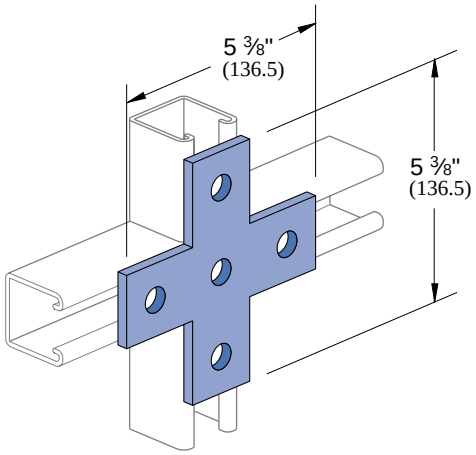
Wt/100 pcs: 80 Lbs (36.3 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

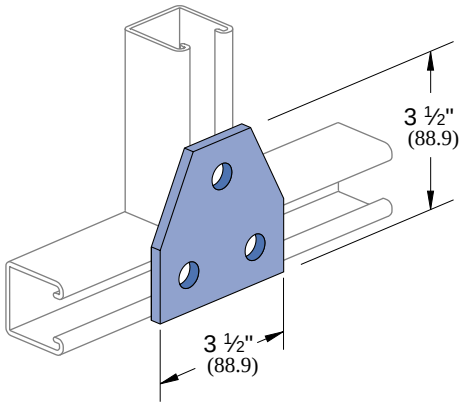
P1028

Wt/100 pcs: 105 Lbs (47.6 kg)



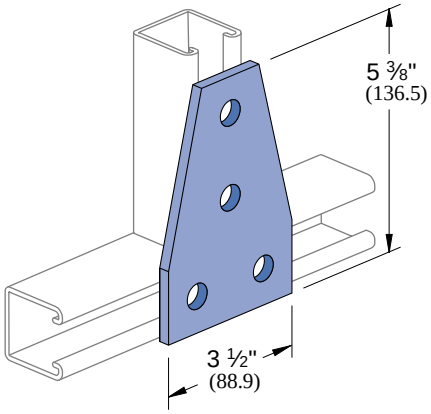
P1356

Wt/100 pcs: 70 Lbs (31.8 kg)



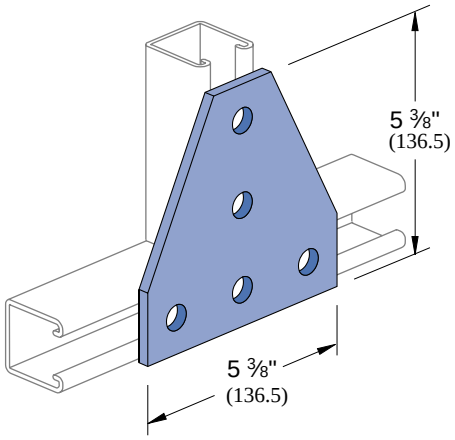
P1358

Wt/100 pcs: 105 Lbs (47.6 kg)



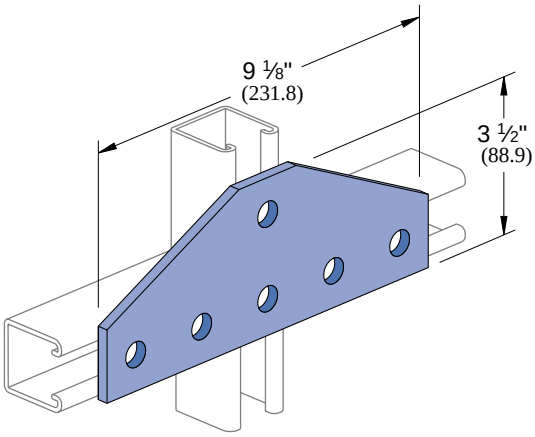
P1726

Wt/100 pcs: 148 Lbs (67.1 kg)



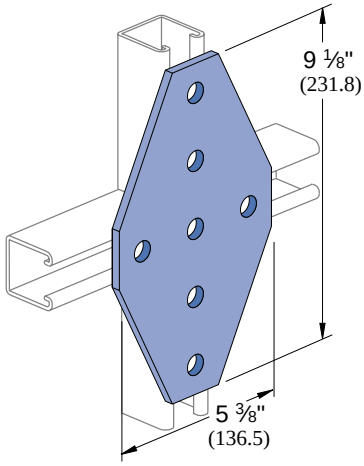
P1953

Wt/100 pcs: 176 Lbs (79.8 kg)



P1950

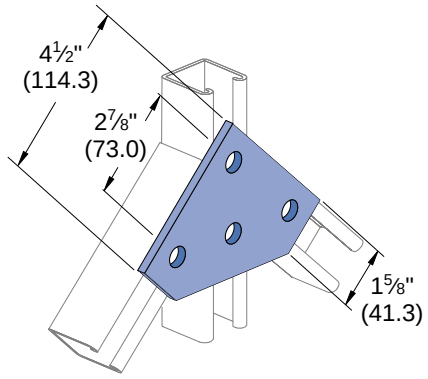
Wt/100 pcs: 240 Lbs (108.9 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

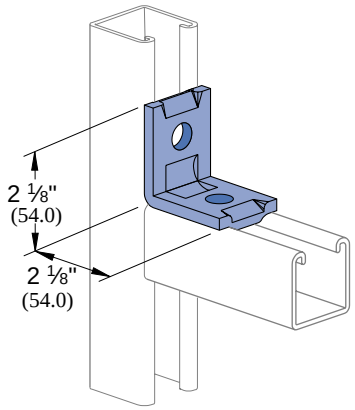
P1962

Wt/100 pcs: 112 Lbs (50.8 kg)



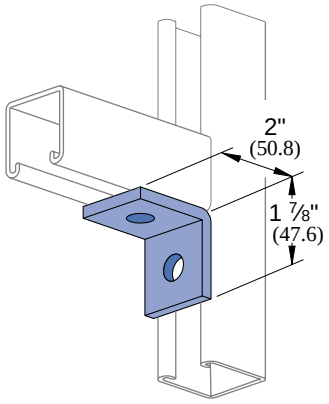
P2626

Wt/100 pcs: 40 Lbs (18.1 kg)



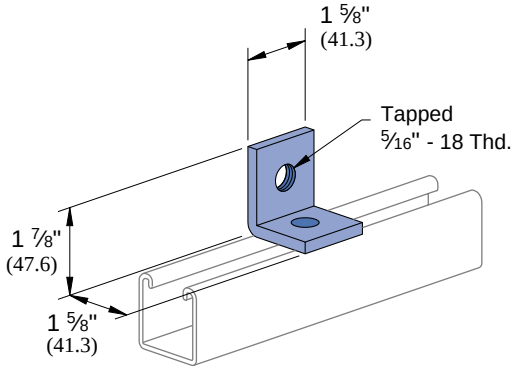
P1026

Wt/100 pcs: 38 Lbs (17.2 kg)



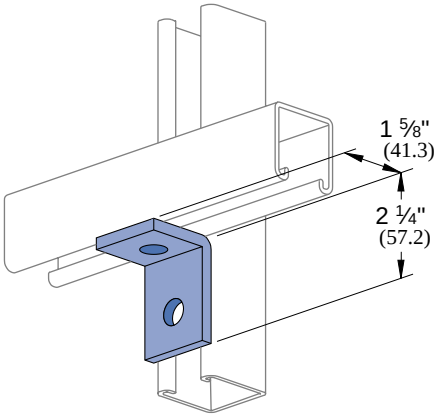
P1723

Wt/100 pcs: 34 Lbs (15.4 kg)

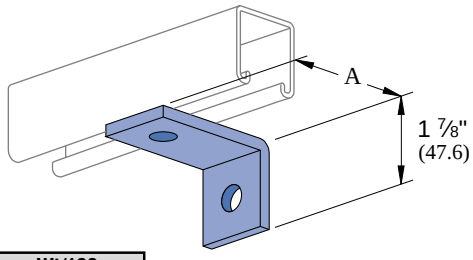


P1068

Wt/100 pcs: 38 Lbs (17.2 kg)



P1281, P1282, P1283



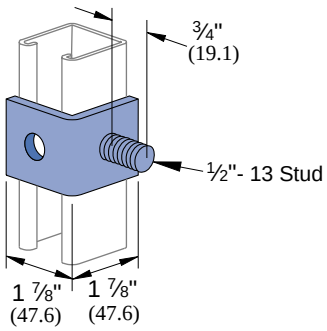
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1281	3 *76.2*	49 *22.2*
P1282	3½ *88.9*	54 *24.5*
P1283	4 *101.6*	61 *27.7*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

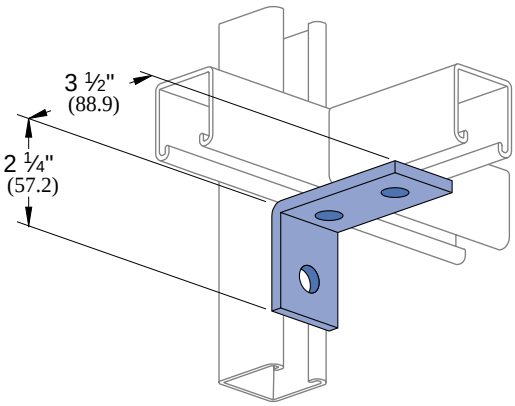
P1315

Wt/100 pcs: 45 Lbs (20.4 kg)



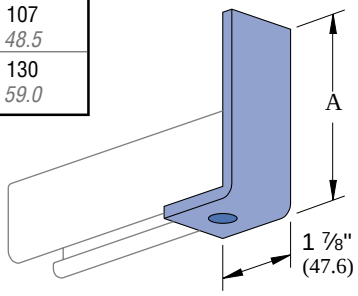
P1458

Wt/100 pcs: 58 Lbs (26.3 kg)



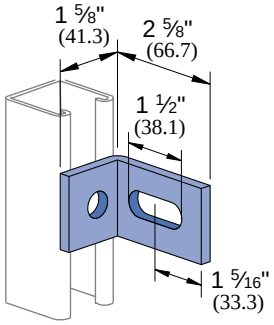
P1538A thru P1538D

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1538A	3⅞ *98.4*	61 *27.7*
P1538B	5⅞ *149.2*	84 *38.1*
P1538C	7⅞ *200.0*	107 *48.5*
P1538D	9⅞ *250.8*	130 *59.0*



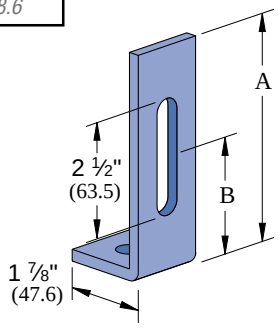
P1750

Wt/100 pcs: 38 Lbs (17.2 kg)



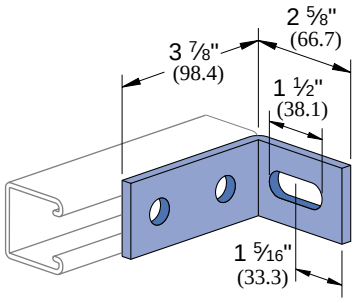
P1498, P1499

Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1498	4⅞ *123.8*	2½ *63.5*	65 *29.5*
P1499	6⅞ *174.6*	4½ *114.3*	85 *38.6*



P1747

Wt/100 pcs: 66 Lbs (29.9 kg)

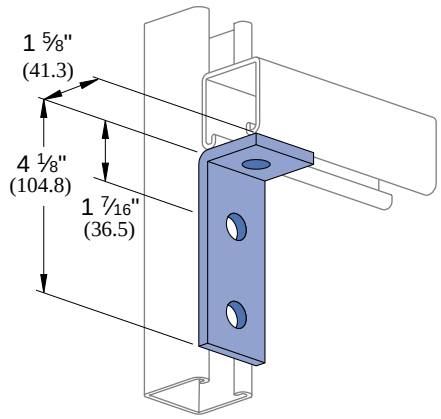


Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: ⅜" (14.3mm); **Hole Spacing - From End:** ¹³⁄₁₆" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

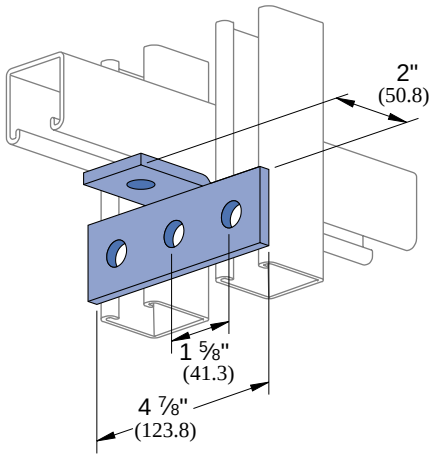
P1326

Wt/100 pcs: 58 Lbs (26.3 kg)



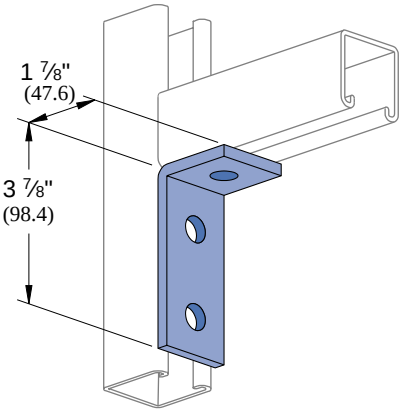
P1821

Wt/100 pcs: 71 Lbs (32.2 kg)



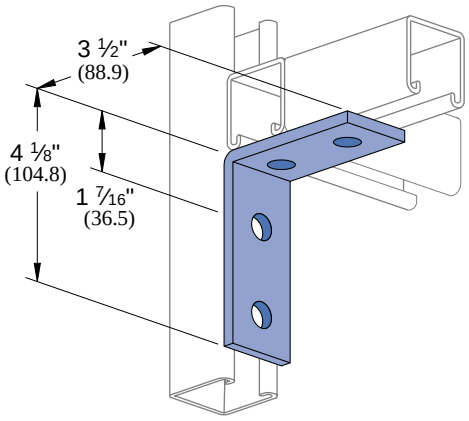
P1346

Wt/100 pcs: 58 Lbs (26.3 kg)



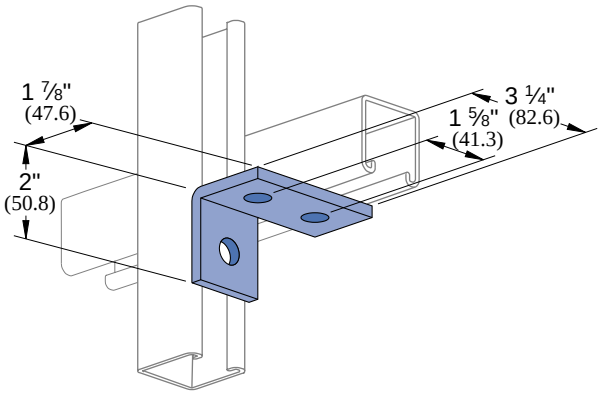
P1325

Wt/100 pcs: 78 Lbs (35.4 kg)



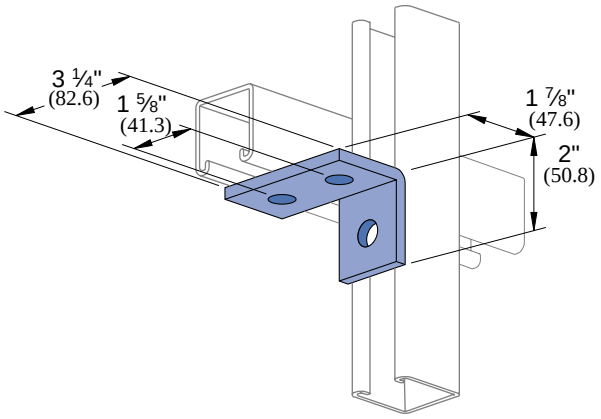
P1822

Wt/100 pcs: 55 Lbs (24.9 kg)



P1823

Wt/100 pcs: 55 Lbs (24.9 kg)

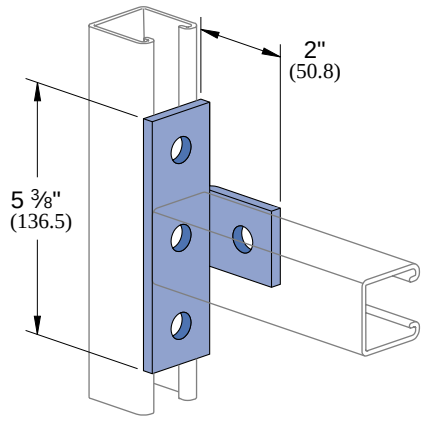


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

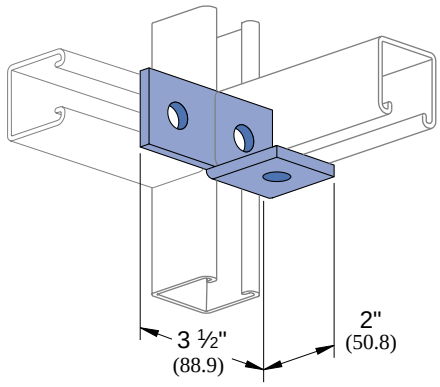
P1033

Wt/100 pcs: 80 Lbs (36.3 kg)



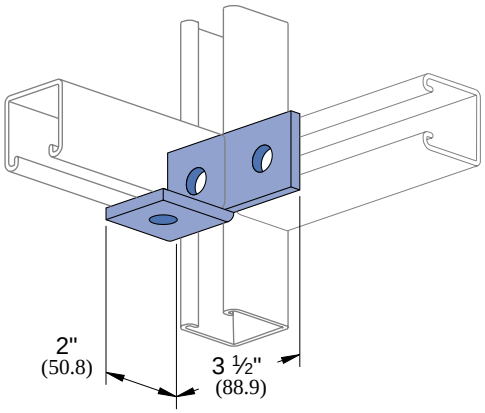
P1037

Wt/100 pcs: 58 Lbs (26.3 kg)



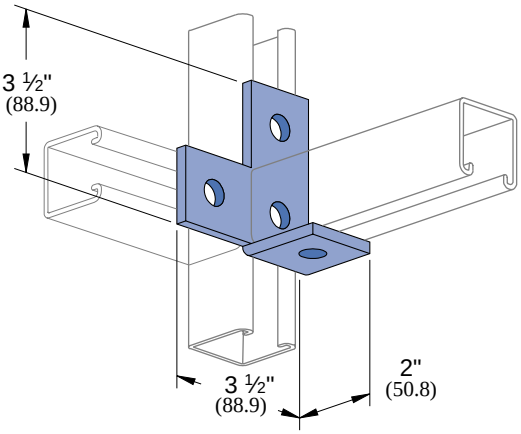
P1038

Wt/100 pcs: 58 Lbs (26.3 kg)



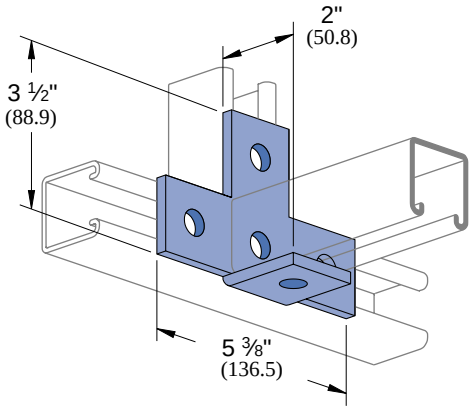
P1034

Wt/100 pcs: 80 Lbs (36.3 kg)



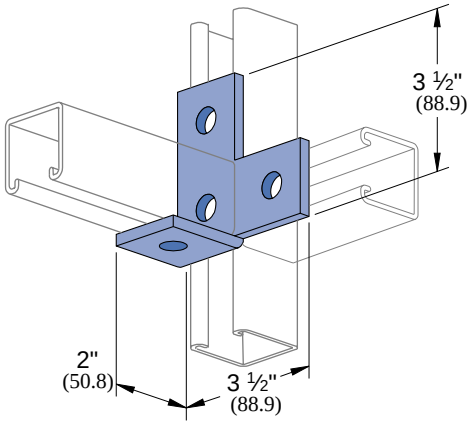
P1029

Wt/100 pcs: 105 Lbs (47.6 kg)



P1035

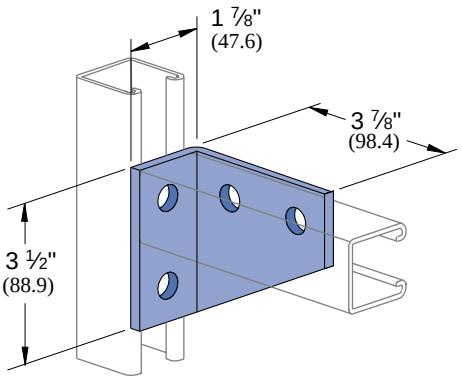
Wt/100 pcs: 80 Lbs (36.3 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

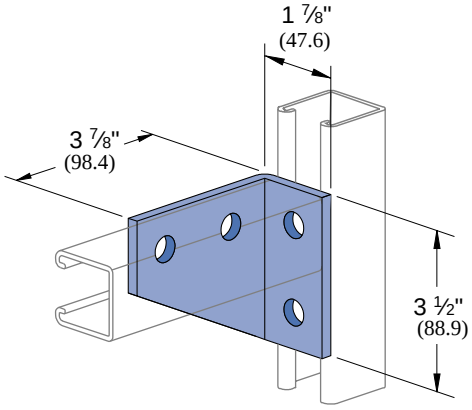
P1290

Wt/100 pcs: 101 Lbs (45.8 kg)



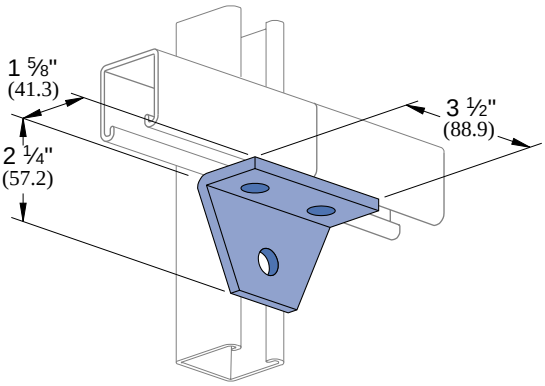
P1291

Wt/100 pcs: 101 Lbs (45.8 kg)



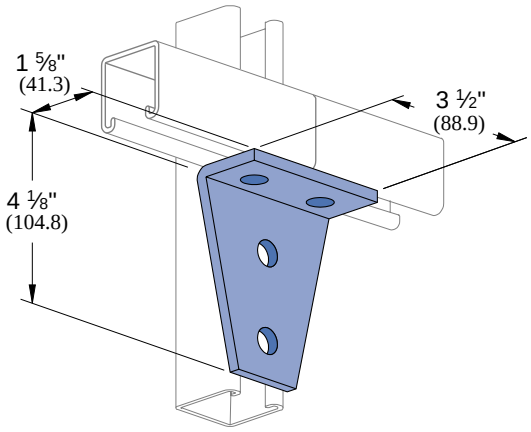
P1357

Wt/100 pcs: 70 Lbs (31.8 kg)



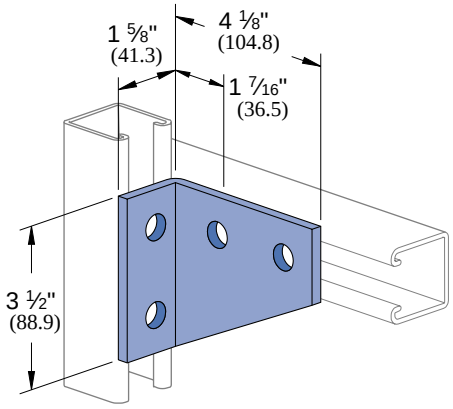
P1359

Wt/100 pcs: 105 Lbs (47.6 kg)



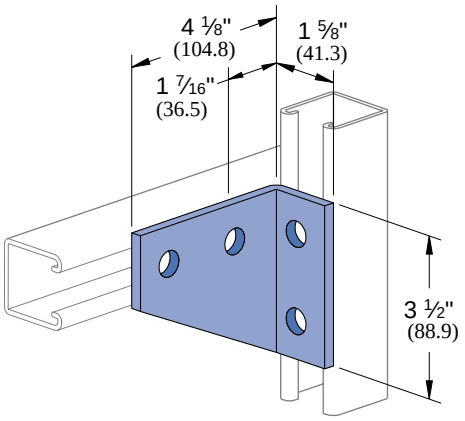
P1381

Wt/100 pcs: 105 Lbs (47.6 kg)



P1382

Wt/100 pcs: 105 Lbs (47.6 kg)

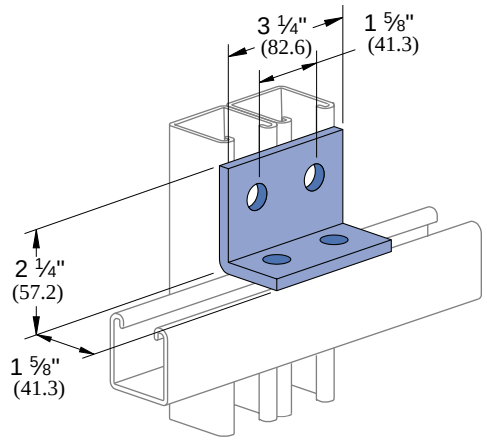


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

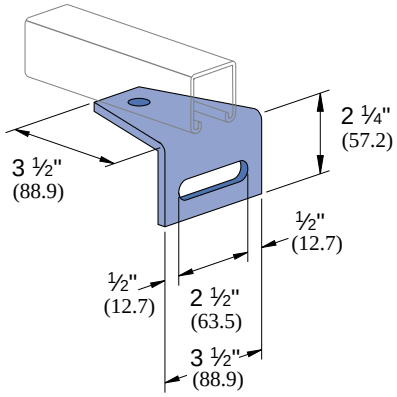
P1934

Wt/100 pcs: 75 Lbs (34.0 kg)



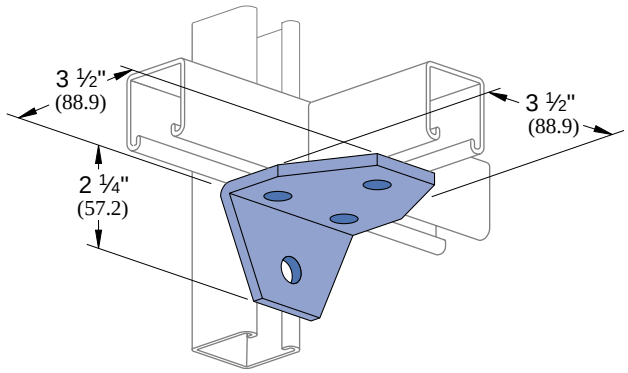
P1713

Wt/100 pcs: 97 Lbs (44.0 kg)



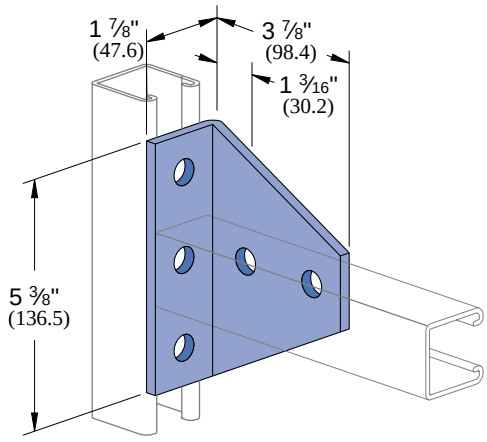
P1579

Wt/100 pcs: 103 Lbs (46.7 kg)



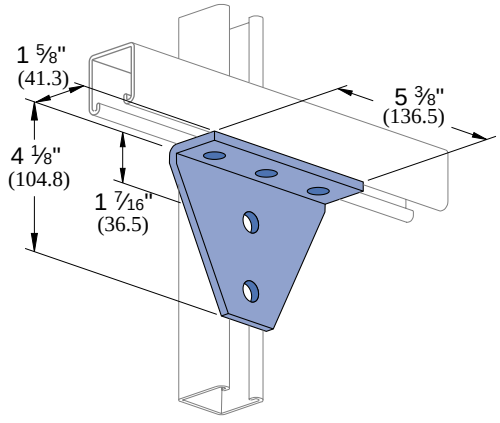
P1727

Wt/100 pcs: 154 Lbs (69.9 kg)



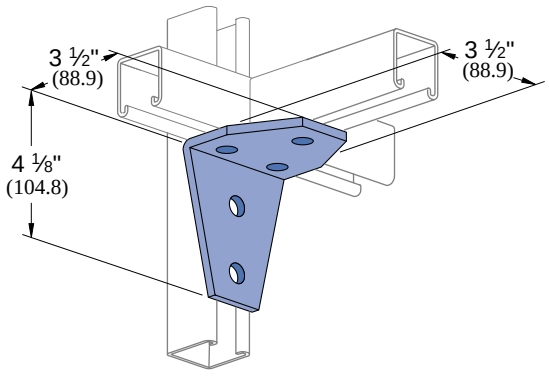
P1728

Wt/100 pcs: 154 Lbs (69.9 kg)



P2235

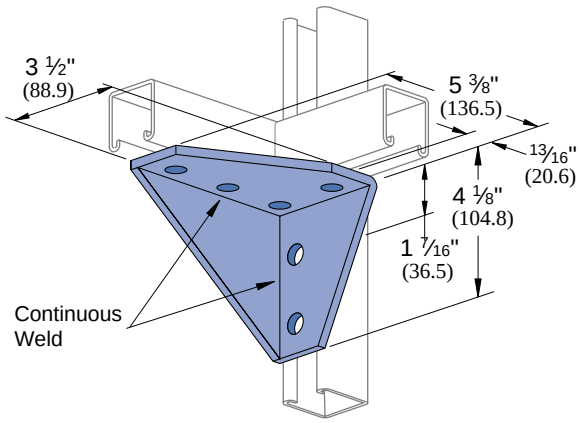
Wt/100 pcs: 135 Lbs (61.2 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

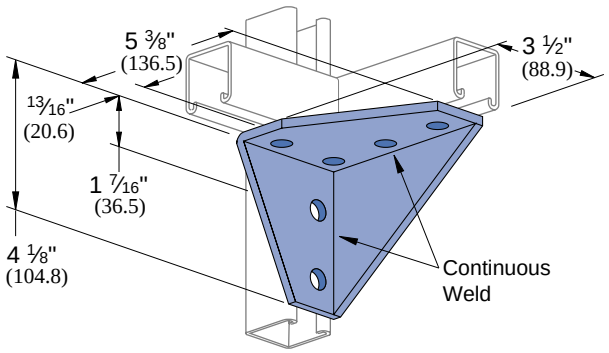
P1956

Wt/100 pcs: 230 Lbs (104.3 kg)



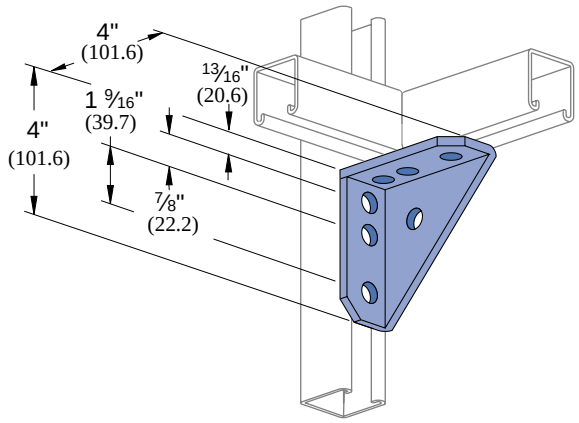
P1957

Wt/100 pcs: 230 Lbs (104.3 kg)



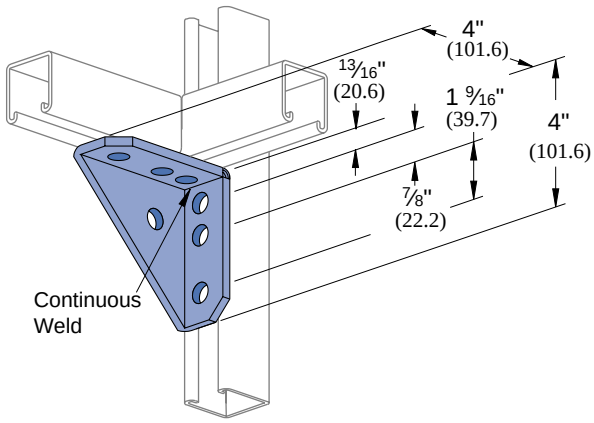
P2484

Wt/100 pcs: 134 Lbs (60.8 kg)

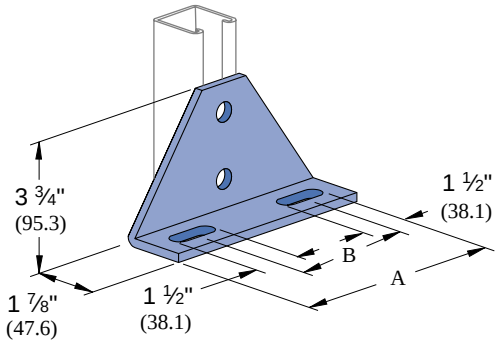


P2484W

Wt/100 pcs: 134 Lbs (60.8 kg)



P1130, P1131



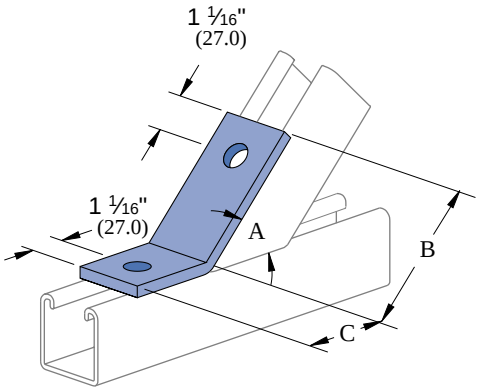
Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1130	6⅝ *168.3*	4 *101.6*	190 *86.2*
P1131	8⅝ *219.1*	6 *152.4*	242 *109.8*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P1546, P2094 thru P2100

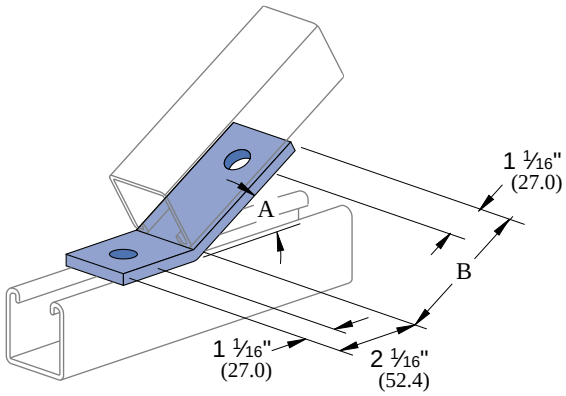
Wt/100 pcs: 58 Lbs (26.3 kg)



Part Number	"A" Degree *(rad)*	"B" In *(mm)*	"C" In *(mm)*
P2094	82½° *1.44*	3⁹⁄₁₆ *90.5*	1¹¹⁄₁₆ *42.9*
P2095	75° *1.31*	3⁹⁄₁₆ *90.5*	1¹¹⁄₁₆ *42.9*
P2096	67½° *1.18*	3½ *88.9*	1¾ *44.5*
P2097	60° *1.05*	3⅜ *85.7*	1⅞ *47.6*
P2098	52½° *0.92*	3¼ *82.6*	2¹⁄₁₆ *52.4*
P1546	45° *0.79*	3 *76.2*	2⁵⁄₁₆ *58.7*
P2099	37½° *0.65*	3½ *88.9*	1¹³⁄₁₆ *46.0*
P2100	37½° *0.65*	2¹¹⁄₁₆ *68.3*	2⅝ *66.7*

P2101 thru P2104

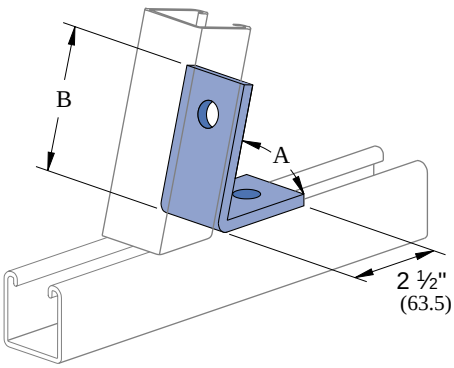
Wt/100 pcs: 58 Lbs (26.3 kg)



Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2101	30° *0.52*	3¼ *82.6*
P2102	22½° *0.39*	3⁵⁄₁₆ *84.1*
P2103	15° *0.26*	3⁵⁄₁₆ *84.1*
P2104	7½° *0.13*	3⁵⁄₁₆ *84.1*

P1186, P2105 thru P2110

Wt/100 pcs: 58 Lbs (26.3 kg)



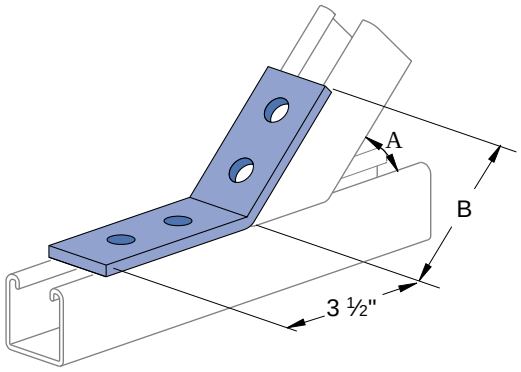
Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2105	82½° *1.44*	3³⁄₁₆ *81.0*
P2106	75° *1.31*	3³⁄₁₆ *81.0*
P2107	67½° *1.18*	3⅛ *79.4*
P2108	60° *1.05*	3⅛ *79.4*
P2109	52½° *0.92*	3¹⁄₁₆ *77.8*
P1186	45° *0.79*	3⅛ *79.4*
P2110	37½° *0.65*	3 *76.2*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: ⁹⁄₁₆" (14.3mm); **Hole Spacing - From End:** ¹³⁄₁₆" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P2260 thru P2270

Wt/100 pcs: 78 Lbs (35.4 kg)

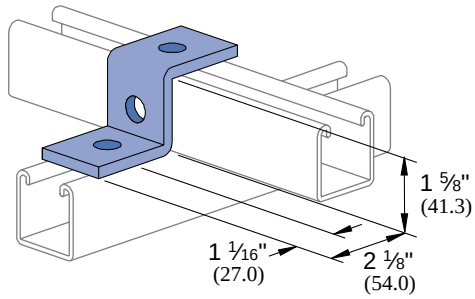


Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2270	82½° *1.44*	3⅝ *91.1*
P2269	75° *1.31*	3⅝ *91.1*
P2268	67½° *1.18*	3⅝ *91.1*
P2267	60° *1.05*	3 11/16 *93.7*
P2266	52½° *0.92*	3 11/16 *93.7*
P2265	45° *0.79*	3 11/16 *93.7*

Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2264	37½° *0.65*	3 11/16 *93.7*
P2263	30° *0.52*	3 11/16 *93.7*
P2262	22½° *0.39*	3¾ *95.3*
P2261	15° *0.26*	3¾ *95.3*
P2260	7½° *0.13*	3¾ *95.3*

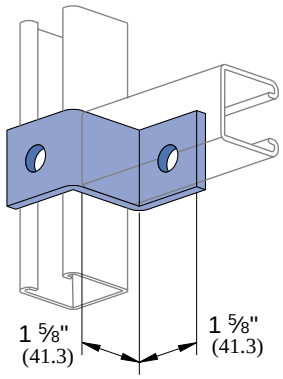
P1045

Wt/100 pcs: 55 Lbs (24.9 kg)



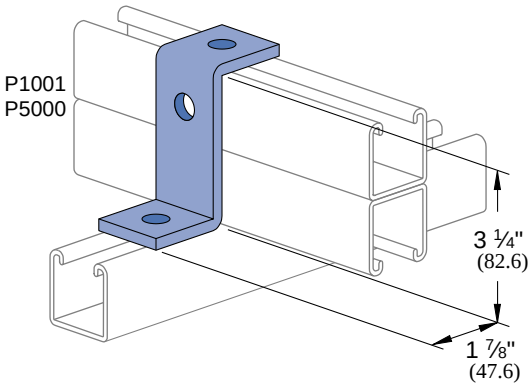
P1347

Wt/100 pcs: 55 Lbs (24.9 kg)



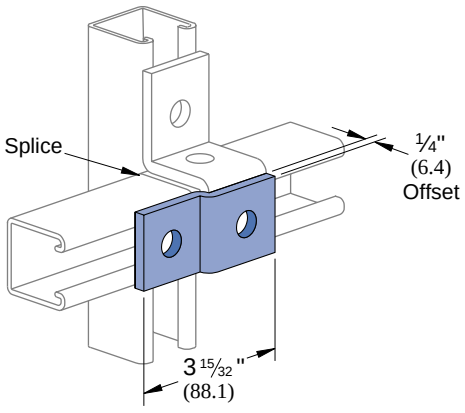
P1453

Wt/100 pcs: 70 Lbs (31.8 kg)



P1454

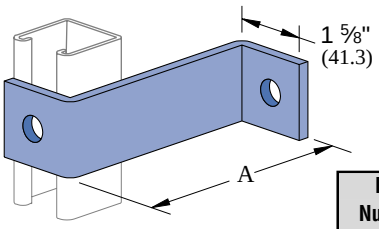
Wt/100 pcs: 38 Lbs (17.2 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

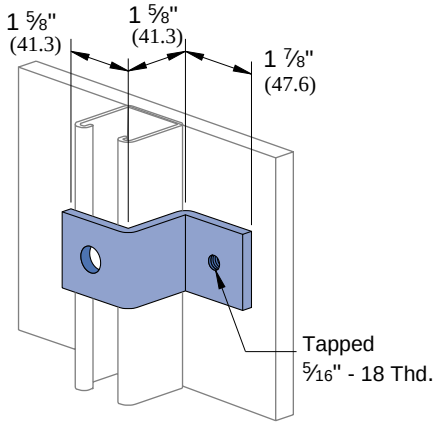
P1479A thru P1479E



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1479A	4 *101.6*	81 *36.7*
P1479B	5 *127.0*	92 *41.7*
P1479C	6 *152.4*	104 *47.2*
P1479D	7 *177.8*	115 *52.2*
P1479E	8 *203.2*	127 *57.6*

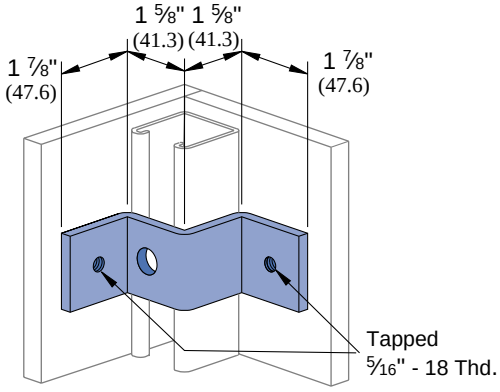
P1730

Wt/100 pcs: 54 Lbs (24.5 kg)



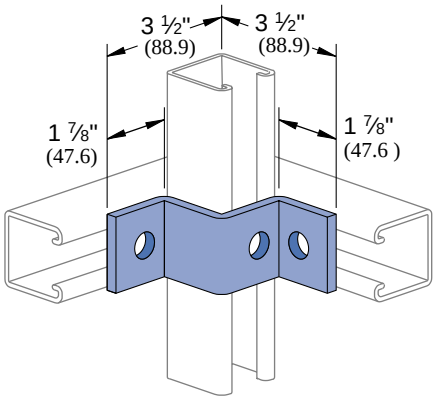
P1734

Wt/100 pcs: 70 Lbs (31.8 kg)



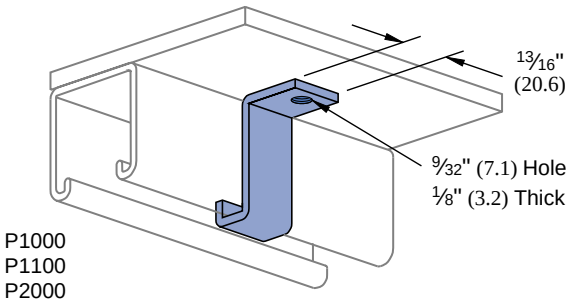
P1736

Wt/100 pcs: 70 Lbs (31.8 Kg)



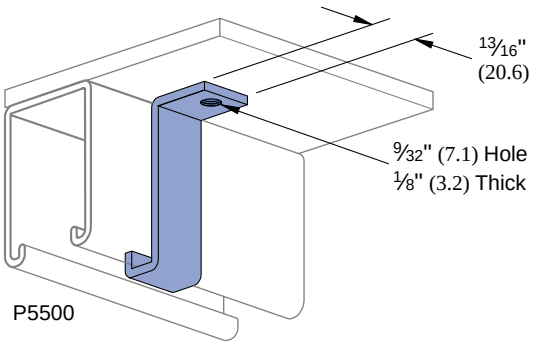
P2360

Wt/100 pcs: 9 Lbs (4.1 kg)



P5560

Wt/100 pcs: 11 Lbs (5.0 kg)

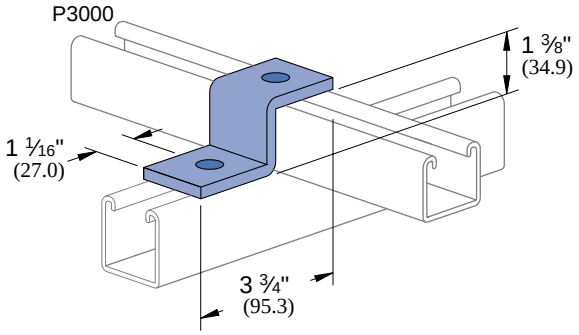


Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

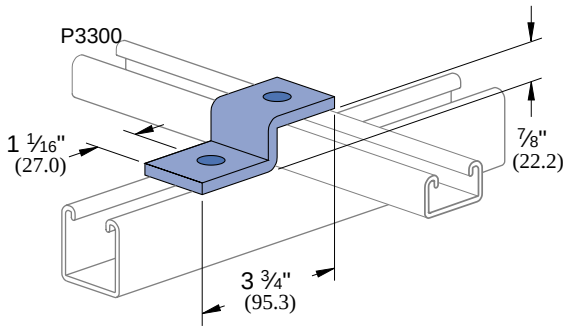
P3045

Wt/100 pcs: 53 Lbs (24.0 kg)



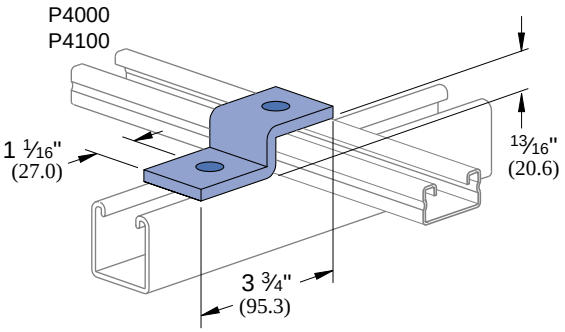
P3345

Wt/100 pcs: 47 Lbs (21.3 kg)



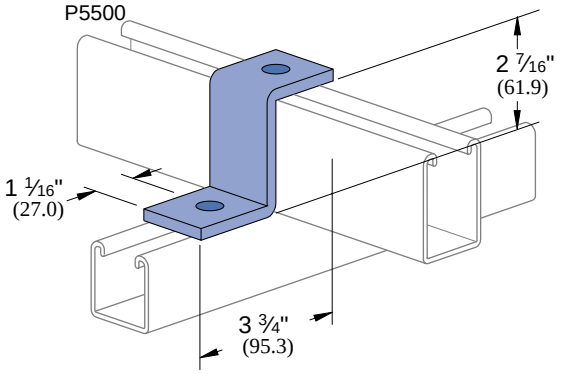
P4045

Wt/100 pcs: 47 Lbs (21.3 kg)



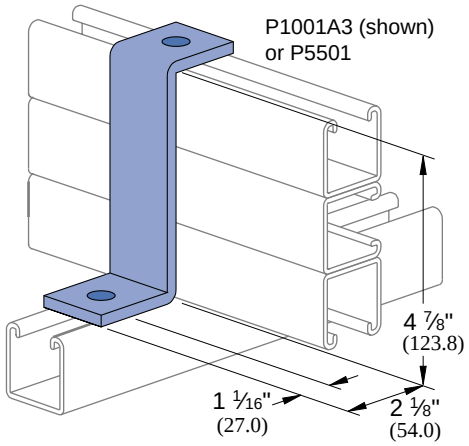
P5545

Wt/100 pcs: 67 Lbs (30.4 kg)

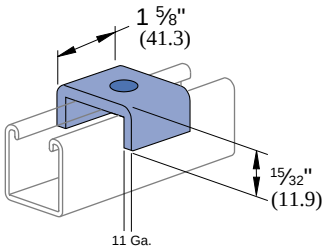


P2469

Wt/100 pcs: 93 Lbs (42.2 kg)



P2800



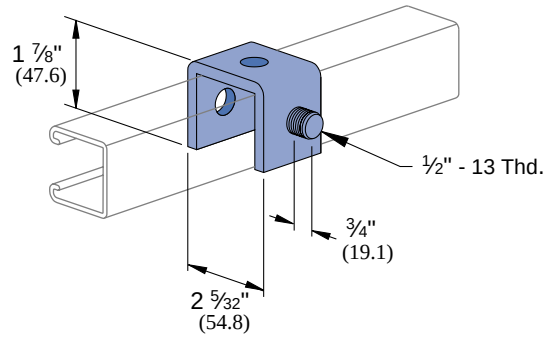
Part Number	Bolt Size In	Wt/100 pcs Lbs *(kg)*
P2800-25	¼"	14 *6.4*
P2800-37	⅜"	14 *6.4*
P2800-50	½"	13 *5.9*
P2800-62	5/7"	13 *5.9*
P2800-75	¾"	13 *5.9*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

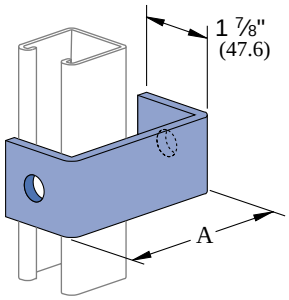
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P1320

Wt/100 pcs: 63 Lbs (28.6 kg)



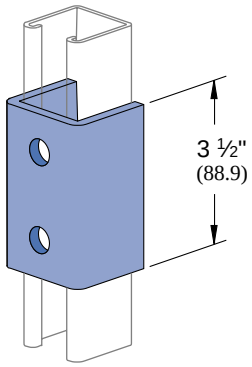
P1363A thru P1363E



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1363A	4 *101.6*	78 *35.4*
P1363B	5 *127.0*	89 *40.4*
P1363C	6 *152.4*	101 *45.8*
P1363D	7 *177.8*	112 *50.8*
P1363E	8 *203.2*	124 *56.2*

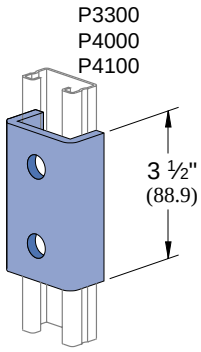
P1376

Wt/100 pcs: 128 Lbs (58.1 kg)



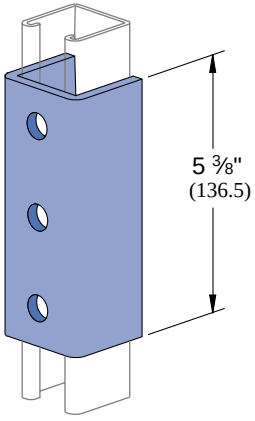
P4376

Wt/100 pcs: 85 Lbs (38.6 kg)



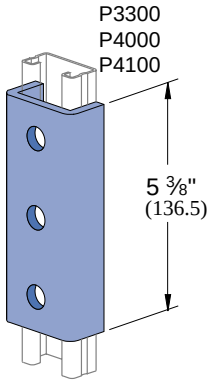
P1376A

Wt/100 pcs: 197 Lbs (89.4 kg)



P4376A

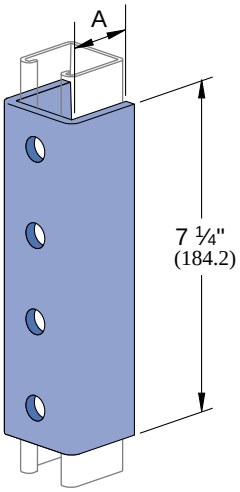
Wt/100 pcs: 130 Lbs (59.0 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

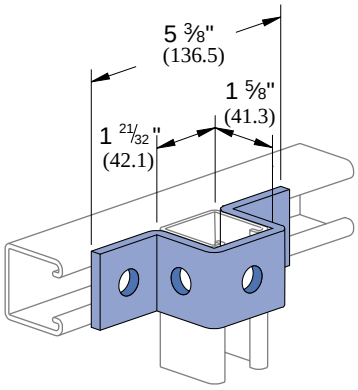
P1377, P4377, P5077, P5577



Part Number	For Use With	Wt/100 pcs Lbs (kg)
P1377	P1000, P1100, P2000	265 *120.2*
P4377	P3300, P4000, P4100	176 *79.8*
P5077	P5000	390 *176.9*
P5577	P5500	310 *140.6*

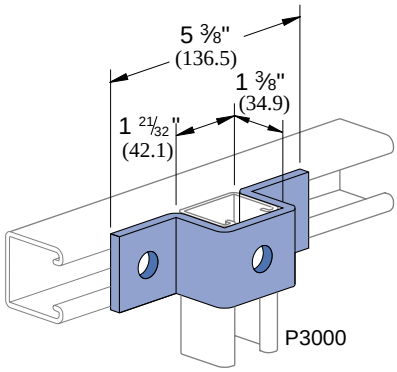
P1047

Wt/100 pcs: 88 Lbs (39.9 kg)



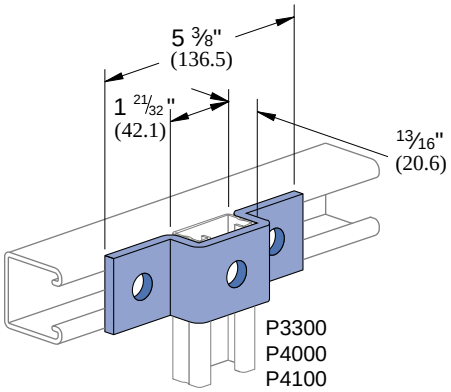
P3047

Wt/100 pcs: 84 Lbs (38.1 kg)



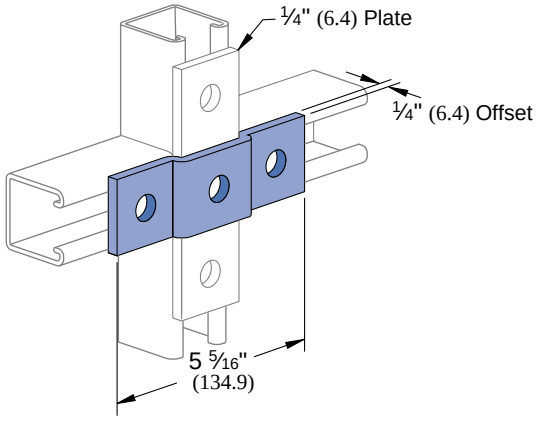
P4047

Wt/100 pcs: 71 Lbs (32.2 kg)



P1455

Wt/100 pcs: 58 Lbs (26.3 kg)

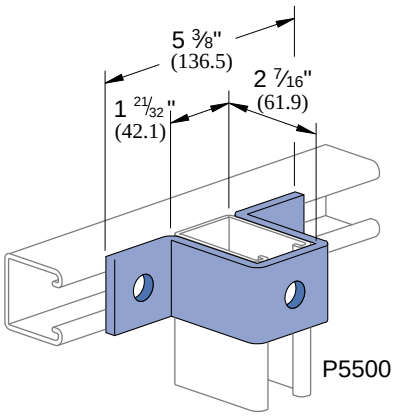


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

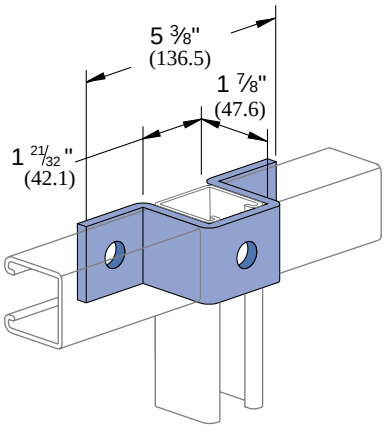
P5547

Wt/100 pcs: 108 Lbs (49.0 kg)



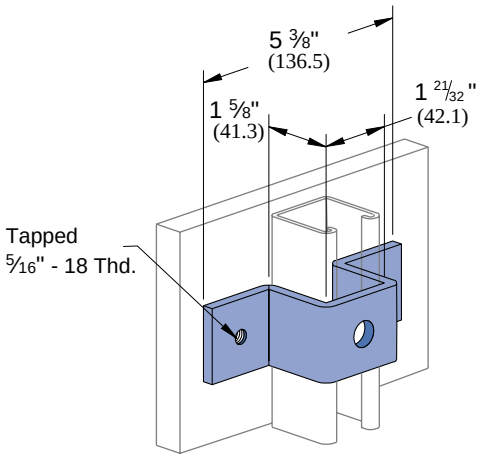
P1383

Wt/100 pcs: 95 Lbs (43.1 kg)



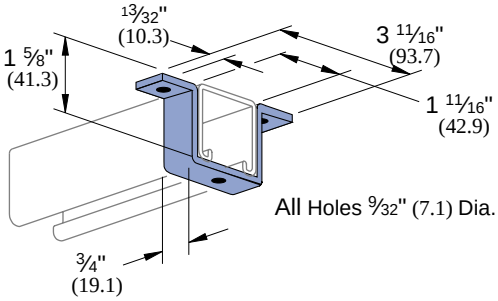
P1732

Wt/100 pcs: 88 Lbs (39.9 kg)



P2237

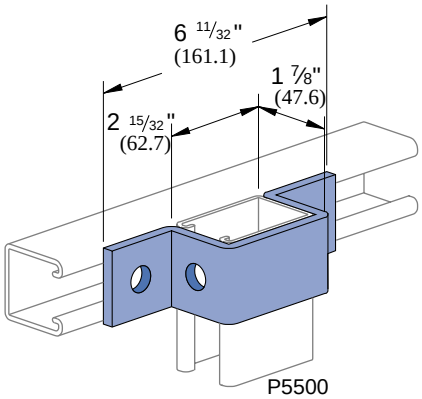
Wt/100 pcs: 18 Lbs (8.2 kg)



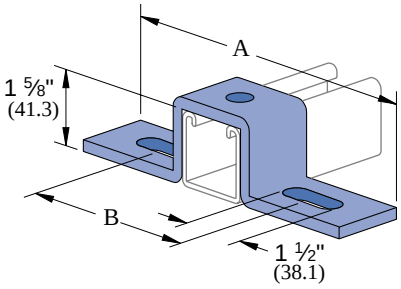
Material: 1/8" (3.2) thick.

P5543

Wt/100 pcs: 97 Lbs (44.0 kg)



P1048, P1049, P1050



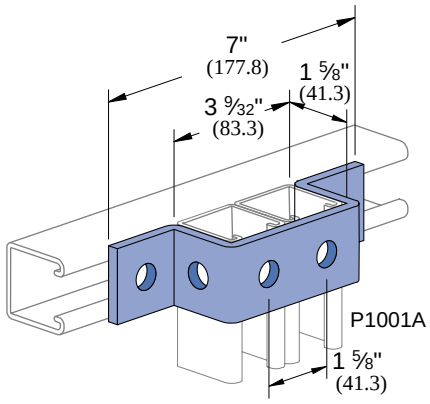
Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1048	7 1/4 *184.2*	4 1/8 *104.8*	105 *47.6*
P1049	8 1/2 *215.9*	5 3/8 *136.5*	120 *54.4*
P1050	10 3/8 *263.5*	7 1/4 *184.2*	130 *59.0*

Standard Dimensions for 1 5/8" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1 7/8" (47.6 mm); **Width:** 1 5/8"(41mm); **Thickness:** 1/4" (6.4mm)

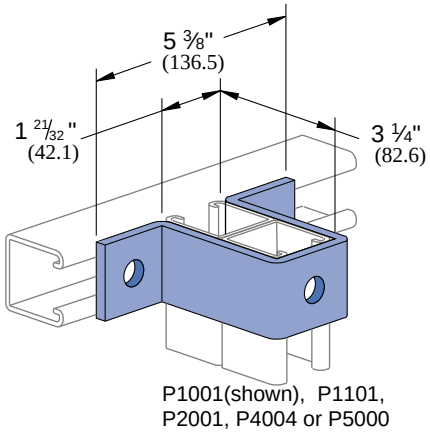
P1043A

Wt/100 pcs: 105 Lbs (47.6 kg)



P1737

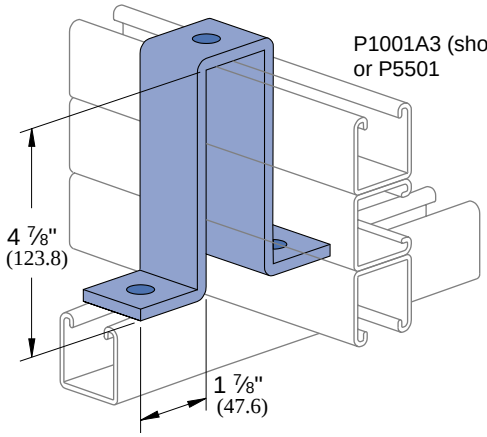
Wt/100 pcs: 128 Lbs (58.1 kg)



P1001(shown), P1101, P2001, P4004 or P5000

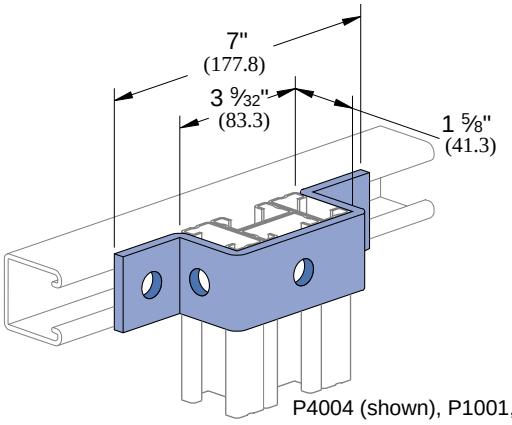
P2473

Wt/100 pcs: 197 Lbs (89.4 kg)



P4043

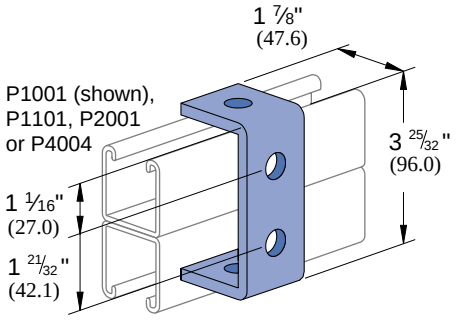
Wt/100 pcs: 106 Lbs (48.1 kg)



P4004 (shown), P1001, P1101, P2001, or P5000

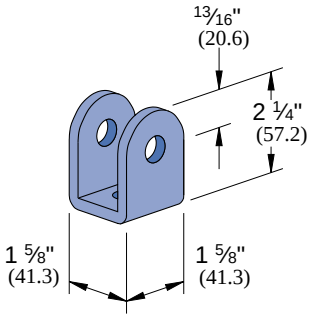
P1044

Wt/100 pcs: 70 Lbs (31.8 kg)



P1973

Wt/100 pcs: 53 Lbs (24.0 kg)

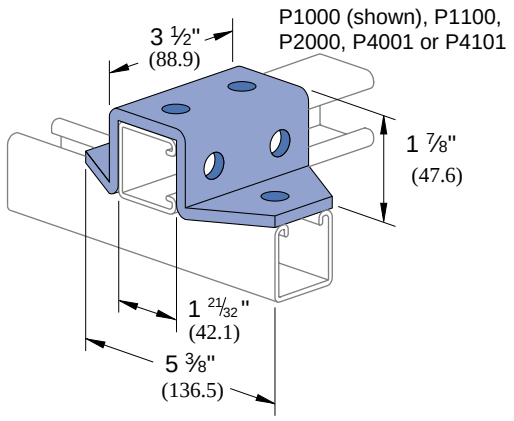


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1 7/8" (47.6 mm); **Width:** 1 5/8"(41mm); **Thickness:** 1/4" (6.4mm)

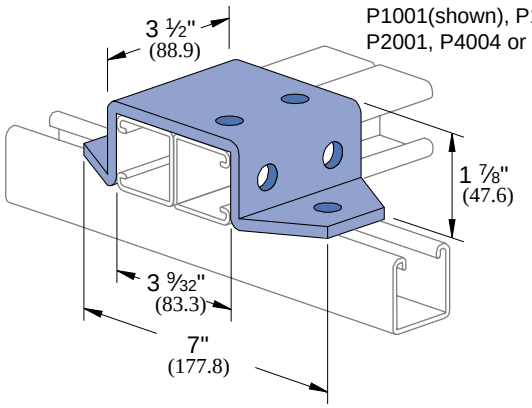
P2326

Wt/100 pcs: 171 Lbs (77.6 kg)



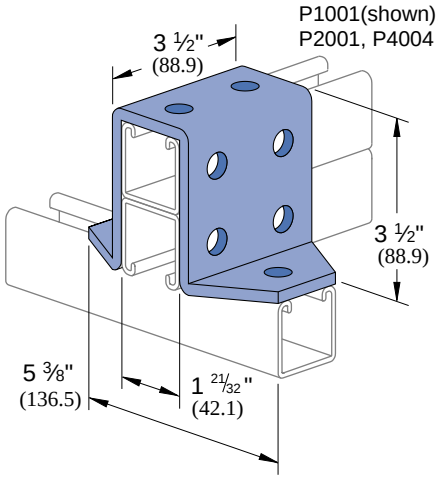
P2328

Wt/100 pcs: 209 Lbs (94.8 kg)



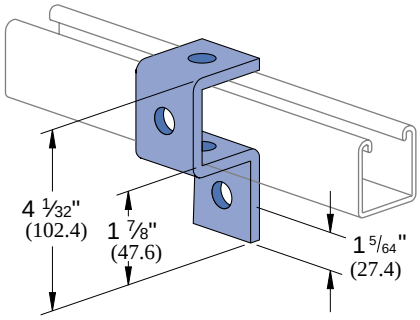
P2329

Wt/100 pcs: 257 Lbs (116.6 kg)



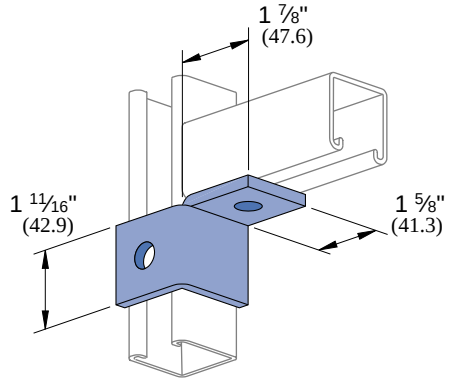
P1046A

Wt/100 pcs: 76 Lbs (34.5 kg)



P2341 R-L

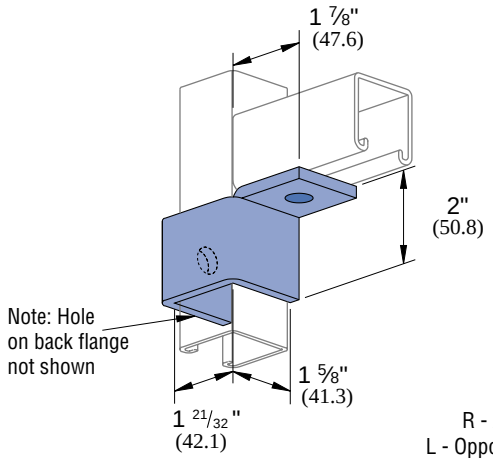
Wt/100 pcs: 60 Lbs (27.2 kg)



R - As shown
L - Opposite hand

P2472 R-L

Wt/100 pcs: 75 Lbs (34.0 kg)

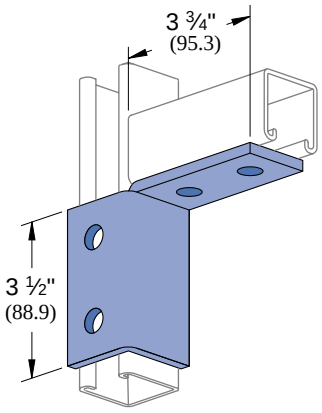


R - As shown
L - Opposite hand

Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P2343 R-L

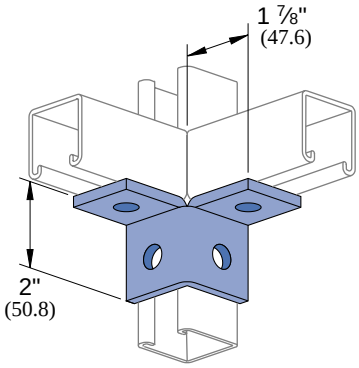
Wt/100 pcs: 119 Lbs (54.0 kg)



R - As shown
L - Opposite hand

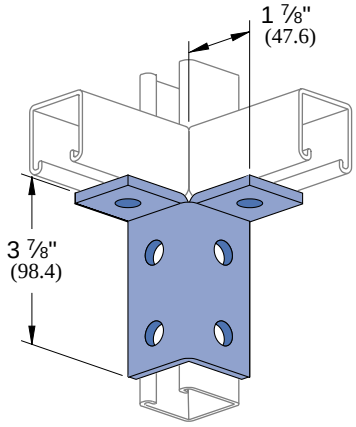
P2223

Wt/100 pcs: 76 Lbs (34.5 kg)



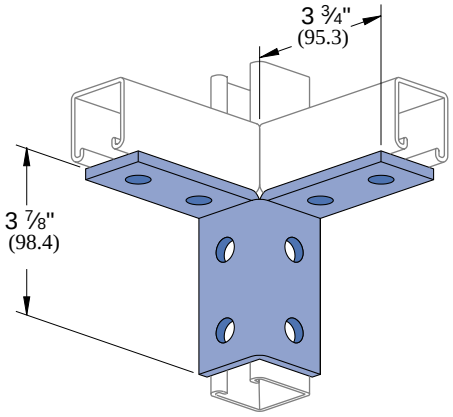
P2224

Wt/100 pcs: 115 Lbs (52.2 kg)



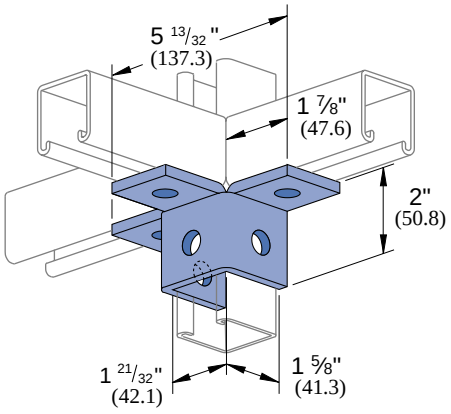
P2225

Wt/100 pcs: 155 Lbs (70.3 kg)



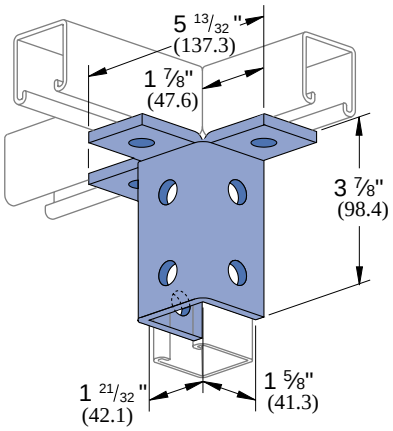
P2227

Wt/100 pcs: 113 Lbs (51.3 kg)



P2228

Wt/100 pcs: 177 Lbs (80.3 kg)

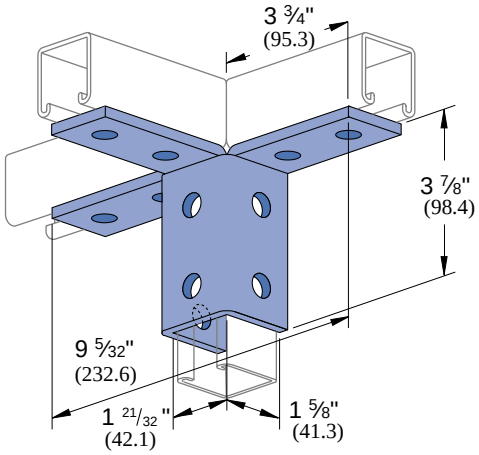


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

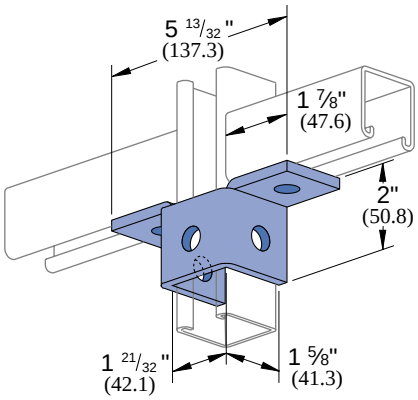
P2229

Wt/100 pcs: 230 Lbs (104.3 kg)



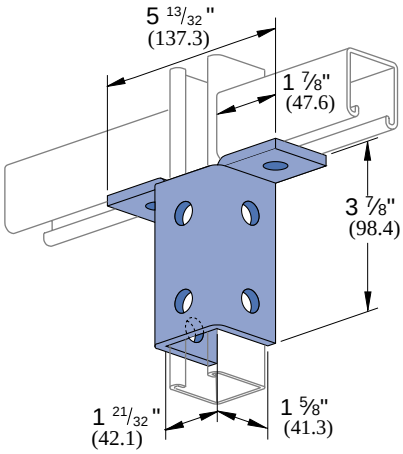
P2345

Wt/100 pcs: 93 Lbs (42.2 kg)



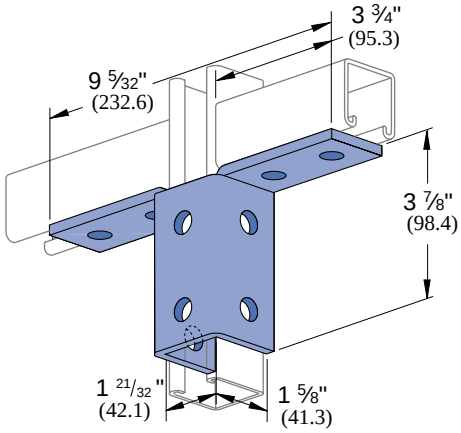
P2346

Wt/100 pcs: 150 Lbs (68.0 kg)



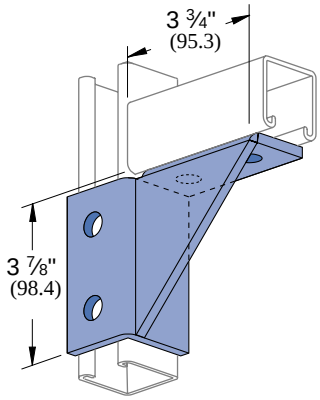
P2347

Wt/100 pcs: 193 Lbs (87.5 kg)



P2344 R-L

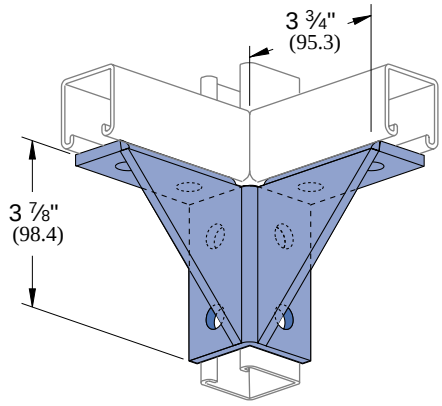
Wt/100 pcs: 176 Lbs (79.8 kg)



R - As shown
L - Opposite hand

P2226

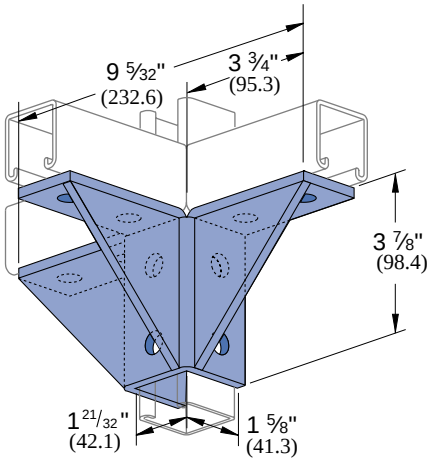
Wt/100 pcs: 217 Lbs (98.4 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

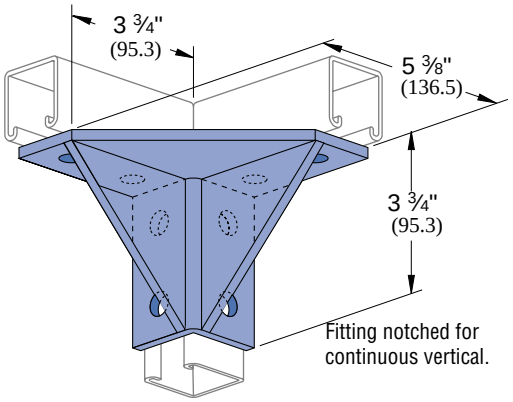
P2230

Wt/100 pcs: 310 Lbs (140.6 kg)



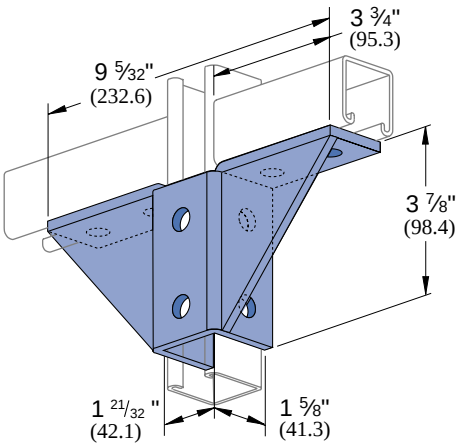
P2245

Wt/100 pcs: 315 Lbs (142.9 kg)



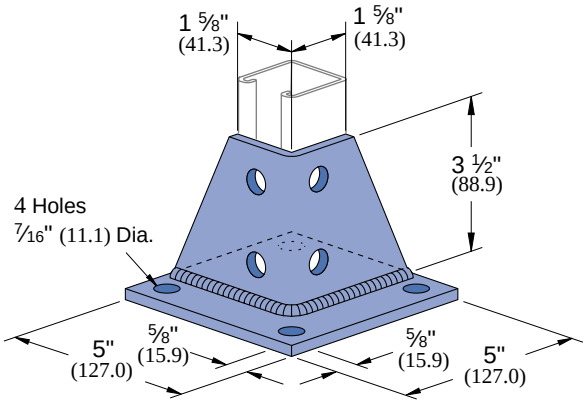
P2348

Wt/100 pcs: 274 Lbs (124.3 kg)



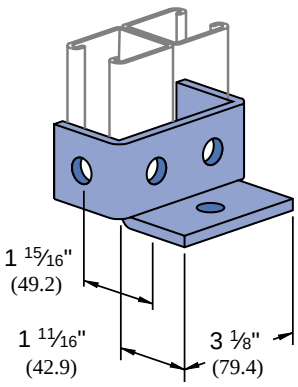
P1887

Wt/100 pcs: 297 Lbs (134.8 kg)



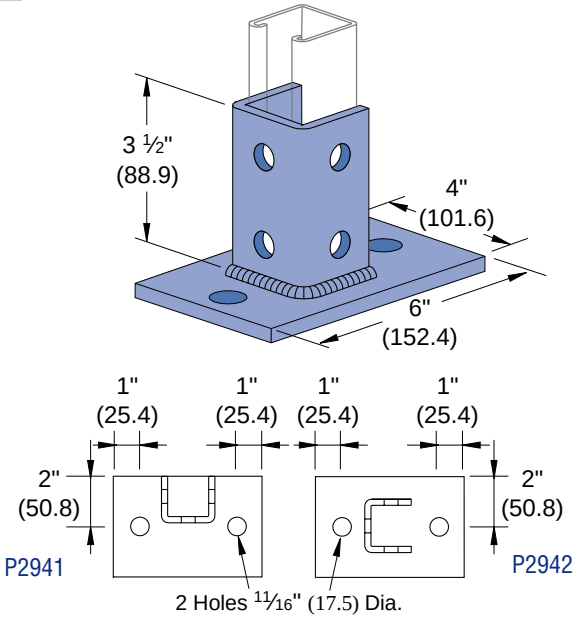
P2453

Wt/100 pcs: 116 Lbs (52.6 kg)



P2941, P2942

Wt/100 pcs: 358 Lbs (162.4 kg)

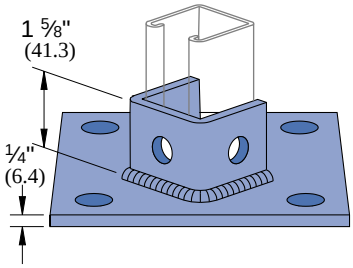


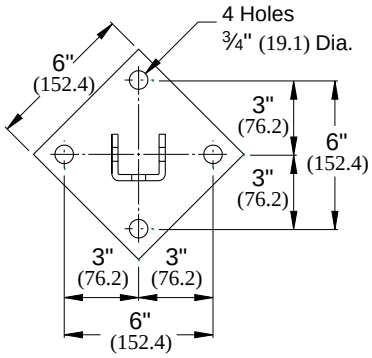
Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

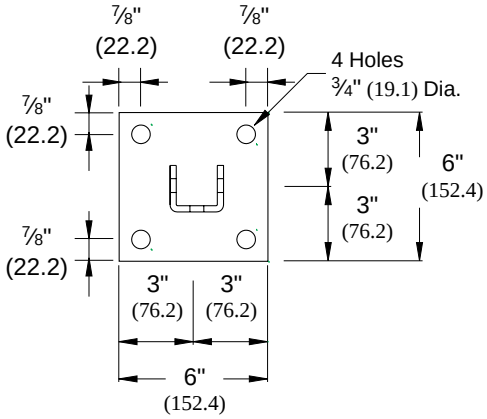
P2072, P2072 SQ

Wt/100 pcs: 307 Lbs (139.3 kg)





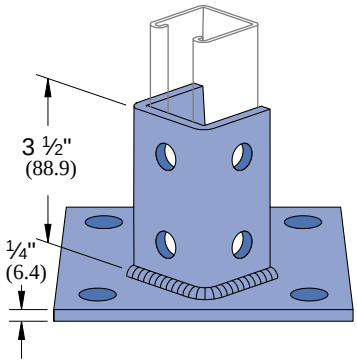
P2072

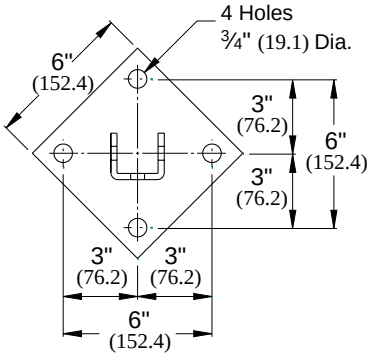


P2072 SQ

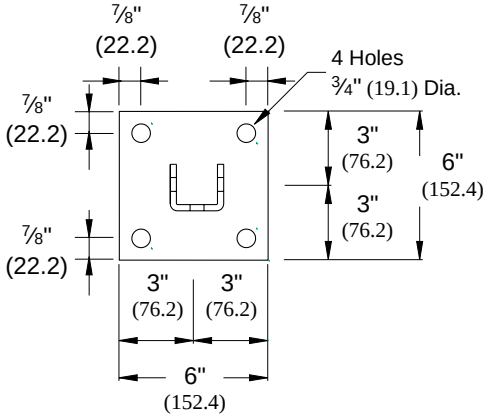
P2072A, P2072A SQ

Wt/100 pcs: 373 Lbs (169.2 kg)





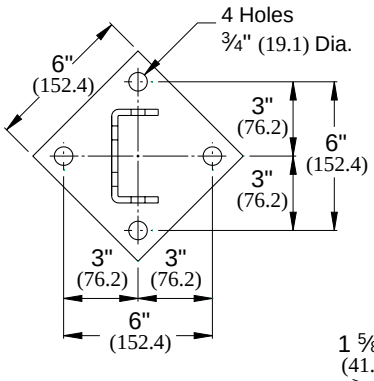
P2072A

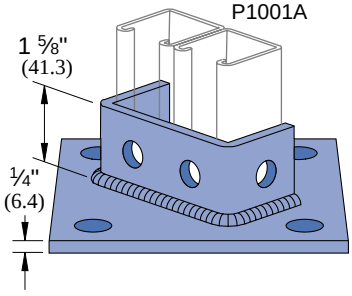


P2072A SQ

P2073

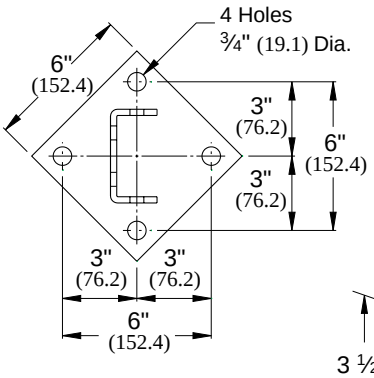
Wt/100 pcs: 325 Lbs (147.4 kg)

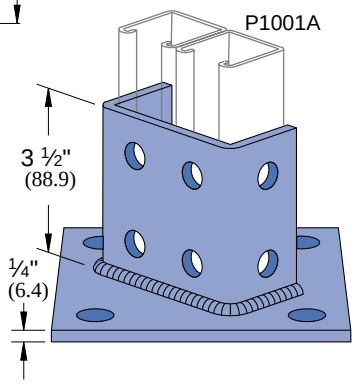




P2073A

Wt/100 pcs: 408 Lbs (185.1 kg)

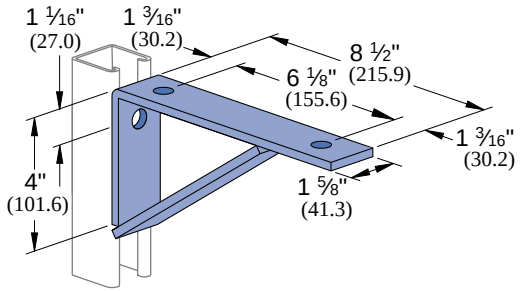




Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P1769

Wt/100 pcs: 174 Lbs (78.9 kg)



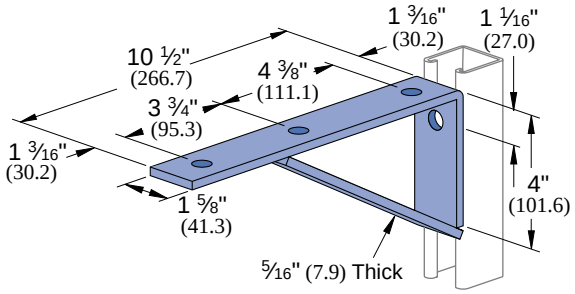
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	800 *362.9*
P1100	14	600 *272.2*
P2000	16	400 *181.4*

Safety Factor 2½

Material: ¼" (6.4) thick steel.

P1771

Wt/100 pcs: 206 Lbs (93.4 kg)



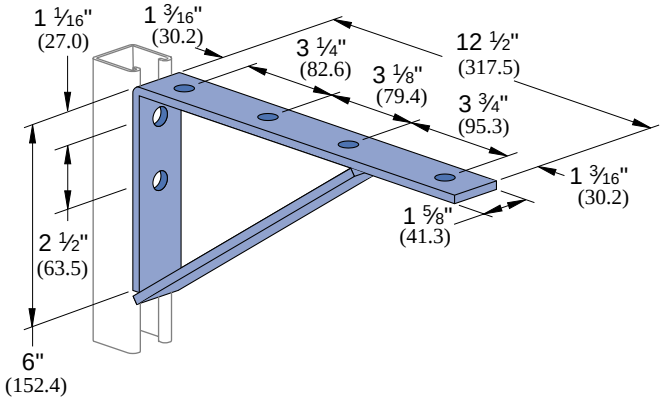
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	800 *362.9*
P1100	14	600 *272.2*
P2000	16	400 *181.4*

Safety Factor 2½

Material: ¼" (6.4) thick steel.

P1773

Wt/100 pcs: 264 Lbs (119.7 kg)



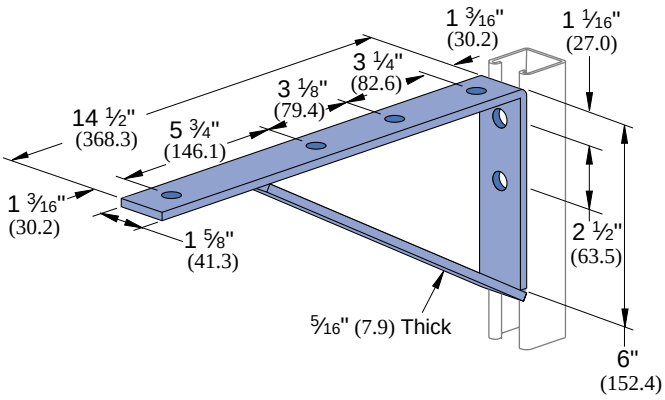
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	900 *408.2*
P1100	14	800 *362.9*
P2000	16	450 *204.1*

Safety Factor 2½

Material: ¼" (6.4) thick steel.

P1775

Wt/100 pcs: 295 Lbs (133.8 kg)



Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	900 *408.2*
P1100	14	800 *362.9*
P2000	16	450 *204.1*

Safety Factor 2½

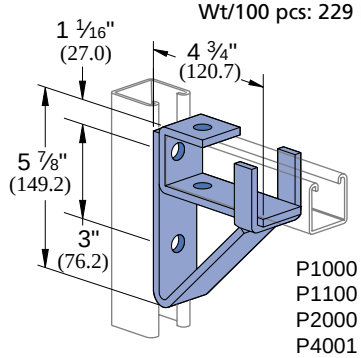
Material: ¼" (6.4) thick steel.

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P1075

Wt/100 pcs: 229 Lbs (103.9 kg)



P1000
P1100
P2000
P4001

Material: ¼" (6.4) thick steel.

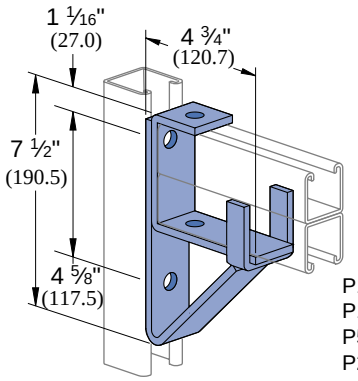
* Allowable moment for fitting only.
Channel may determine overall capacity.

Vertical Channel Part No.	Gauge	Allowable Moment* In-Lbs *(N•M)*
P1000	12	5,100 *576*
P1100	14	4,400 *497*
P2000	16	3,200 *362*

Safety Factor 2½

P1593

Wt/100 pcs: 272 Lbs (123.4 kg)



P1001
P1101
P5000
P2001

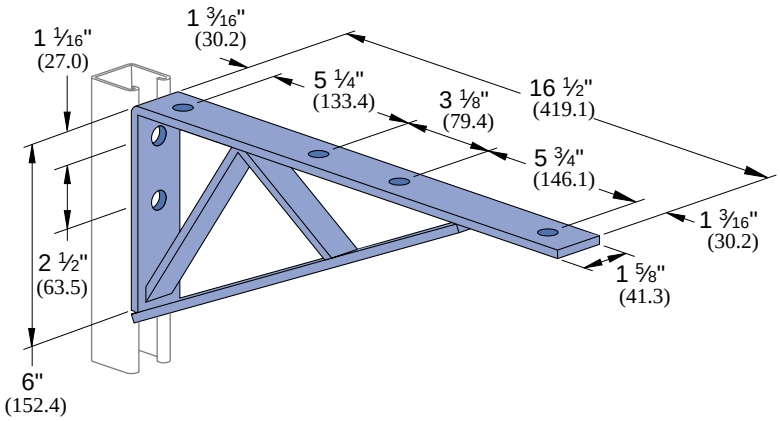
Material: ¼" (6.4) thick steel.
* Allowable moment for fitting only.
Channel may determine overall capacity.

Vertical Channel Part No.	Gauge	Allowable Moment* In-Lbs *(N•M)*
P1000	12	13,000 *1,469*
P1100	14	9,100 *1,028*
P2000	16	6,500 *734*

Safety Factor 2½

P1777

Wt/100 pcs: 385 Lbs (174.6 kg)



Material: ¼" (6.4) thick steel.

Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	1,200 *544.3*
P1100	14	900 *408.2*
P2000	16	600 *272.2*

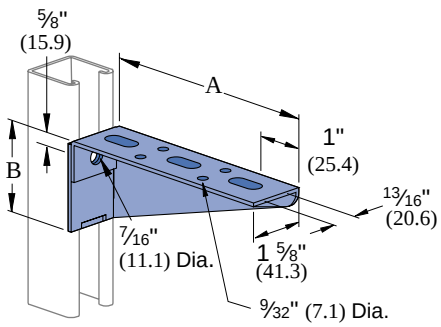
Safety Factor 2½

Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2491 R-L thru P2493 R-L

Material : 12 Gauge Steel.



Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	300 *136.1*
P1100	14	250 *113.4*
P2000	16	200 *90.7*

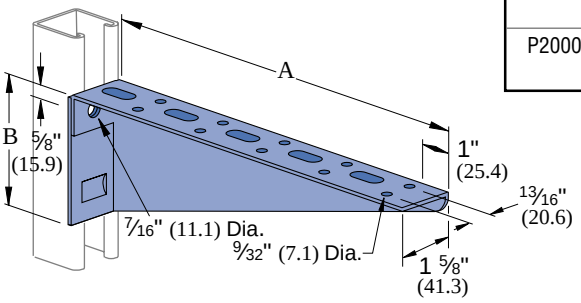
Safety Factor - 2½

R - As shown; L - Opposite hand

Part Number	Stamped Ident. No.	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2491 R-L	121892 R-L	6 *52.4*	1 15/16 *49.2*	67 *30.4*
P2492 R-L	121893 R-L	8 *203.2*	2 7/16 *61.9*	92 *41.7*
P2493 R-L	121894 R-L	10 *254.0*	2 15/16 *74.6*	120 *54.4*

P2494 R-L thru P2499 R-L

Material : 12 Gauge Steel.



Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	300 *136.1*
P1100	14	250 *113.4*
P2000	16	200 *90.7*

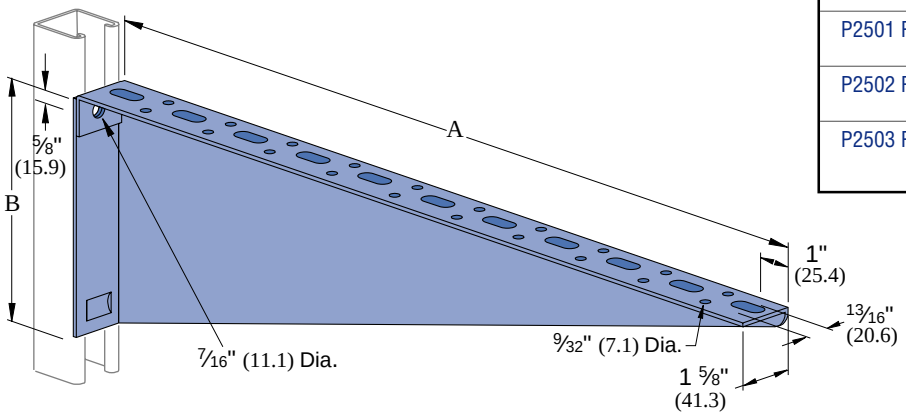
Safety Factor - 2½

R - As shown; L - Opposite hand

Part Number	Stamped Ident. No.	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2494 R-L	121895 R-L	12 *304.8*	3 7/16 *87.3*	152 *68.9*
P2495 R-L	121896 R-L	14 *355.6*	3 15/16 *100.0*	173 *78.5*
P2496 R-L	121897 R-L	16 *406.4*	4 7/16 *112.7*	223 *101.2*
P2497 R-L	121898 R-L	18 *457.2*	4 15/16 *125.4*	266 *120.7*
P2498 R-L	121899 R-L	20 *508.0*	5 7/16 *138.1*	308 *139.7*
P2499 R-L	121900 R-L	22 *558.8*	5 15/16 *150.8*	355 *161.0*

P2500 R-L thru P2503 R-L

Material : 12 Gauge Steel.



R - As shown; L - Opposite hand

Part Number	Stamped Ident. No.	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2500 R-L	121901 R-L	24 *609.6*	6 7/16 *163.5*	400 *181.4*
P2501 R-L	121902 R-L	26 *660.4*	6 15/16 *176.2*	445 *201.8*
P2502 R-L	121903 R-L	28 *711.2*	7 7/16 *188.9*	493 *223.6*
P2503 R-L	121904 R-L	30 *762.0*	7 15/16 *201.6*	545 *247.2*

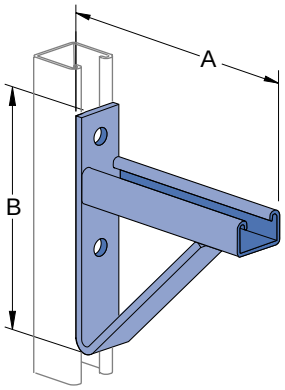
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P1000	12	300 *136.1*
P1100	14	250 *113.4*
P2000	16	200 *90.7*

Safety Factor - 2½

Note

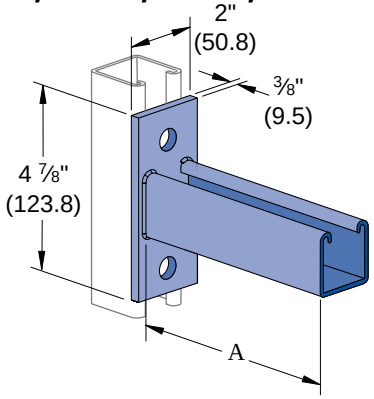
When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2547 thru P2551 Cable Tray Bracket



Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Load* Lbs *(kg)*
P2547	15 *152.4*	8¾ *222.3*	420 *190.5*	1,000 *453.6*
P2548	21 *304.8*	8¾ *222.3*	628 *284.9*	1,000 *453.6*
P2549	27 *457.2*	11¼ *285.8*	860 *390.1*	900 *408.2*
P2550	33 *457.2*	11¼ *285.8*	1010 *458.1*	900 *408.2*
P2551	39 *609.6*	16 *406.4*	1257 *683.3*	800 *362.9*

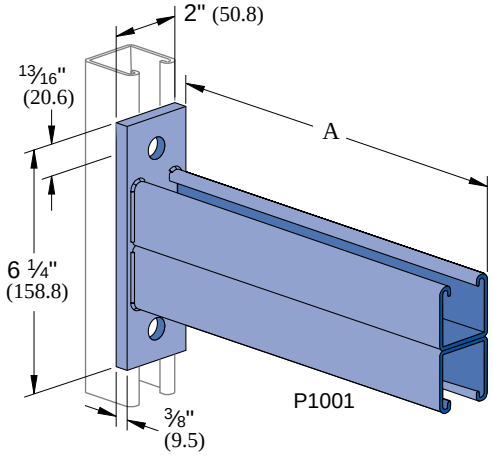
P2944, P2945, P2946, P2947



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Load* Lbs *(kg)*
P2944	6 *152.4*	185 *83.9*	1200 *544.3*
P2945	12 *304.8*	293 *132.9*	600 *272.2*
P2946	18 *457.2*	401 *181.9*	400 *181.4*
P2947	24 *609.6*	509 *230.9*	300 *136.1*

Safety Factor 2½
* Mounted on 12 Ga. Channel

P2542 thru P2546

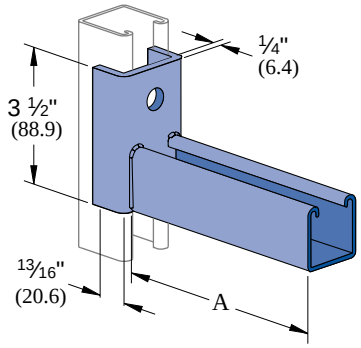


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kg)*
P2542	12 *304.8*	502 *227.7*	P1000	12	2,000 *907.2*
			P1100	14	1,400 *635.0*
			P2000	16	1,000 *453.6*
P2543	18 *457.2*	692 *313.9*	P1000	12	1,300 *589.7*
			P1100	14	900 *408.2*
			P2000	16	650 *294.8*
P2544	24 *609.6*	882 *400.1*	P1000	12	1,000 *453.6*
			P1100	14	700 *317.5*
			P2000	16	500 *226.8*
P2545	30 *762.0*	1,072 *486.3*	P1000	12	800 *362.9*
			P1100	14	560 *254.0*
			P2000	16	400 *181.4*
P2546	36 *914.4*	1,262 *572.4*	P1000	12	650 *294.8*
			P1100	14	450 *204.1*
			P2000	16	320 *145.1*

Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

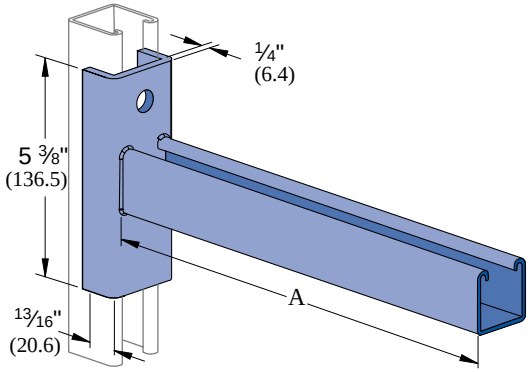
P2231, P2232



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P2231	6 *152.4*	191 *86.6*	P1000	12	1,600 *725.7*
			P1100	14	1,200 *544.3*
			P2000	16	800 *362.9*
P2232	12 *304.8*	292 *132.4*	P1000	12	800 *362.9*
			P1100	14	600 *272.2*
			P2000	16	400 *181.4*

Safety Factor - 2½

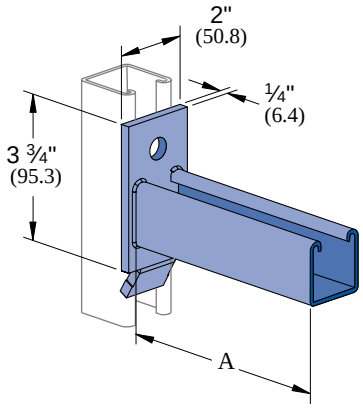
P2233, P2234



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P2233	18 *457.2*	436 *197.8*	P1000	12	600 *272.2*
			P1100	14	450 *204.1*
			P2000	16	300 *136.1*
P2234	24 *609.6*	536 *243.1*	P1000	12	450 *204.1*
			P1100	14	330 *149.7*
			P2000	16	220 *99.8*

Safety Factor - 2½

P2513 thru P2516



When installed in inverted position use 60% of loads shown.

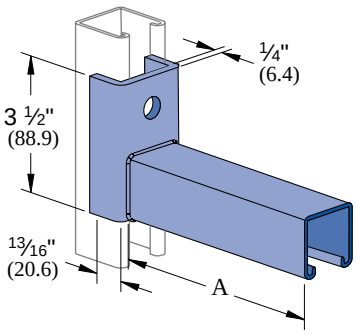
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kg)*
P2513	6 *152.4*	161 *73.0*	P1000	12	1,200 *544.3*
			P1100	14	800 *362.9*
			P2000	16	600 *272.2*
P2514	12 *304.8*	261 *118.4*	P1000	12	600 *272.2*
			P1100	14	400 *181.4*
			P2000	16	300 *136.1*
P2515	18 *457.2*	361 *163.7*	P1000	12	400 *181.4*
			P1100	14	270 *122.5*
			P2000	16	200 *90.7*
P2516	24 *609.6*	461 *209.1*	P1000	12	300 *136.1*
			P1100	14	200 *90.7*
			P2000	16	150 *68.0*

Safety Factor - 2½

Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

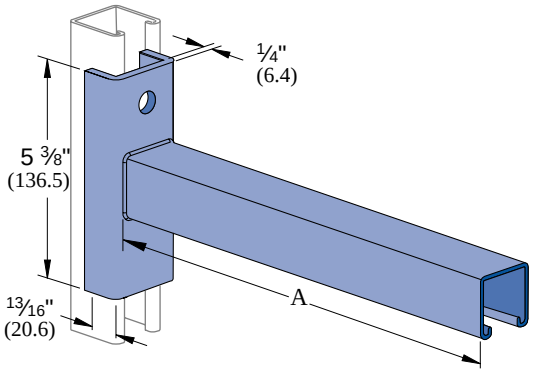
P2231A, P2232A



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kg)*
P2231A	6 *152.4*	191 *86.6*	P1000	12	1,600 *725.7*
			P1100	14	1,200 *544.3*
			P2000	16	800 *362.9*
P2232A	12 *304.8*	292 *132.4*	P1000	12	800 *362.9*
			P1100	14	600 *272.2*
			P2000	16	400 *181.4*

Safety Factor - 2½

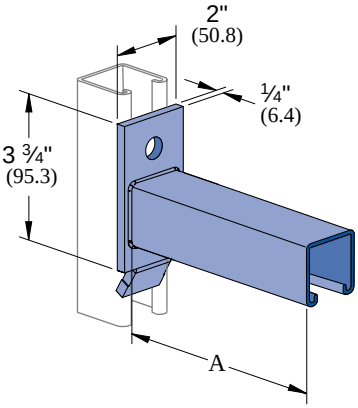
P2233A, P2234A



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kg)*
P2233A	18 *457.2*	436 *197.8*	P1000	12	600 *272.2*
			P1100	14	450 *204.1*
			P2000	16	300 *136.1*
P2234A	24 *609.6*	536 *243.1*	P1000	12	450 *204.1*
			P1100	14	330 *149.7*
			P2000	16	220 *99.8*

Safety Factor 2½

P2513A thru P2516A



When installed in inverted position use 60% of loads shown.

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kg)*
P2513A	6 *152.4*	161 *73.0*	P1000	12	1,200 *544.3*
			P1100	14	800 *362.9*
			P2000	16	600 *272.2*
P2514A	12 *304.8*	261 *118.4*	P1000	12	600 *272.2*
			P1100	14	400 *181.4*
			P2000	16	300 *136.1*
P2515A	18 *457.2*	361 *163.7*	P1000	12	400 *181.4*
			P1100	14	270 *122.5*
			P2000	16	200 *90.7*
P2516A	24 *609.6*	461 *209.1*	P1000	12	300 *136.1*
			P1100	14	200 *90.7*
			P2000	16	150 *68.0*

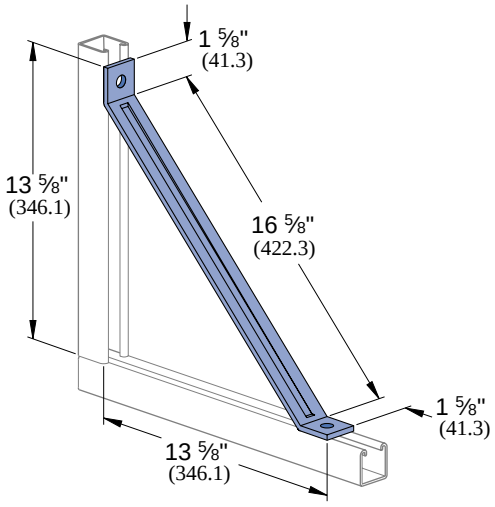
Safety Factor 2½

Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2452 Knee Brace

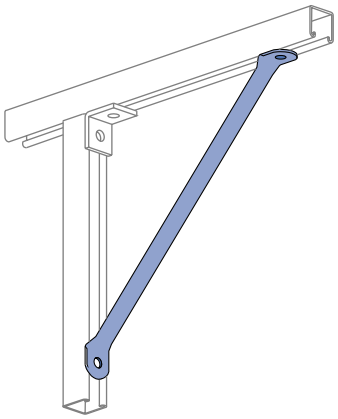
Wt/100 pcs: 277 Lbs (125.6 kg)

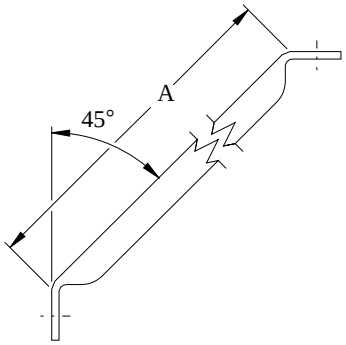


Material: ¼" (6.4) thick steel.

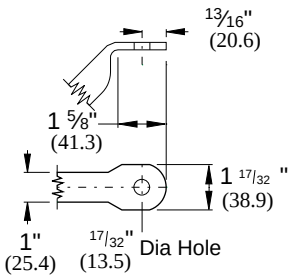
Design Axial Load
1200 Lbs (544.3 kg)

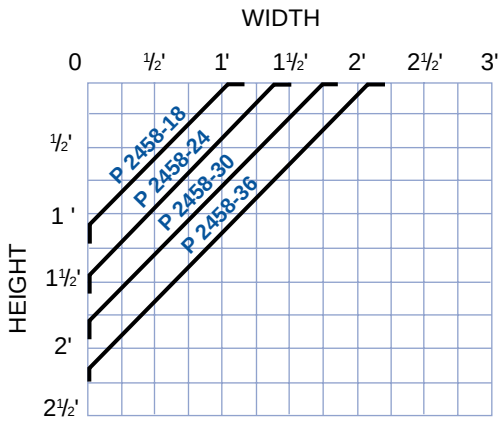
P2458-18 thru P2458-36 Tubular Knee Braces





Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2458-18	18 *457.2*	146 *66.2*
P2458-24	24 *609.6*	186 *84.4*
P2458-30	30 *762.0*	227 *103.0*
P2458-36	36 *914.4*	267 *121.1*



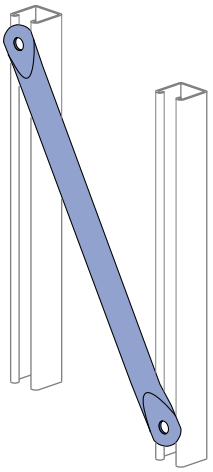


Design Loads
Compression = 1500 Lbs (680.4 kg)
Tension = 300 Lbs (136.1 kg)

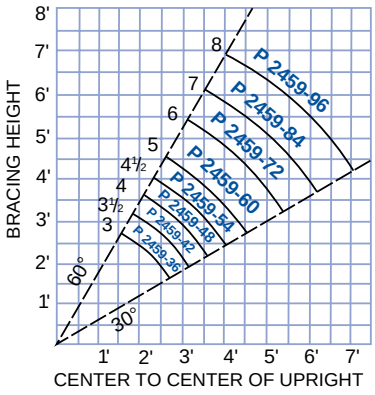
Note

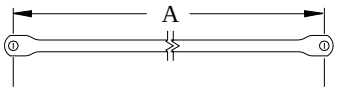
When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2459-36 thru P2459-96 — Tubular Back Braces

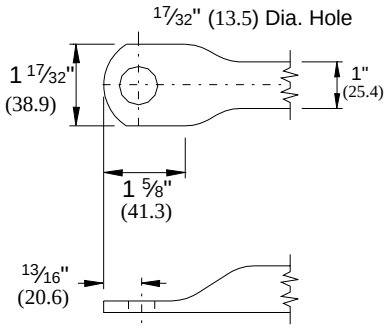


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2459-36	36 *914.4*	255 *115.7*
P2459-42	42 *1,066.8*	296 *134.3*
P2459-48	48 *1,219.2*	336 *152.4*
P2459-54	54 *1,371.6*	377 *171.0*
P2459-60	60 *1,524.0*	418 *189.6*
P2459-72	72 *1,828.8*	499 *226.3*
P2459-84	84 *2,133.6*	580 *263.1*
P2459-96	96 *2,438.4*	661 *299.8*



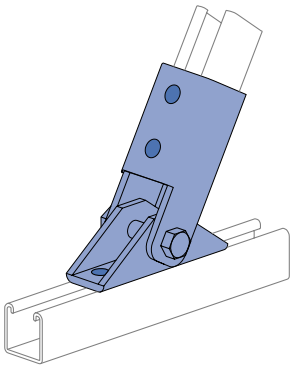


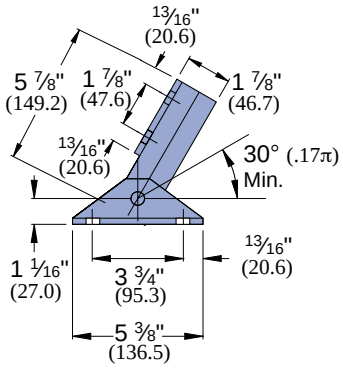
1. The vertical lines of the graph correspond to the center to center line dimension of the uprights.
2. Along this vertical line locate the (maximum usable) horizontal bracing height line.
3. The arc line that intersects the point formed by the intersection of the two lines, indicates the brace required.
4. 60° - 30° maximum, minimum brace angles are indicated for maximum effect.



P2815 — Adjustable Brace Fitting

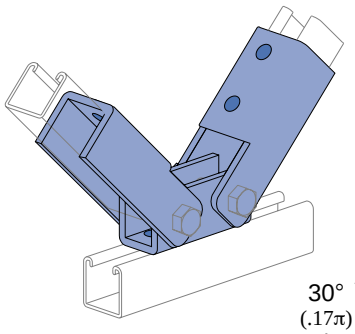
Wt/100 pcs: 307 Lbs (139.3 kg)

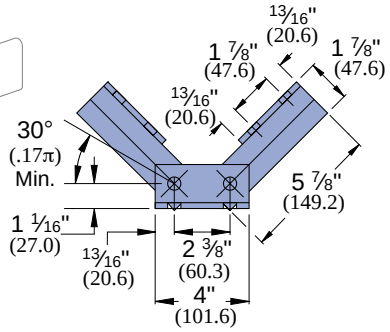




P2815D — Adjustable Brace Fitting

Wt/100 pcs: 497 Lbs (225.4 kg)



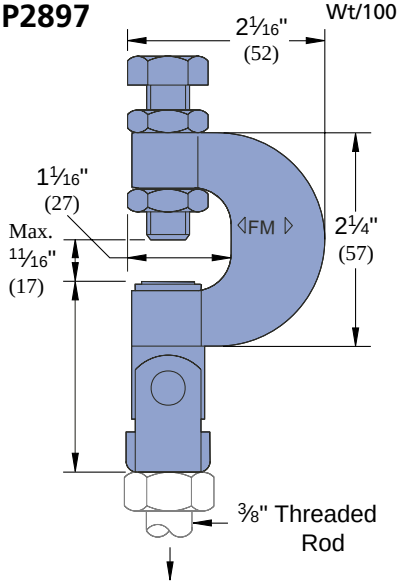


Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

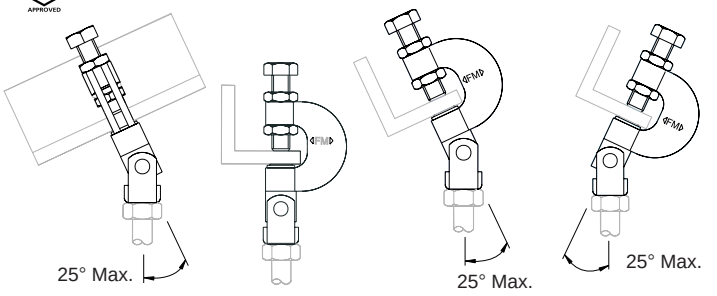
P2897

Wt/100 pcs: 33 Lbs (15.0 kg)

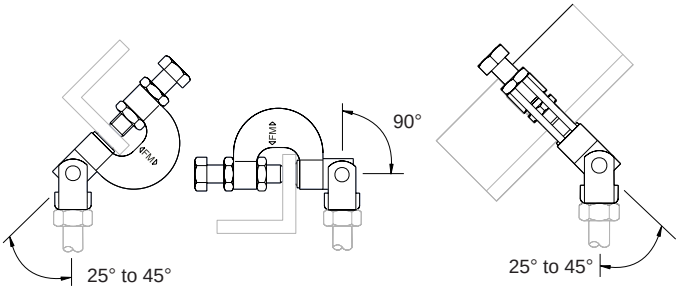


Design Load (Safety Factor of 4)
(angles ≤ 25°) - 550 Lbs (250Kg)
(angles > 25°) - 330 Lbs (150Kg)

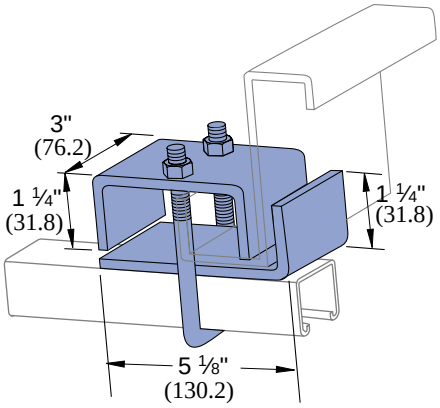
FM Approved Applications



Other (Non - FM Approved) Applications



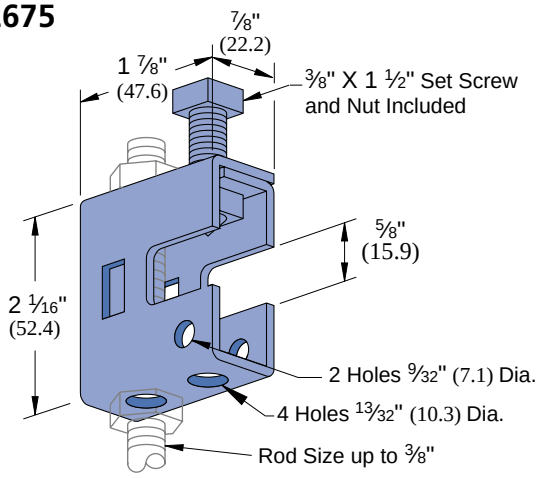
P2784

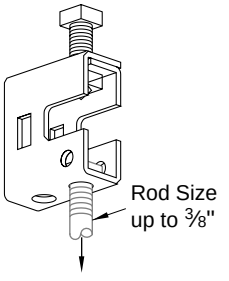


Part Number	For Use With	Load Lbs (kg)	Wt/100 pcs Lbs (kg)
P2784-1	P1000, P1100, P2000	1,200 *544*	175 *79.3*
P2784-2	P1001, P1101, P2001	1,200 *544*	179 *81.1*
P2784-3	P5001,P5501	1,200 *544*	180 *81.5*

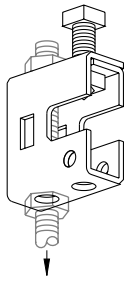
P2675

Wt/100 pcs: 33 Lbs (15.0 kg)

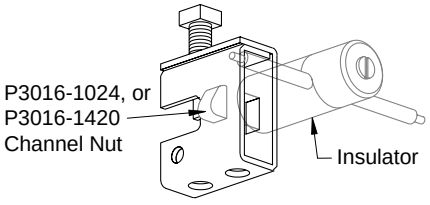




Design Load
250 Lbs (113.4 kg)



Design Load
150 Lbs (68.0 kg)

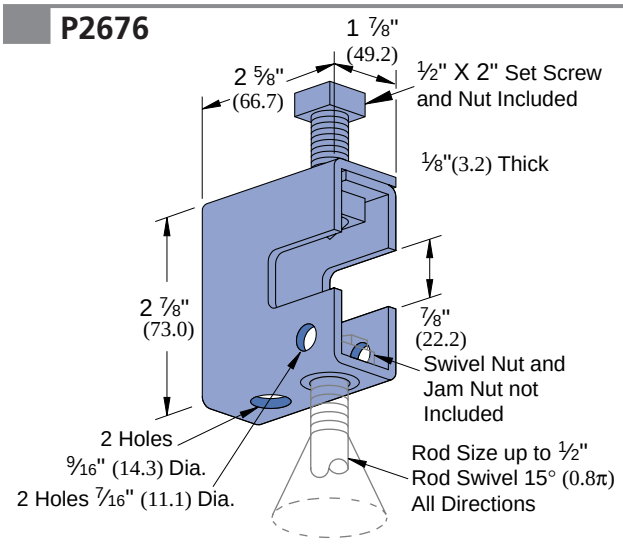


Clamp Materials: .105" (2.7) thick steel.
Clamp P2675 is designed for light duty rod suspension.
It also may be used with P3016-1024 or P3016-1420 nut as illustrated above for mounting insulators, etc.

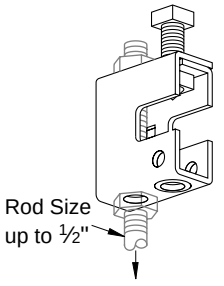
Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

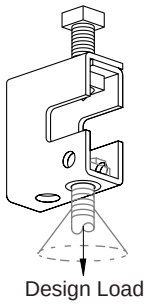
P2676



Wt/100 pcs: 72 Lbs (32.7 kg)



Design Load
300 Lbs (136.1 kg)



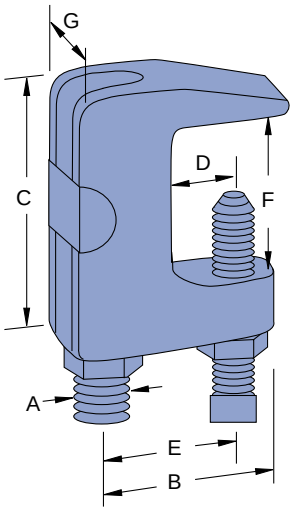
Design Load
500 Lbs (226.8 kg)

Clamp P2676 provides a means of rod suspension where a free swing of up to 15° (0.8π) is required. Clamp will accommodate ¼" (6.4), ⅜" (9.5), or ½" (12.7) rods. Order swivel nuts P2679-4,-6, or -8 as required. Clamp may also be used with P2677 as illustrated in application drawings on page 113.

Clamp Materials: ⅛" (3.2) thick steel.

P2898

Universal Beam Clamp

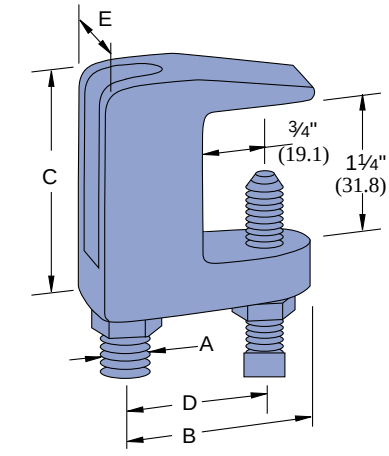


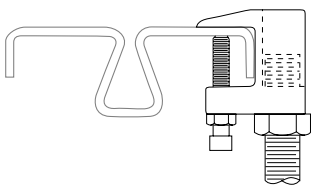
- Maximum temperature of 450° F
- At least one full thread must be exposed

	A in	B In (mm)	C In (mm)	D In (mm)	E In (mm)	F In (mm)	G In (mm)	Max Load Lbs (kg)	Wt/100 pcs Lbs (kg)
P2898-37	3/8	1 25.4	1 1/2 38.1	1/2 12.7	1 25.4	3/4 19.1	7/8 22.2	400 181.8	33 15.0
P2898-50	1/2	1 25.4	1 1/2 38.1	1/2 12.7	1 25.4	3/4 19.1	7/8 22.2	500 227.3	33 15.0
P2898-62	5/8	1 1/2 38.1	1 1/2 38.1	1/2 12.7	1 25.4	3/4 19.1	1 25.4	600 272.7	22 10.0
P2898-75	3/4	1 7/8 47.6	1 3/4 44.5	5/8 15.9	1 3/8 34.9	1 25.4	1 1/4 31.8	800 363.6	88 40.0
P2898-87	7/8	2 50.8	1 3/4 44.5	5/8 15.9	1 1/2 38.1	1 25.4	1 1/4 31.8	1,200 545.5	79 35.9

P2899

WIDE THROAT TOP BEAM CLAMP





- Maximum temperature of 450° F

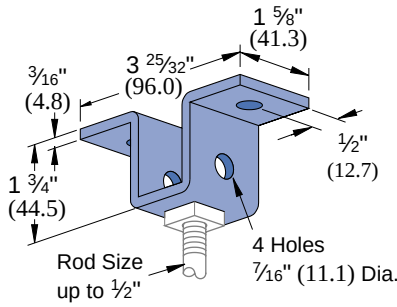
	Rod Size A in	B In (mm)	C In (mm)	D In (mm)	E In (mm)	Max. Load Lbs (kg)	Wt/100 pcs Lbs (kg)
P2899-37	3/8	1 5/8 41.3	2 50.8	1 25.4	7/8 22.2	500 227.3	28 12.7
P2899-50	1/2	1 5/8 41.3	2 50.8	1 25.4	7/8 22.2	500 227.3	28 12.7
P2899-62	5/8	1 3/4 44.5	2 1/4 57.2	1 1/4 31.8	1 25.4	600 272.7	66 30.0
P2899-75	3/4	1 7/8 47.6	2 3/8 60.3	1 3/8 34.9	1 1/4 31.8	800 363.6	83 37.7

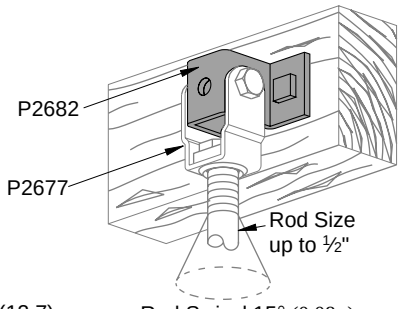
Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2682

Wt/100 pcs: 55 Lbs (24.9 kg)



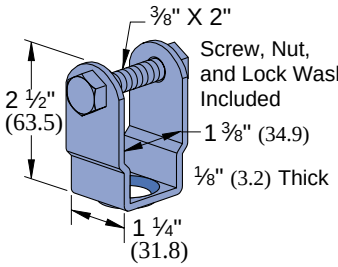


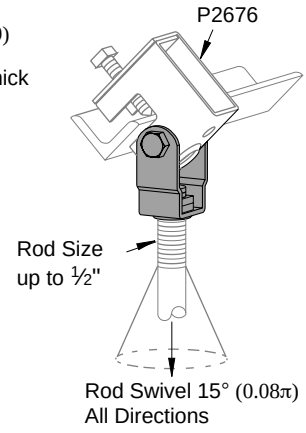
Hanger clevis for up to ½" (12.7) rod suspension from wood ceilings. May also be used with P2677 as illustrated in application drawings.

Rod Swivel 15° (0.08π) All Directions

P2677

Wt/100 pcs: 30 Lbs (13.6 kg)



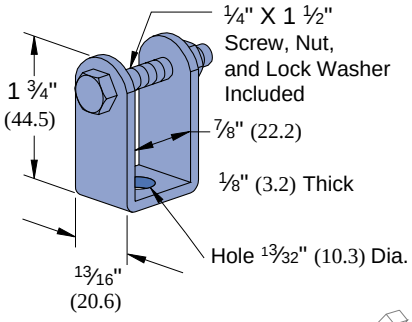


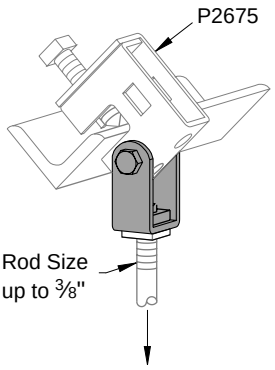
Clevis hanger to be used with P2676 or P2682 to provide angle adjustment and 15° (0.08 π) free swing for up to ½" (12.7) rod suspension. Order swivel nuts P2679-4, -6, or -8 as required.

Design Load
500 Lbs (226.8 kg)

P2674

Wt/100 pcs: 17 Lbs (7.7 kg)



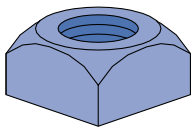


Clevis hanger to be used with P2675 to provide angle adjustment for up to ⅜" rod suspension as illustrated.

Design Load
250 Lbs (113.4 kg)

P2679-4, -6 & -8

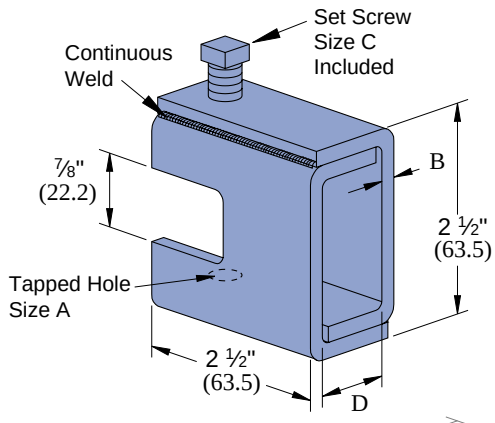
SWIVEL NUT

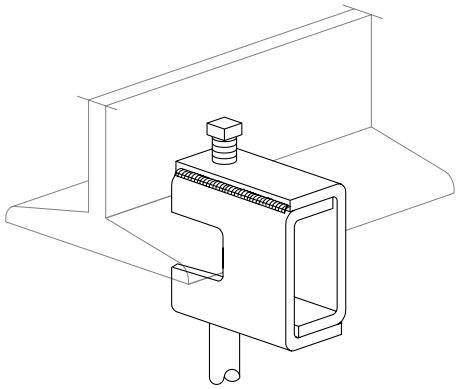


- Use with P2676 and P2677.
- Order size as required.

Part Number	Thread Size	Wt/100 pcs Lbs (kg)
P2679-4	¼"-20	4 *1.8*
P2679-6	⅜"-16	5 *2.3*
P2679-8	½"-13	6 *2.7*

P1648S thru P1653S

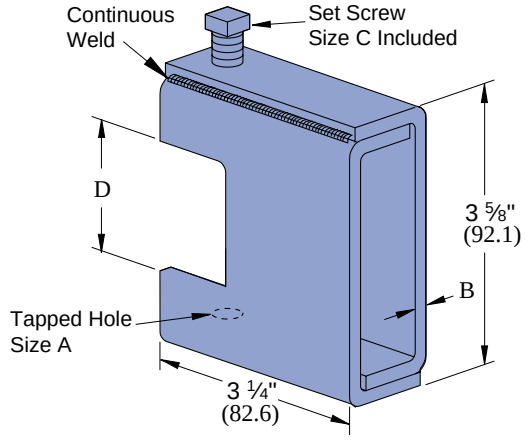




Part Number	"A" In	"B" In *(mm)*	"C" In	"D" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P1648S	1/4 -20	1/8 *3.2*	3/8 x 1 1/2	7/8 *22.2*	67 *30.4*	650 *294.8*
P1649S	5/16 -18	1/8 *3.2*	3/8 x 1 1/2	7/8 *22.2*	67 *30.4*	650 *294.8*
P1649AS	3/8 -16	1/8 *3.2*	3/8 x 1 1/2	7/8 *22.2*	67 *30.4*	650 *294.8*
P1650S	3/8 -16	3/16 *4.8*	1/2 x 1 1/2	15/16 *23.8*	100 *45.4*	1,100 *499.0*
P1650AS	1/2 -13	3/16 *4.8*	1/2 x 1 1/2	15/16 *23.8*	100 *45.4*	1,100 *499.0*
P1651S	1/2 -13	1/4 *6.4*	1/2 x 1 1/2	15/16 *23.8*	130 *59.0*	1,600 *725.7*
P1651AS	5/8 -11	1/4 *6.4*	1/2 x 1 1/2	15/16 *23.8*	130 *59.0*	1,600 *725.7*
P1652S	5/8 -11	5/16 *7.9*	5/8 x 1 1/2	1 5/16 *33.3*	160 *72.6*	2,400 *1,088.6*
P1653S	3/4 -10	5/16 *7.9*	5/8 x 1 1/2	1 5/16 *33.3*	160 *72.6*	2,400 *1,088.6*

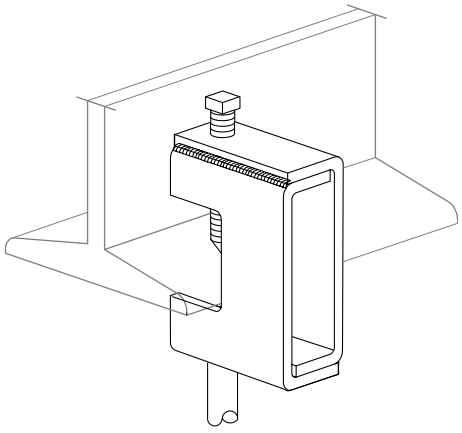
For beams under 7/8" (22.2) thick flange.

P2398S, P2401S, P2403S

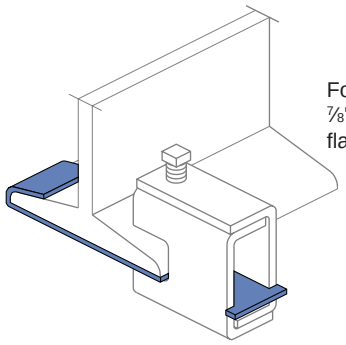


Part Number	"A" In	"B" In *(mm)*	"C" In	"D" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P2398S	1/4 -20	1/8 *3.2*	3/8 x 2	1 21/32 *42.1*	109 *49.4*	800 *362.9*
P2401S	3/8 -16	3/16 *4.8*	1/2 x 2	1 11/16 *42.9*	156 *70.8*	1,300 *589.7*
P2403S	1/2 -13	1/4 *6.4*	1/2 x 2	1 11/16 *42.9*	201 *91.2*	1,900 *861.8*

For beams between 3/4" (19.1) to 1 5/8" (41.3) thick flanges.



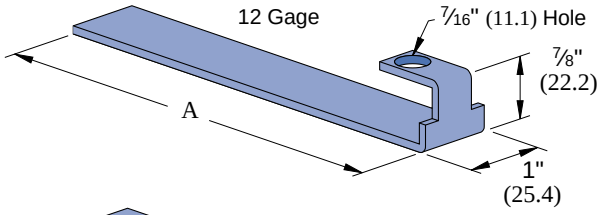
P1654A thru P1661A — Retainer Strap

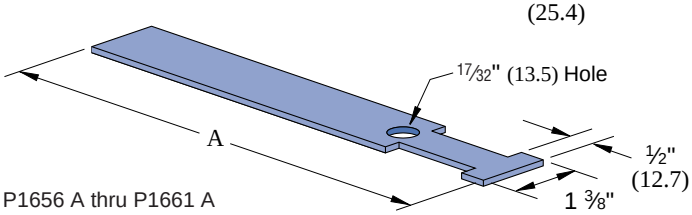


For beams under ⅞" (22.2) thick flange.

Strap Part Number	Flange Width In *(mm)*	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Beam Clamp Used With
P1654 A	6 *152.4*	7 *177.8*	25 *11.3*	P2675
P1655 A	9 *228.6*	10 *254.0*	34 *15.4*	P2675
P1656 A	6 *152.4*	9 *228.6*	35 *15.9*	P1648 S Thru
P1657 A	9 *228.6*	12 *304.8*	47 *21.3*	P1651 AS, and
P1658 A	12 *304.8*	15 *381.0*	59 *26.8*	P2398 S Series
P1659 A	6 *152.4*	9 *228.6*	33 *15.0*	P2676
P1660 A	9 *228.6*	12 *304.8*	45 *20.4*	P2676
P1661 A	12 *304.8*	15 *381.0*	57 *25.9*	P2676

P1654 A & P1655 A

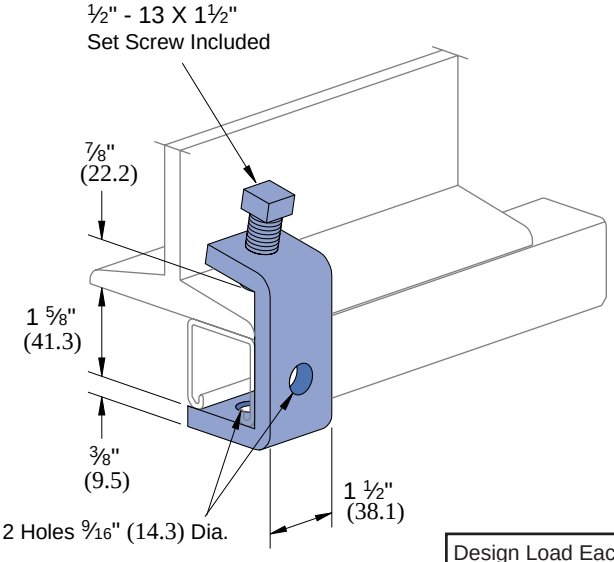




P1656 A thru P1661 A

P1271S

Wt/100 pcs: 95 Lbs (43.1 kg)

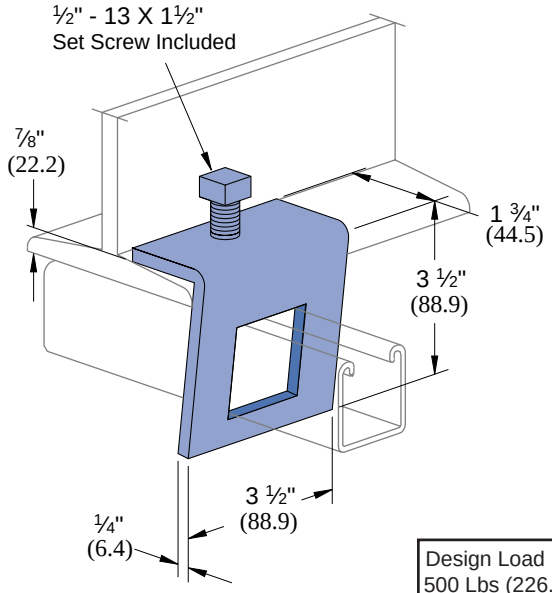


Note: Requires P1010 Channel Nut and bolt.

Design Load Each 500 Lbs (226.8 kg) Use in Pairs Only

P1796S

Wt/100 pcs: 91 Lbs (41.3 kg)

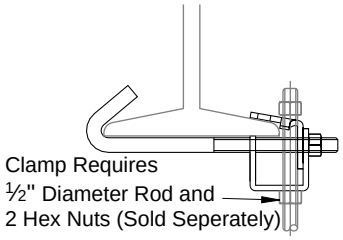


Design Load Each 500 Lbs (226.8 kg) Use in Pairs Only

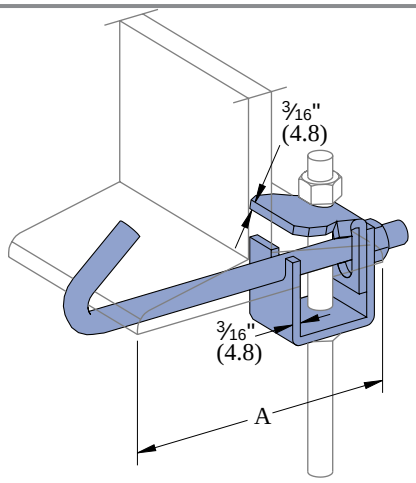
Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2824-6,-9,-12

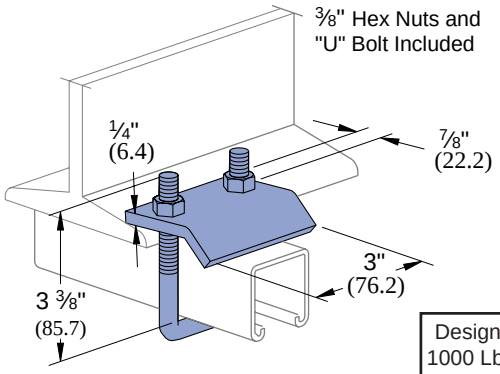


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P2824-6	2½ - 6 *63.5 - 152.4*	125 *56.7*	500 *226.8*
P2824-9	5½ - 9 *139.7 - 228.6*	140 *63.5*	500 *226.8*
P2824-12	8½ - 12 *215.9 - 304.8*	171 *77.6*	500 *226.8*



P2785

Wt/100 pcs: 83 Lbs (37.6 kg)

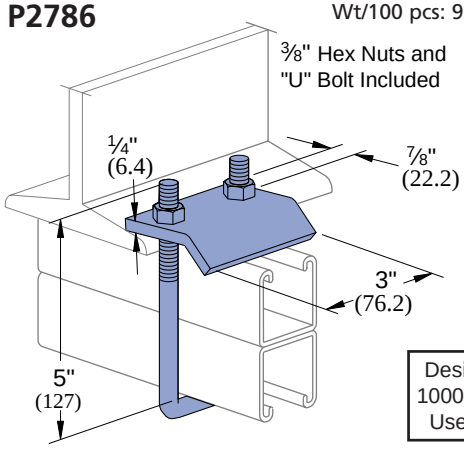


Design Load Each 1000 Lbs (453.6 kg) Use in Pairs Only

- For use with Beams up to ¾" (19.1) Flanges and with Channels P1000, P1100, P2000, P3000, P3300, P3301, P4000, P4001, P4100, and P4101.

P2786

Wt/100 pcs: 92 Lbs (41.7 kg)

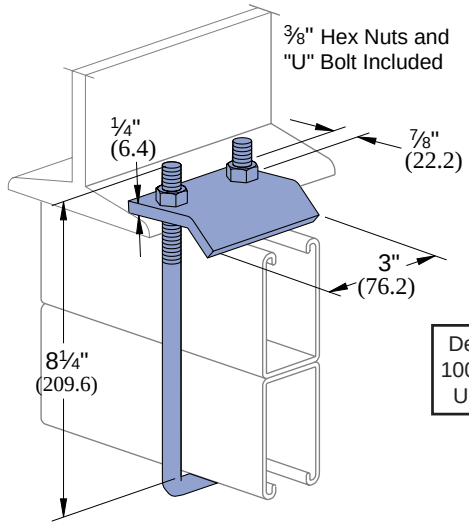


Design Load Each 1000 Lbs (453.6 kg) Use in Pairs Only

- For use with Beams up to ¾" (19.1) Flanges and with Channels P1001, P1101, P2001, P3001, P5000, and P5500.

P2787

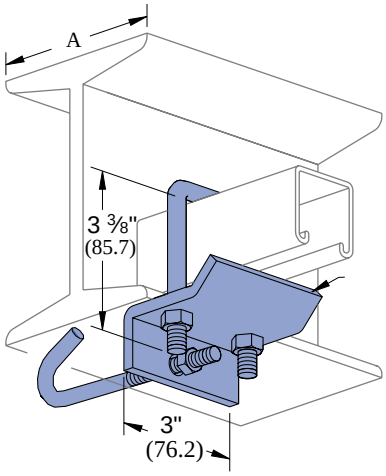
Wt/100 pcs: 112 Lbs (50.8 kg)



Design Load Each 1000 Lbs (453.6 kg) Use in Pairs Only

- For use with Beams up to ¾" (19.1) Flanges and with Channels P5001 and P5501.

P2867



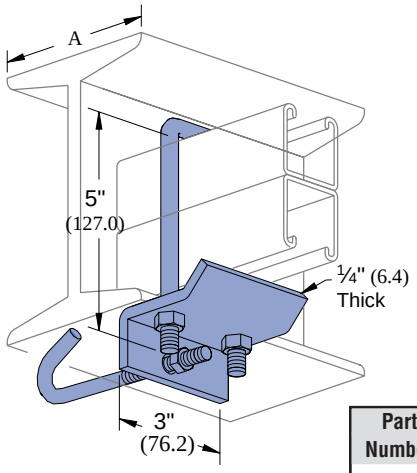
Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2867	4"-6"	142 *64.4*
P2867-9	6"-9"	151 *68.5*
P2867-12	9"-12"	160 *72.6*
P2867-15	12"-15"	170 *77.1*
P2867-18	15"-18"	179 *81.2*

- Includes: "J" Bolt, "U" Bolt and Hex Nuts.
- For use with Channels P1000, P1100, P2000, P3000, P3300, P3301, P4000, P4001, P4100, and P4101.

Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

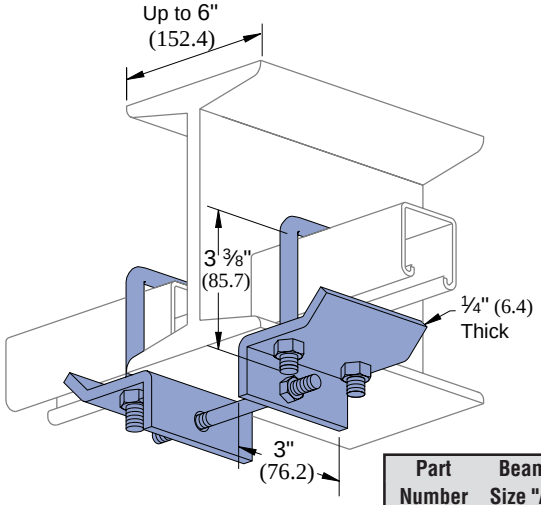
P2867A



Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2867A	4"-6"	151 *68.5*
P2867A-9	6"-9"	157 *71.2*
P2867A-12	9"-12"	166 *75.3*
P2867A-15	12"-15"	176 *79.8*
P2867A-18	15"-18"	185 *83.9*

- Includes: "J" Bolt, "U" Bolt and Hex Nuts.
- For use with Channel P1001, P1101, P2001, P3001, P5000, and P5500.

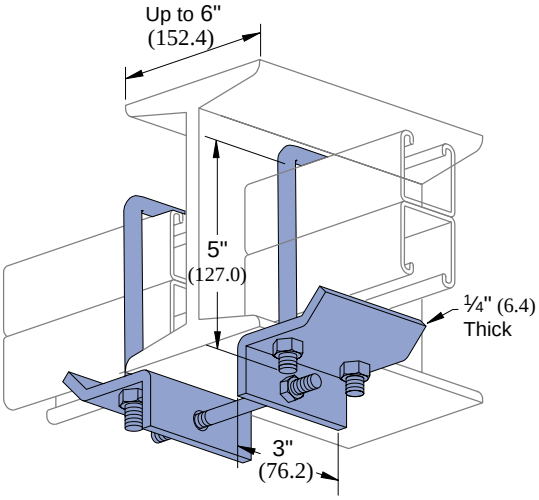
P2868



Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2868	4"-6"	282 *127.9*
P2868-9	6"-9"	289 *131.1*
P2868-12	9"-12"	296 *134.3*
P2868-15	12"-15"	304 *137.9*
P2868-18	15"-18"	311 *141.1*

- Includes: Center Rod, "U" Bolts and Hex Nuts.
- For use with Channels P1000, P1100, P2000, P3000, P3300, P3301, P4000, P4001, P4100, and P4101.

P2868A

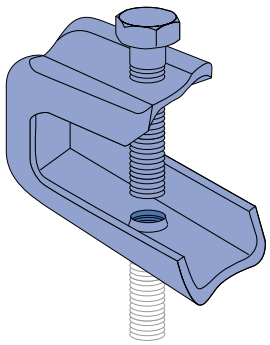


Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2868A	4"-6"	300 *136.1*
P2868A-9	6"-9"	307 *139.3*
P2868A-12	9"-12"	314 *142.2*
P2868A-15	12"-15"	322 *146.1*
P2868A-18	15"-18"	329 *149.2*

- Includes: Center Rod, "U" Bolts and Hex Nuts.
- For use with Channels P1001, P1101, P2001, P3001, P5000, and P5500.

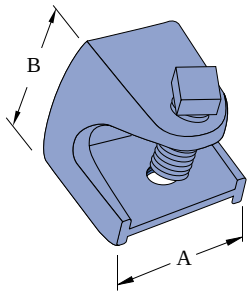
P2893

Wt/100 pcs: 14 lbs. (6.4 kg)



Material: Steel
Use With: ¼" rod
Load Rating: 75 lbs.

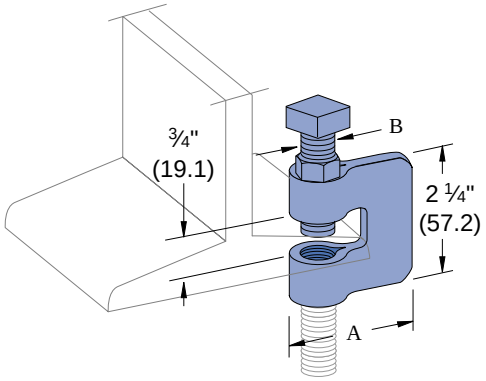
P2894



Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2894-25	¼	1⅛ *28.6*	1¼ *31.8*	150 *68.0*	23 *10.4*
P2894-37	⅜	2 *50.8*	2 *50.8*	350 *158.8*	95 *43.1*
P2894-50	½	2⅝ *66.7*	2½ *63.5*	400 *181.4*	195 *88.5*

Material: Malleable Iron
⅞" Maximum Flange Thickness

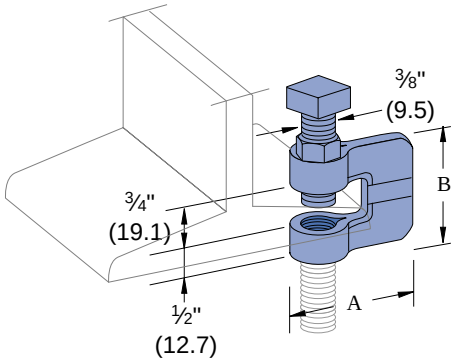
P2895



Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2895-37	⅜	2⁵⁄₁₆ *58.7*	⅜ *9.5*	330 *149.7*	35 *15.9*
P2895-50	½	2¼ *57.2*	½ *12.7*	380 *172.4*	41 *18.6*
P2895-62	⅝	2⅜ *60.3*	⅝ *15.9*	450 *204.1*	67 *30.4*
P2895-75	¾	2¼ *57.2*	½ *12.7*	500 *226.8*	72 *32.7*

Material: Steel
NOTE: UL Listed for ⅜" rod.

P2896

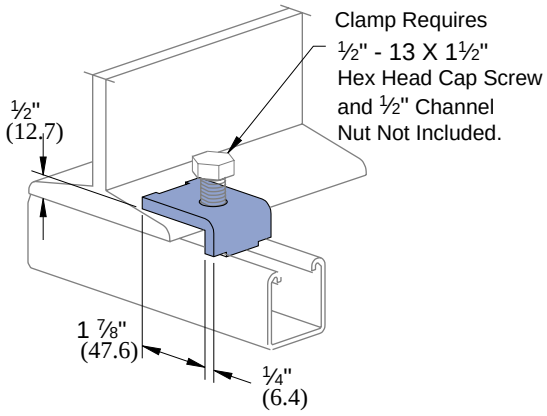


Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2896-37	⅜	1¹¹⁄₁₆ *42.9*	1¾ *44.5*	400 *181.4*	38 *17.2*
P2896-50	½	1²³⁄₃₂ *43.7*	1¾ *44.5*	400 *181.4*	52 *23.6*
P2896-62	⅝	1¹⁵⁄₁₆ *49.2*	2 *50.8*	450 *204.1*	68 *30.8*
P2896-75	¾	2¹⁄₃₂ *51.6*	2 *50.8*	600 *272.2*	128 *58.1*

Material: Malleable Iron, Steel Set Screw
NOTE: UL Listed for ⅜" rod.

P1386

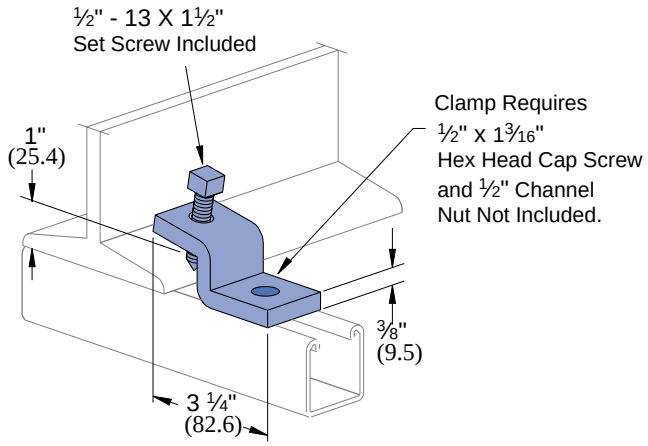
Wt/100 pcs: 27 Lbs (12.2 kg)



Channel Style	Design Load Each (Use in Pairs Only) Lbs (kg)
P1000	600 *272.2*
P1100	500 *226.8*
P2000	450 *204.1*

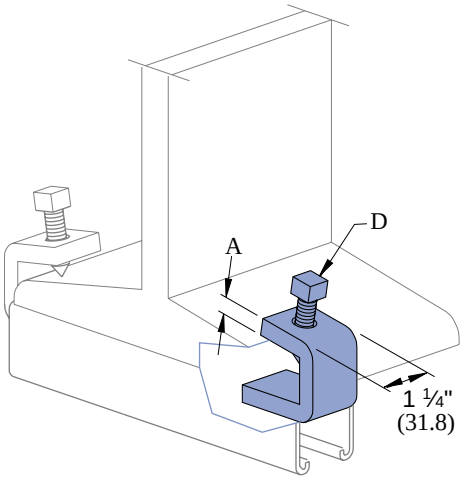
P1379S

Wt/100 pcs: 75 Lbs (34.0kg)



Channel Style	Design Load Each (Use in Pairs Only) Lbs *(kg)*
P1000	600 *272.2*
P1100	500 *226.8*
P2000	450

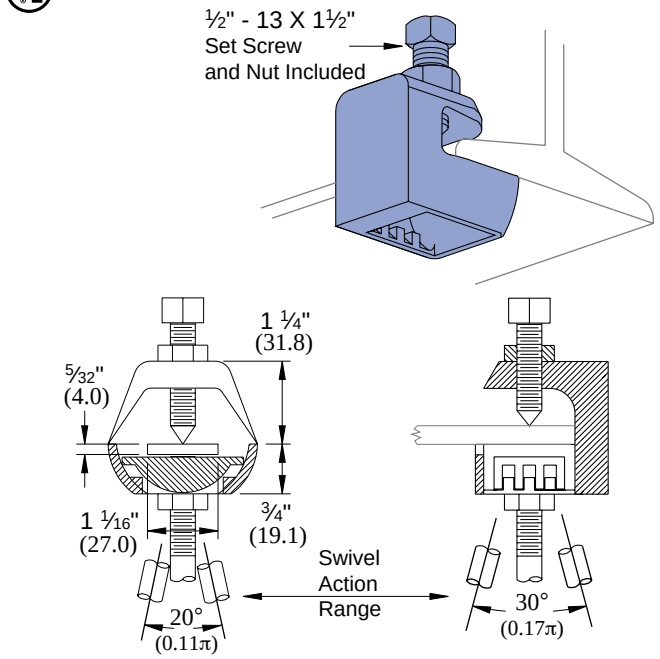
P1272S, P1985S, P1986S



Part Number	"A" In *(mm)*	Flange Thickness In *(mm)*	"D" Set Screw Included	Wt/100 pcs Lbs *(kg)*	Design Load Per Pair (Use in Pairs Only) Lbs *(kg)*
P1272S	¼ *6.4*	Up to ¾ *Up to 19.1*	⅜-16 x 1½	39 *17.7*	450 *204.1*
P1985S	⅜ *9.5*	Up to ¾ *Up to 19.1*	½-13 x 1½	62 *28.1*	1,000 *453.6*
P1986S	⅜ *9.5*	⅞ to 2 *22.2 - 50.8*	½-13 x 1½	74 *33.6*	900 *408.2*

M29 Swivel Beam Clamp

Wt/100 pcs: 83 Lbs (37.6 kg)



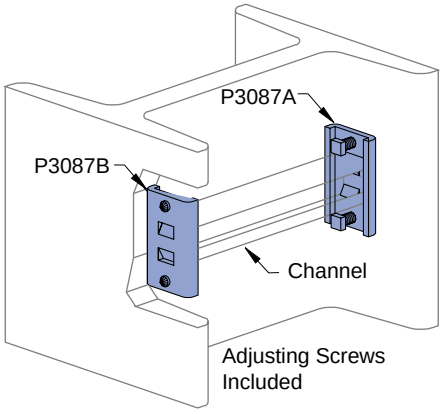
- For use with M2708 series swivel nut.
- It fits flanges up to 0.8" (20.3) thickness.
- For ¾" (19.1) to 8" (203.2) pipe sizes.
- Supports ⅜",½" ,⅝" ,¾" ,⅞" hanger rods.
- Material: Malleable Iron.

Patent No. 2953874.

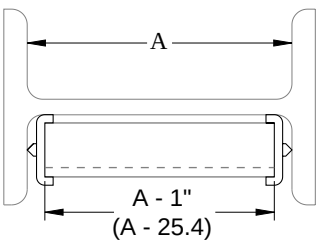
Design Load
750 Lbs (340.2 kg)

P3087 Column Insert

Wt/100 pcs: 136 Lbs (61.7 kg)



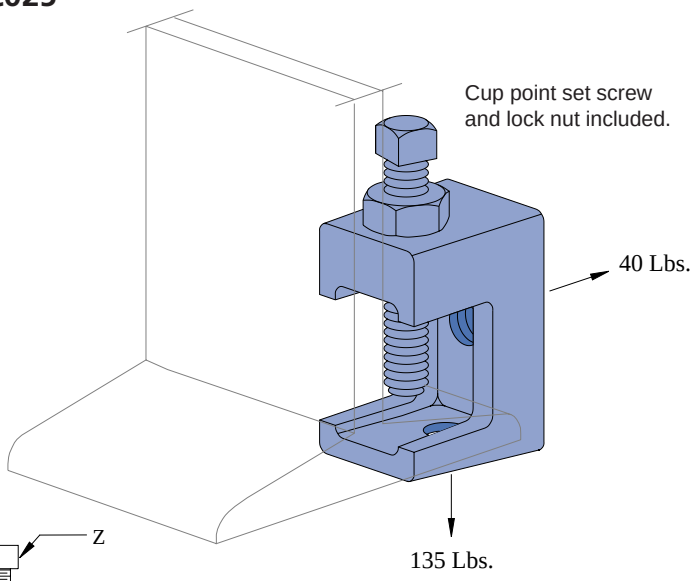
- Adjusting Screws Included.
- Unistrut channel not included.
- Part number P3087 consists of: (1) piece P3087A, (1) piece P3087B and (2) set screws

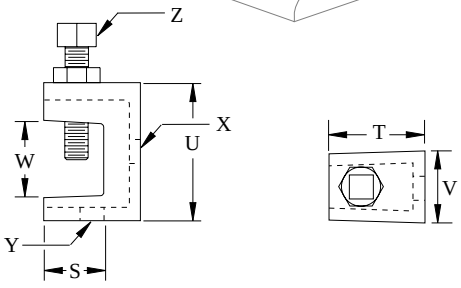


Channel Part Number	Design Pull Out Load Lbs *(kg)*	Design Slip Load Lbs *(kg)*
P1000	1,000 *453.6*	800 *362.9*
P1100	700 *317.5*	500 *226.8*
P2000	500 *226.8*	300 *136.1*

Safety factor of 3.

PLLC025 — Flange Clamp





Set Screw Torque = 3 Ft-Lb
Lock Nut Torque = 3.5 Ft-Lb

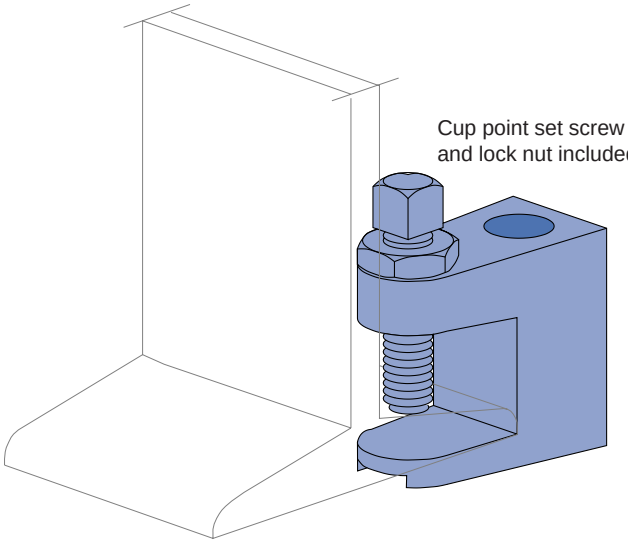
X, Y are threaded holes.

Part Number	Rod Size	"Z" Set Screw Size	Wt/100 pcs Lbs *(kg)*
PLLC025	¼"	¼"	16 *7.3*

Material: Malleable Iron.

Part Number	Dimensions "S" In *(mm)*	"T" In *(mm)*	"U" In *(mm)*	"V", "W" In *(mm)*	"X", "Y" In
PLLC025	5/8 *15.9*	1 *25.4*	1 7/16 *36.5*	¾ *19.1*	¼ X 20

PFL037 thru PFL050T — Flange Clamp

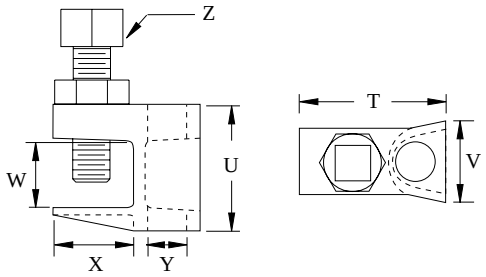


(When used for sprinkler systems only.)

Set Screw Torque = 6 Ft-Lb
Lock Nut Torque = 16 Ft-Lb

Safety Factor: 5

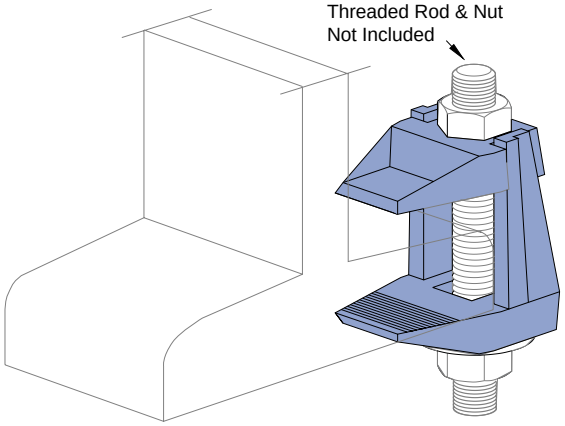
Part Number	Rod Size	"Z" Set Screw Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kg)*
PFL037	3/8"	3/8"	28 *12.7*	540 *244.9*
PFL037T	3/8"	3/8"	28 *12.7*	540 *244.9*
PFL050	½"	3/8"	40 *18.1*	700 *317.5*
PFL050T	½"	3/8"	40 *18.1*	700 *317.5*



Material: Malleable Iron.

Part Number	Dimensions "T" In *(mm)*	"U" In *(mm)*	"V" In *(mm)*	"W" In*(mm)*	"X" In *(mm)*	"Y" In *(mm)*
PFL037	1 11/16 *42.9*	1 9/16 *39.7*	7/8 *22.2*	¾ *19.1*	1 *25.4*	7/16 *11.1*
PFL037T	1 11/16 *42.9*	1 9/16 *39.7*	7/8 *22.2*	¾ *19.1*	1 *25.4*	3/8 Tapped Hole
PFL050	2 *50.8*	1 23/32 *43.7*	1 *25.4*	29/32 *23.0*	1 3/32 *27.8*	17/32 *13.5*
PFL050T	2 *50.8*	1 23/32 *43.7*	1 *25.4*	29/32 *23.0*	1 3/32 *27.8*	½ Tapped Hole

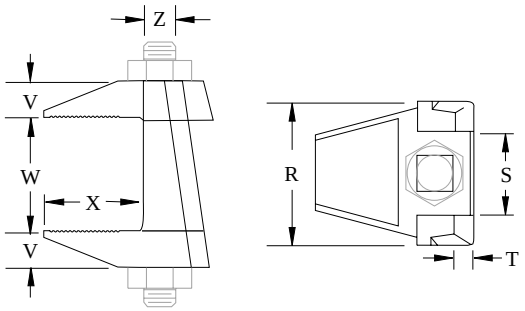
PLF3037 thru PLF3075 — Flange Clamp



FM APPROVED (When used for sprinkler systems only.)

Safety Factor: 4

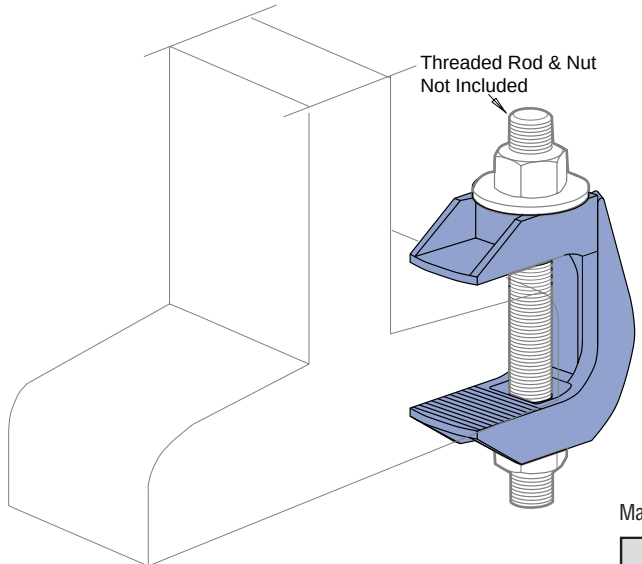
Part Number	Rod Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kg)*	Torque Ft-Lbs
PLF3037	3/8"	53 *24.0*	270 *122.5*	15
PLF3050	1/2"	91 *41.3*	450 *204.1*	29
PLF3062	5/8"	186 *84.4*	900 *408.2*	69
PLF3075	3/4"	334 *151.5*	1,350 *612.3*	130



Material: Malleable Iron

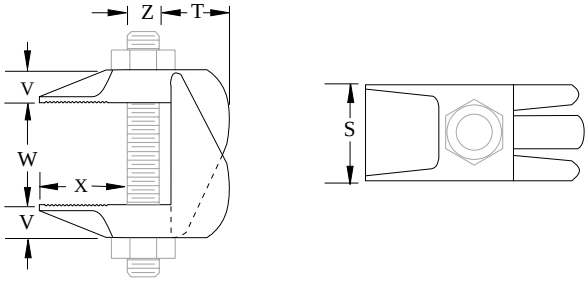
Part Number	Dimensions "X" In *(mm)*	"W" In *(mm)*	"V" In *(mm)*	"T" In *(mm)*	"R" In *(mm)*	"S" In *(mm)*
PLF3037	1 *25.4*	0 - 1 3/16 *0 - 30.2*	3/8 *9.5*	9/32 *7.1*	1 1/2 *38.1*	7/8 *22.2*
PLF3050	1 3/8 *34.9*	0 - 1 9/16 *0 - 39.7*	1/2 *12.7*	11/32 *8.7*	1 15/16 *49.2*	1 5/32 *29.4*
PLF3062	1 13/16 *46.0*	0 - 2 3/16 *0 - 55.6*	5/8 *15.9*	1/2 *12.7*	2 11/32 *59.5*	1 7/16 *36.5*
PLF3075	2 3/16 *55.6*	0 - 1 3/4 *0 - 44.5*	3/4 *19.1*	5/8 *15.9*	3 *76.2*	1 3/4 *44.5*

PLF9037 thru PLF9100 — Flange Clamp



Safety Factor: 5

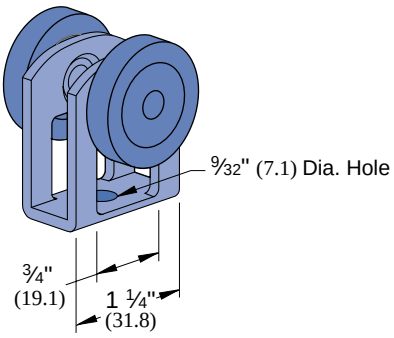
Part Number	Rod Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kg)*	Torque Ft-Lbs
PLF9037	3/8"	55 *24.9*	440 *199.6*	15
PLF9050	1/2"	122 *55.3*	630 *285.8*	29
PLF9062	5/8"	200 *90.7*	1,260 *571.5*	69
PLF9075	3/4"	367 *166.5*	1,880 *852.8*	131
PLF9100	1"	1,101 *499.4*	3,150 *1428.8*	173

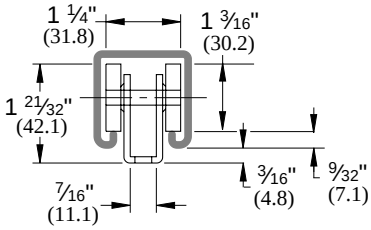


Material: Malleable Iron

Part Number	Dimensions "X" In *(mm)*	"W" In *(mm)*	"V" In *(mm)*	"T" In *(mm)*	"S" In *(mm)*
PLF9037	1 *25.4*	3/4 - 1 11/16 *19.1 - 42.9*	1/2 *12.7*	3/4 *19.1*	1 *25.4*
PLF9050	1 3/8 *34.9*	1 - 2 3/8 *25.4 - 60.3*	21/32 *16.7*	15/16 *23.8*	1 3/16 *30.2*
PLF9062	1 11/16 *42.9*	1 1/8 - 2 3/4 *28.6 - 69.9*	13/16 *20.6*	1 1/8 *28.6*	1 3/8 *34.9*
PLF9075	2 *50.8*	1 1/4 - 3 1/4 *31.8 - 182.6*	1 *25.4*	1 3/8 *34.9*	1 3/4 *44.5*
PLF9100	3 *76.2*	1 3/4 - 3 3/4 *44.5 - 95.3*	1 1/2 *38.1*	2 3/16 *55.6*	2 1/2 *63.5*

P2749*, P2749N†

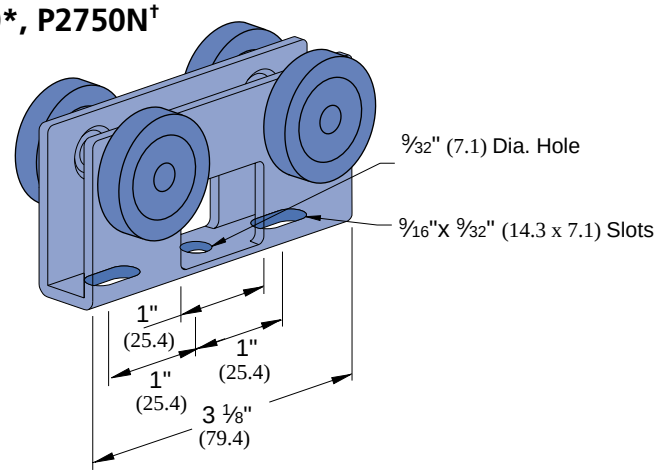


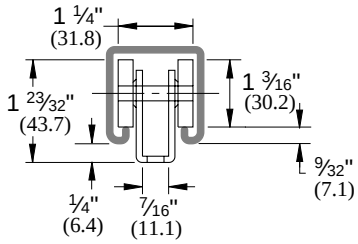


Part Number	Design Load Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2749	50 *22.7*	21 *9.5*
P2749N	10 *4.5*	13 *5.9*

Clevis Material: 12 gauge.
*Wheel bearings are stainless steel, and should not be lubricated.
† "N" indicates acetal wheels.

P2750*, P2750N†

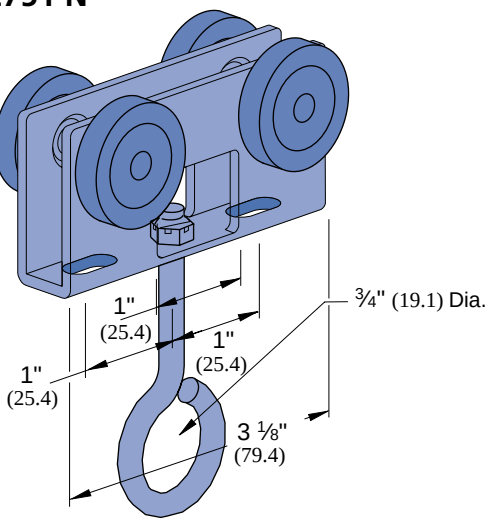


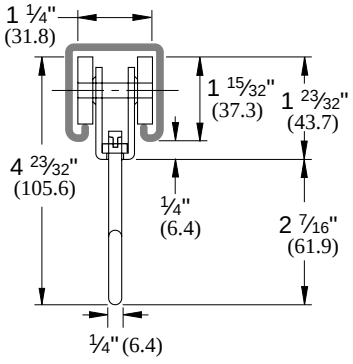


Part Number	Design Load Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2750	100 *45.4*	55 *24.9*
P2750N	20 *9.1*	32 *14.5*

Clevis Material: 12 gauge.
*Wheel bearings are stainless steel, and should not be lubricated.
† "N" indicates acetal wheels.

P2751*, P2751 N†



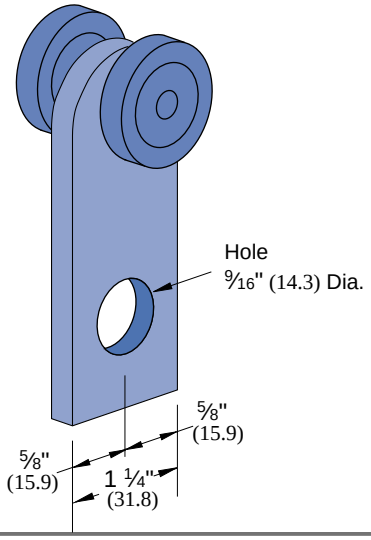


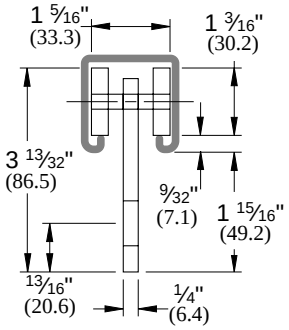
Part Number	Design Load Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
P2751	100 *45.4*	63 *28.6*
P2751N	20 *9.1*	40 *18.1*

Clevis Material: 12 gauge.
*Wheel bearings are stainless steel, and should not be lubricated.
† "N" indicates acetal wheels.

P2949

Wt/100 pcs: 46 Lbs (20.9 kg)



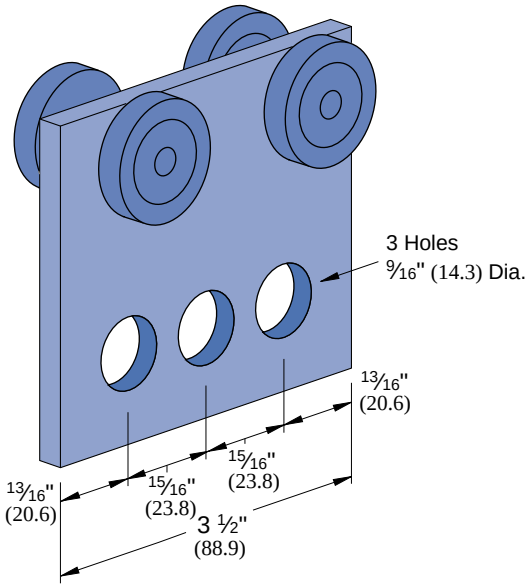


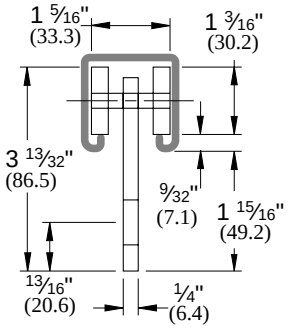
Wheel bearings are stainless steel.
Do not lubricate.

RPM	Design Load In P1000 Lbs *(kg)*
600	150 *68.0*
300	225 *102.1*
100	437 *198.2*

P2950

Wt/100 pcs: 110 Lbs (49.9 kg)



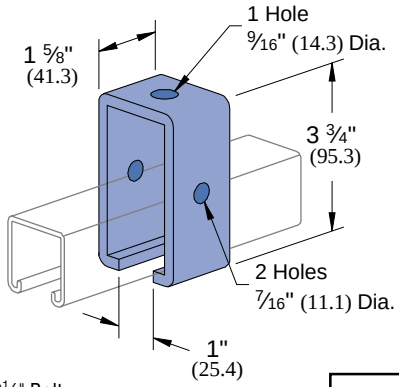


Wheel bearings are stainless steel.
Do not lubricate.

RPM	Design Load In P1000 Lbs *(kg)*
600	300 *136.1*
300	450 *204.1*
100	600 *272.2*

P1834 Channel Trolley Support

Wt/100 pcs: 102 Lbs (46.3 kg)

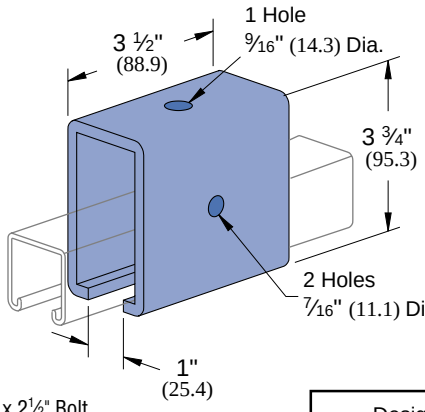


Requires 3/8" x 2½" Bolt and 3/8" Nut (not included)

Design Load 1200 Lbs (544.3 kg)

P1834A Channel Trolley Support

Wt/100 pcs: 220 Lbs (99.8 kg)

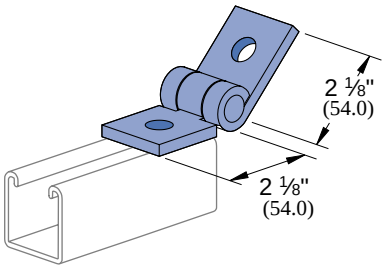


Requires 3/8" x 2½" Bolt and 3/8" Nut (not included)

Design Load 2500 Lbs (1,134.0 kg)

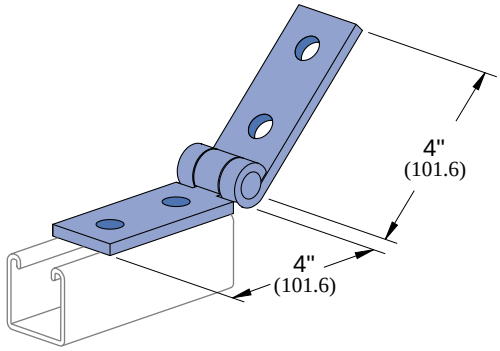
P1843 Adjustable Hinge Connection

Wt/100 pcs: 68 Lbs (30.8 kg)

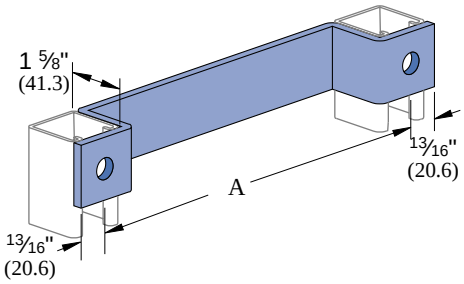


P1354 Adjustable Hinge Connection

Wt/100 pcs: 109 Lbs (49.4 kg)

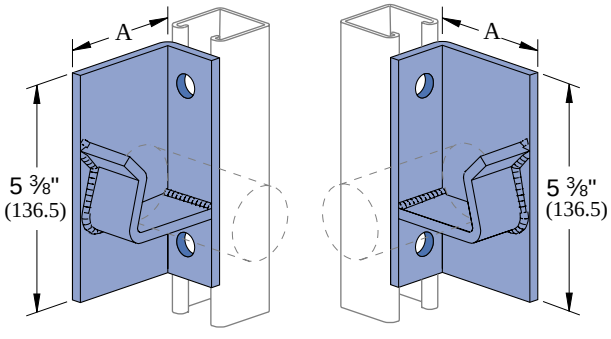


P1201, P1202, P1203 Ladder Rung



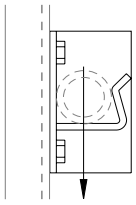
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1201	12 *304.8*	186 *84.4*
P1202	15 *381.0*	221 *100.2*
P1203	18 *457.2*	254 *115.2*

P2354 R-L, P2355 R-L Reel Rack Supports for 1¼" and 2 " Pipe



Left Hand

Right Hand



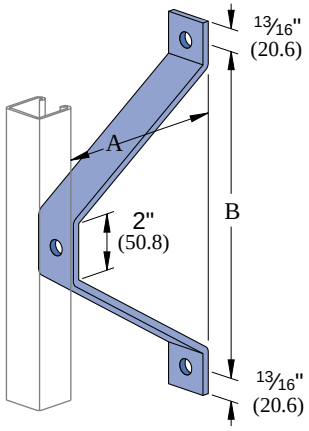
Part Number	"A" In *(mm)*	Std. Pipe Size In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2354 R-L	3 *76.2*	1¼ *31.8*	220 *99.8*
P2355 R-L	3⅝ *92.1*	2 *50.8*	252 *114.3*

Vertical Channel Part No.	Gauge	Max. Allowable Load Lbs *(kg)*
P1000	12	3,000 *1360.8*
P1100	14	2,000 *907.2*
P2000	16	2,000 *907.2*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

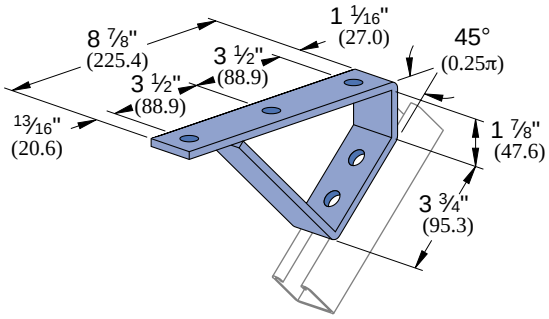
P1204 thru P1208 Wall Ladder Bracket



Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1204	2⅜ *60.3*	6 *152.4*	113 *51.3*
P1205	4⅜ *111.1*	8 *203.2*	164 *74.4*
P1206	6⅜ *161.9*	10 *254.0*	216 *98.0*
P1207	8⅜ *212.7*	12 *304.8*	267 *121.1*
P1208	10⅜ *263.5*	14 *355.6*	318 *144.2*

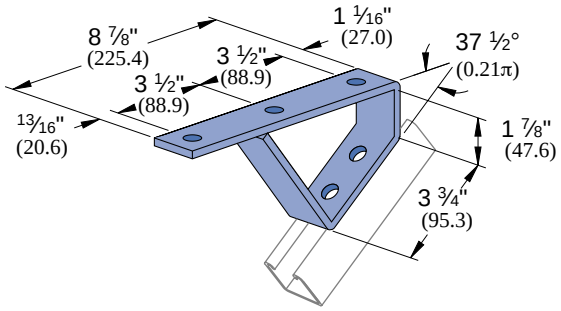
P1944 45° (.25π) Stair Tread Support

Wt/100 pcs: 220 Lbs (99.8 kg)

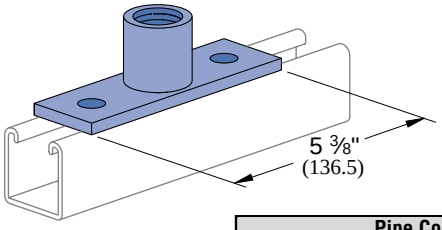


P2655 37½° (.21π) Stair Tread Support

Wt/100 pcs: 213 Lbs (96.6 kg)



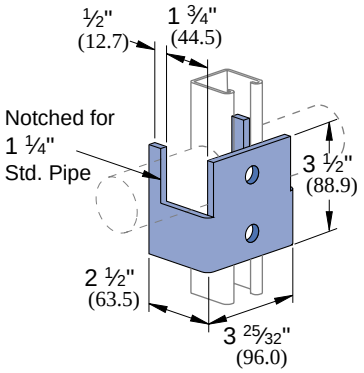
P2470-50, -75, -100 Pipe Coupling Fitting

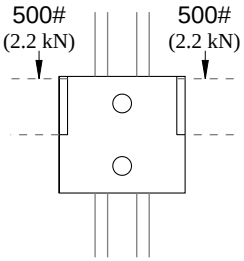


Part Number	Pipe Coupling Size In	Wt/100 pcs Lbs *(kg)*
P2470-50	½	77 *34.9*
P2470-75	¾	93 *42.2*
P2470-100	1	103 *46.7*

P2454 Axle Support

Wt/100 pcs: 148 Lbs (67.1 kg)





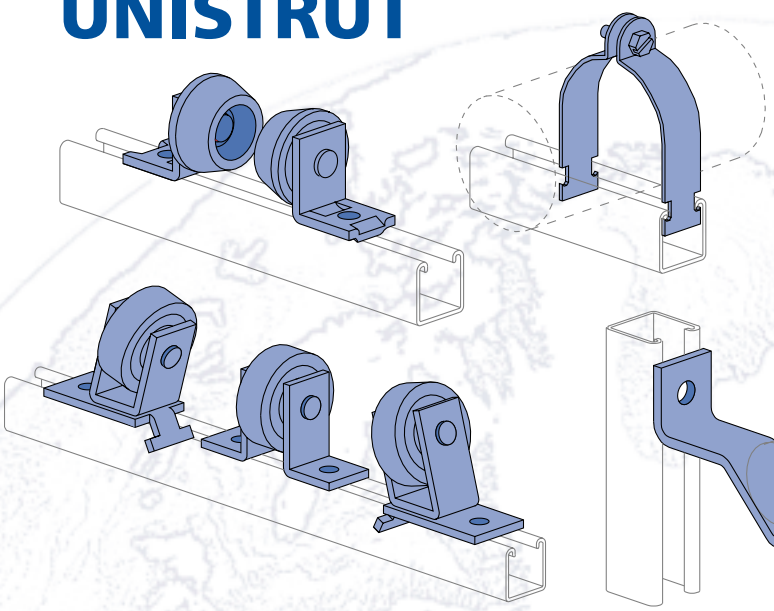
For 1¼" (31.8) Standard Pipe

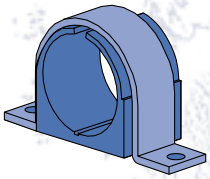
Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

PIPE/CONDUIT SUPPORTS

UNISTRUT®





MATERIAL

Unistrut pipe clamps, unless noted, are punch-press made from hot-rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A1008, A575, A576, A635, or A36. The fitting steel also meets the physical requirements of ASTM A1011 SS GR 33. The pickling of the steel produces a smooth surface free from scale.

Many items are also available in stainless steel. Consult factory for ordering information.

FINISHES

Pipe supports are available in:

- Electro-galvanized (EG), conforming to ASTM B633 Type III SC1
- Hot-dipped galvanized (HG), conforming to ASTM A123 or A153 (hardware)
- Perma-Green II (GR), and plain (PL).

APPLICATION

Unistrut pipe clamps, pipe hangers, brackets and rollers are designed for the support of electrical and mechanical services. Supports to meet nearly every requirement can be attained using Unistrut Metal Framing components.

DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

DESIGN BOLT TORQUE

BOLT SIZE	¼" 20	5/16" 18	⅜" 16	½" 13	⅝" 11	¾" 10
FOOT LBS.	6	11	19	50	100	125
N·m	8	15	25	70	135	170

Note: When tightening ¼" screws used with a two piece pipe clamp, a torque of 5 foot pounds (60 inch-pounds) should be used.

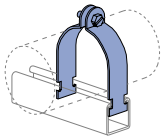
DESIGN LOAD

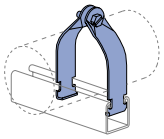
Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 5.0, unless otherwise noted.

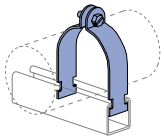
Pipe Clamps In Special Materials (P1109, P1211, P1425, P2024 Series)

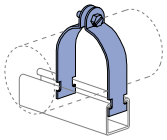
Material	Add Suffix to P/N	Example
Steel Strap, Everdur Hardware	E	P1109 E
Copper Coated Steel Strap & Hardware	CC	P1109 CC
Aluminum	AL	P1109 AL
Stainless Steel 304 or 316	SS or ST	P1109 SS
Plastic Coated Steel Straps	PC	P1109 PC

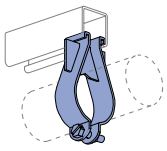
Pipe & Conduit Clamps

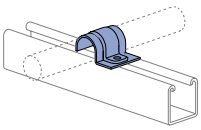

P1109 - Pg 139

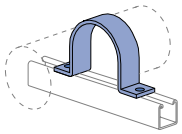

P1211 - Pg 141

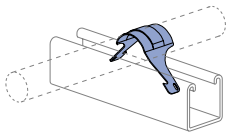

P1425 - Pg 139

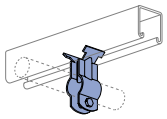

P2024 - Pg 140

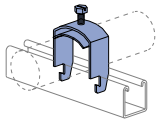

P1563 - Pg 141

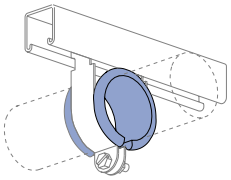

P2008 - Pg 141

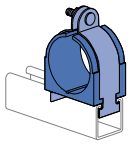

P2558 - Pg 142

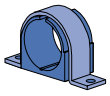

P2609 - Pg 142

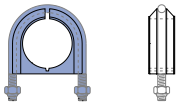

P3409 - Pg 143

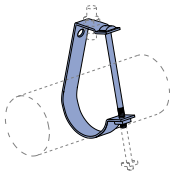

M5025 - Pg 143


P2600 - Pg 144

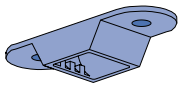

004T008 - Pg 146

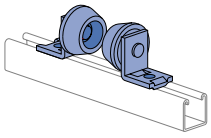

004M007 - Pg 147

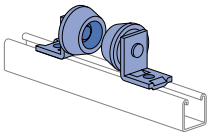

UB½PA - Pg 148

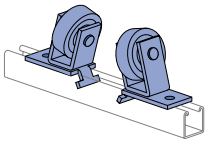

J1205 - Pg 149

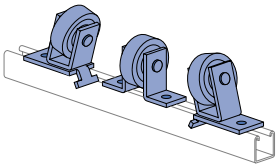
Pipe Rollers


M30 - Pg 150

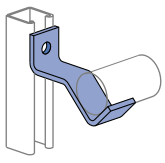

P2474 - Pg 150

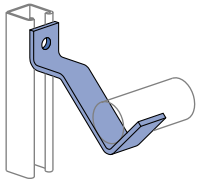

P2474-1 - Pg 151

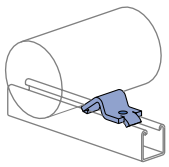

P2475 - Pg 152


P2476 - Pg 152

Pipe Brackets

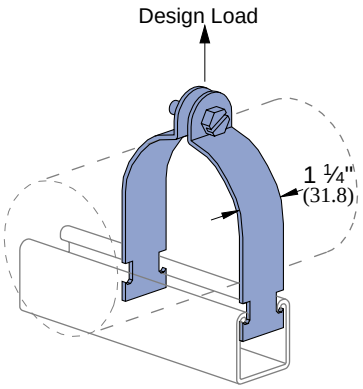

P2481 - Pg 153


P2482 - Pg 153


P2243 - Pg 153

P1109 thru P1126

Pipe Clamps for Rigid Steel Conduit

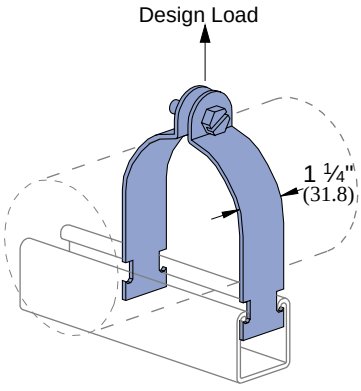


Part Number	Pipe Size In	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P1109	⅜	0.675 *17.1*	16 *1.5*	10 *4.5*	400 *181*
P1111	½	0.840 *21.3*	16 *1.5*	11 *5.0*	400 *181*
P1112	¾	1.050 *26.7*	14 *1.9*	15 *6.8*	600 *272*
P1113	1	1.315 *33.4*	14 *1.9*	17 *7.7*	600 *272*
P1114	1¼	1.660 *42.2*	14 *1.9*	19 *8.6*	600 *272*
P1115	1½	1.900 *48.3*	12 *2.7*	29 *13.2*	800 *363*
P1117	2	2.375 *60.3*	12 *2.7*	34 *15.4*	800 *363*
P1118	2½	2.875 *73.0*	12 *2.7*	40 *18.1*	800 *363*
P1119	3	3.500 *88.9*	12 *2.7*	47 *21.3*	800 *363*
P1120	3½	4.000 *101.6*	11 *3.0*	62 *28.1*	1,000 *454*
P1121	4	4.500 *114.3*	11 *3.0*	67 *30.4*	1,000 *454*
P1123	5	5.563 *141.3*	11 *3.0*	80 *36.3*	1,000 *454*
P1124	6	6.625 *168.3*	10 *3.4*	102 *46.3*	1,000 *454*
P1126	8	8.625 *219.1*	10 *3.4*	130 *59.0*	1,000 *454*

Slotted hex head screw and nut included.
Finish: Electro-galvanized.

P1425 thru P1431

Pipe Clamps for Thin Wall Conduit (E.M.T.)



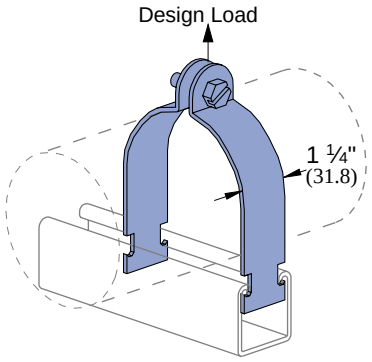
Part Number	Pipe Size In	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P1425	⅜	0.577 *14.7*	16 *1.5*	9 *4.1*	400 *181*
P1426	½	0.706 *17.9*	16 *1.5*	11 *5.0*	400 *181*
P1427	¾	0.922 *23.4*	16 *1.5*	12 *5.4*	400 *181*
P1428	1	1.163 *29.5*	14 *1.9*	15 *6.8*	600 *272*
P1429	1¼	1.510 *38.4*	14 *1.9*	18 *8.2*	600 *272*
P1430	1½	1.740 *44.2*	12 *2.7*	29 *13.2*	800 *363*
P1431	2	2.197 *55.8*	12 *2.7*	33 *15.0*	800 *363*
P1118	2½	2.875 *73.0*	12 *2.7*	40 *18.1*	800 *363*
P1119	3	3.500 *88.9*	12 *2.7*	47 *21.3*	800 *363*
P1120	3½	4.000 *101.6*	11 *3.0*	62 *28.1*	1,000 *454*
P1121	4	4.500 *114.3*	11 *3.0*	67 *30.4*	1,000 *454*

Slotted hex head screw and nut included.
Finish: Electro-galvanized.

P2024 thru P2070-84 — Pipe Clamps for O.D. Tubing

Finish: Electro-galvanized.
Slotted hex head screw and nut included.

P2024 - P2029 16 ga.
P2030 - P2035 14 ga.
P2037 - P2052 12 ga.
P2053 - P2066 11 ga.
P2067 - P2070-84 10 ga.



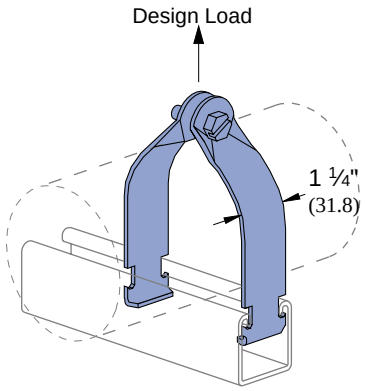
Part Number	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P2024	¼ *6.4*	8 *3.6*	
P2025	⅜ *9.5*	8 *3.6*	400 *181*
P2026	½ *12.7*	9 *4.1*	
P2027	⅝ *15.9*	10 *4.5*	
P2028	¾ *19.1*	11 *5.0*	
P2029	⅞ *22.2*	12 *5.4*	
P2030	1 *25.4*	14 *6.4*	
P2031	1⅛ *28.6*	15 *6.8*	600 *272*
P2032	1¼ *31.8*	16 *7.3*	
P2033	1⅜ *34.9*	17 *7.7*	
P2034	1½ *38.1*	18 *8.2*	
P2035	1⅝ *41.3*	19 *8.6*	
P1430	1¾ *44.5*	29 *13.2*	
P2037	1⅞ *47.6*	28 *12.7*	
P2038	2 *50.8*	31 *14.1*	800 *363*
P2039	2⅛ *54.0*	32 *14.5*	
P2040	2¼ *57.2*	33 *15.0*	
P1117	2⅜ *60.3*	34 *15.4*	
P2042	2½ *63.5*	35 *15.9*	
P2043	2⅝ *66.7*	37 *16.8*	
P2044	2¾ *69.9*	38 *17.2*	
P1118	2⅞ *73.0*	40 *18.1*	
P2046	3 *76.2*	41 *18.6*	

Part Number	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P2047	3⅛ *79.4*	43 *19.5*	
P2048	3¼ *82.6*	45 *20.4*	800 *363*
P2049	3⅜ *85.7*	46 *20.9*	
P1119	3½ *88.9*	47 *21.3*	
P2051	3⅝ *92.1*	56 *25.4*	
P2052	3¾ *95.3*	58 *26.3*	
P2053	3⅞ *98.4*	60 *27.2*	1,000 *454*
P1120	4 *101.6*	62 *28.1*	
P2055	4⅛ *104.8*	62 *28.1*	
P2056	4¼ *108.0*	64 *29.0*	
P2057	4⅜ *111.1*	66 *29.9*	
P1121	4½ *114.3*	67 *30.4*	
P2059	4⅝ *117.5*	70 *31.8*	
P2060	4¾ *120.7*	72 *32.7*	
P2061	4⅞ *123.8*	73 *33.1*	
P2062	5 *127.0*	74 *33.6*	
P2063	5⅛ *130.2*	76 *34.5*	
P2064	5¼ *133.4*	77 *34.9*	
P2065	5⅜ *136.5*	78 *35.4*	
P2066	5½ *139.7*	79 *35.8*	
P2067	5⅝ *142.9*	88 *39.9*	
P2068	5¾ *146.1*	90 *40.8*	
P2069	5⅞ *149.2*	92 *41.7*	

Part Number	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P2070	6 *152.4*	94 *42.6*	
P2070-61	6⅛ *155.6*	96 *43.5*	
P2070-62	6¼ *158.8*	98 *44.5*	
P2070-63	6⅜ *161.9*	99 *44.9*	1,000 *454*
P2070-64	6½ *165.1*	100 *45.4*	
P1124	6⅝ *168.3*	102 *46.3*	
P2070-66	6¾ *171.5*	104 *47.2*	
P2070-67	6⅞ *174.6*	106 *48.1*	
P2070-70	7 *177.8*	108 *49.0*	
P2070-71	7⅛ *181.0*	110 *49.9*	
P2070-72	7¼ *184.2*	112 *50.8*	
P2070-73	7⅜ *187.3*	114 *51.7*	
P2070-74	7½ *190.5*	116 *52.6*	
P2070-75	7⅝ *193.7*	117 *53.1*	
P2070-76	7¾ *196.9*	119 *54.0*	
P2070-77	7⅞ *200.0*	121 *54.9*	
P2070-80	8 *203.2*	123 *55.8*	
P2070-81	8⅛ *206.4*	125 *56.7*	
P2070-82	8¼ *209.6*	126 *57.2*	
P2070-83	8⅜ *212.7*	128 *58.1*	
P2070-84	8½ *215.9*	129 *58.5*	
P1126	8⅝ *219.1*	130 *59.0*	

P1211 thru P1217

Universal Clamps for Rigid or Thinwall Conduit

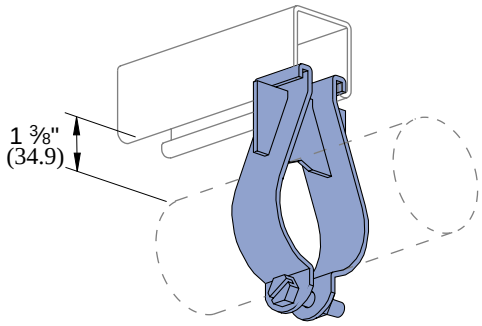


Part Number	Pipe/Conduit Size In	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
P1211	½	16 *1.5*	10 *4.5*	400 *181*
P1212	¾	16 *1.5*	11 *5.0*	400 *181*
P1213	1	16 *1.5*	12 *5.4*	400 *181*
P1214	1¼	14 *1.9*	18 *8.2*	600 *272*
P1215	1½	14 *1.9*	20 *9.1*	600 *272*
P1217	2	14 *1.9*	22 *10.0*	600 *272*

Slotted hex head screw and nut included.
Finish: Electro-galvanized.

P1563 thru P1573

Parallel Clamps for Rigid Conduit and Pipe

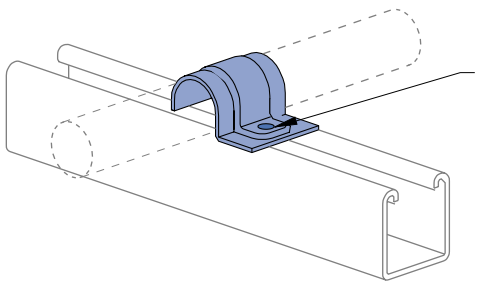


Part Number	Pipe Size In	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
P1563	⅜	0.675 *17.1*	14 *1.9*	27 *12.2*
P1564	½	0.840 *21.3*	14 *1.9*	29 *13.2*
P1565	¾	1.050 *26.7*	14 *1.9*	30 *13.6*
P1566	1	1.315 *33.4*	14 *1.9*	31 *14.1*
P1567	1¼	1.660 *42.2*	14 *1.9*	38 *17.2*
P1568	1½	1.900 *48.3*	12 *2.7*	40 *18.1*
P1569	2	2.375 *60.3*	12 *2.7*	47 *21.3*
P1570	2½	2.875 *73.0*	12 *2.7*	66 *29.9*
P1571	3	3.500 *88.9*	12 *2.7*	78 *35.4*
P1572	3½	4.000 *101.6*	12 *2.7*	87 *39.5*
P1573	4	4.500 *114.3*	12 *2.7*	90 *40.8*

Slotted hex head screw and nut included.
Finish: Electro-galvanized.

P2008 thru P2020

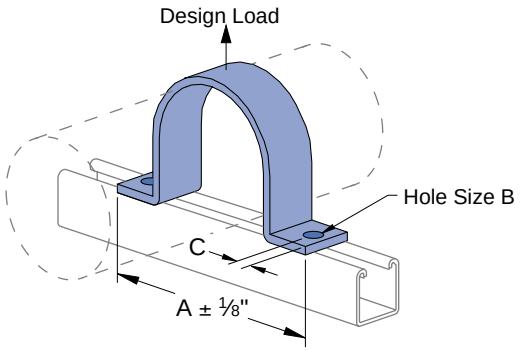
One Hole Clamp for O.D. Tubing



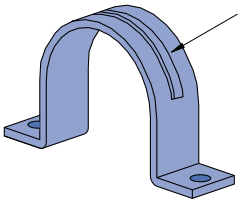
Part Number	O.D. Tube Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
P2008	¼ *6.4*	16 *1.5*	4 *1.8*
P2009	5/16 *7.9*	16 *1.5*	5 *2.3*
P2010	⅜ *9.5*	16 *1.5*	5 *2.3*
P2012	½ *12.7*	16 *1.5*	6 *2.7*
P2014	⅝ *15.9*	14 *1.9*	8 *3.6*
P2016	¾ *19.1*	14 *1.9*	9 *4.1*
P2018	⅞ *22.2*	14 *1.9*	10 *4.5*
P2020	1 *25.4*	14 *1.9*	11 *5.0*

Finish: Electro-galvanized and Aluminum

P2558-5 thru P2558-60 — Single Piece Pipe Strap

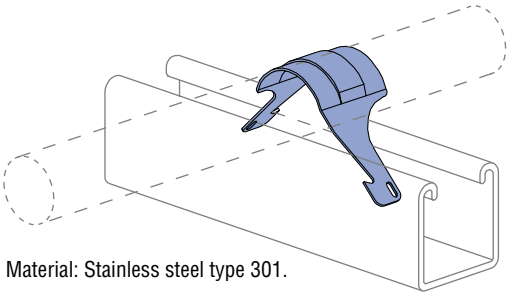


Hardware sold separately.



Part Number	Nominal Pipe Size In	A In *(mm)*	"B" In *(mm)*	C In *(mm)*	Thickness In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P2558-05	½	2⅞ *73.0*				23 *10.4*	
P2558-07	¾	3⅛ *79.4*				26 *11.8*	
P2558-10	1	3⅜ *85.7*	9/32 *7.1*	7/16 *11.1*	⅛ *3.2*	31 *14.1*	500 *2.2*
P2558-12	1¼	3¾ *95.3*				35 *15.9*	
P2558-15	1½	3⅞ *98.4*				39 *17.7*	
P2558-20	2	5¾ *146.1*				94 *42.6*	
P2558-25	2½	6¼ *158.8*				114 *51.7*	
P2558-30	3	6⅞ *174.6*				133 *60.3*	
P2558-35	3½	7⅜ *187.3*	7/16 *11.1*	11/16 *17.5*	¼ *6.4*	152 *68.9*	1,000 *4.4*
P2558-40	4	7⅞ *200.0*				176 *79.8*	
P2558-50	5	9 *228.6*				198 *89.8*	
P2558-60	6	10 *254.0*				225 *102.1*	

P2609 thru P2617, P2426 thru P2431 — UNI-CLIP® Support



Material: Stainless steel type 301.

The Uni-Clip supports meet or exceed load requirements for American Standard Code for Pressure Piping (1967), and National Electric Code (1971).

Patent No. 2863625.

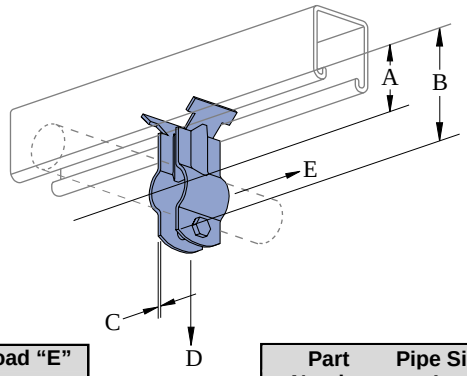
UNI-CLIP® SUPPORTS FOR THINWALL CONDUIT (E.M.T.)

Part Number	Conduit Size In	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2426	½	0.706 *17.9*	1.7 *0.8*
P2427	¾	0.922 *23.4*	2.4 *1.1*
P2428	1	1.163 *29.5*	3.6 *1.6*
P2429	1¼	1.510 *38.4*	4.6 *2.1*
P2430	1½	1.740 *44.2*	5.9 *2.7*
P2431	2	2.197 *55.8*	8 *3.6*

UNI-CLIP® SUPPORTS FOR RIGID STEEL CONDUIT

Part Number	Conduit Size In	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2609	⅜	0.675 *17.1*	1.6 *0.7*
P2611	½	0.840 *21.3*	2.3 *1.0*
P2612	¾	1.050 *26.7*	3.2 *1.5*
P2613	1	1.315 *33.4*	4.1 *1.9*
P2614	1¼	1.660 *42.2*	5.1 *2.3*
P2615	1½	1.900 *48.3*	6.3 *2.9*
P2617	2	2.375 *60.3*	10 *4.5*

P3409 thru P3417 — Stand-off Pipe Clamps

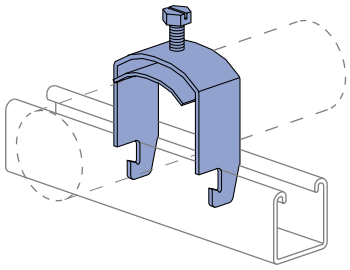


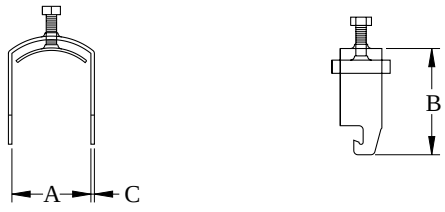
Hardware included.
Finish: Electro-galvanized.
Pipe Clamp 1¼" Wide
Patent No. 3417951.
Safety factor of 5

Part Number	Load "D" Lbs *(kN)*	Load "E" Lbs *(kN)*
P3409	100 *45.4*	25 *11.3*
P3411	150 *68.0*	35 *15.9*
P3412	175 *79.4*	40 *18.1*
P3413	200 *90.7*	50 *22.7*
P3414	300 *136.1*	70 *31.8*
P3415	400 *181.4*	80 *36.3*
P3417	500 *226.8*	120 *54.4*

Part Number	Pipe Size In	O.D. Size In *(mm)*	A In *(mm)*	B In *(mm)*	C Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
P3409	⅜	0.675 *17.1*	1⅛ *28.6*	2⅛ *54.0*	14 *1.9*	14 *6.4*
P3411	½	0.840 *21.3*	1¼ *31.8*	2 5/16 *58.7*	14 *1.9*	15 *6.8*
P3412	¾	1.050 *26.7*	1 5/16 *33.3*	2½ *63.5*	14 *1.9*	19 *8.6*
P3413	1	1.315 *33.4*	1½ *38.1*	2¾ *69.9*	14 *1.9*	22 *10.0*
P3414	1¼	1.660 *42.2*	1 11/16 *42.9*	3¼ *82.6*	12 *2.7*	34 *15.4*
P3415	1½	1.900 *48.3*	1¾ *44.5*	3½ *88.9*	11 *3.0*	49 *22.2*
P3417	2	2.375 *60.3*	2 *50.8*	4 *101.6*	10 *3.4*	55 *24.9*

M5025 thru M5060 — One-piece Cable and Conduit Clamps





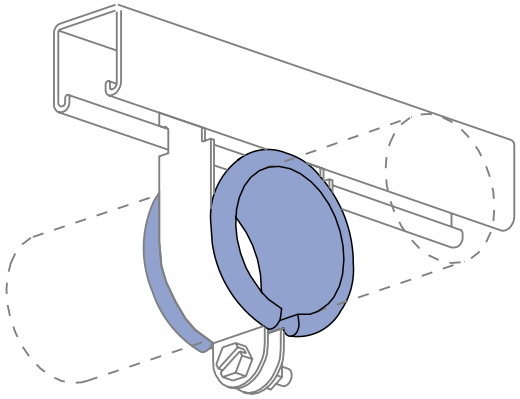
Part Number	Max O.D. Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	"C" Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
M5025	⅜ *9.5*	7/16 *11.1*	1⅝ *41.3*	14 *1.9*	6 *2.7*
M5026	½ *12.7*	9/16 *14.3*	1¾ *44.5*	14 *1.9*	7 *3.2*
M5028	¾ *19.1*	13/16 *20.6*	2 *50.8*	14 *1.9*	12 *5.4*
M5030	1 *25.4*	1 1/16 *27.0*	2¼ *57.2*	14 *1.9*	15 *6.8*
M5032	1¼ *31.8*	1 5/16 *33.3*	2½ *63.5*	14 *1.9*	19 *8.6*
M5034	1½ *38.1*	1 9/16 *39.7*	2¾ *69.9*	14 *1.9*	20 *9.1*
M5036	1¾ *44.5*	1 13/16 *46.0*	3 *76.2*	12 *2.7*	25 *11.3*
M5038	2 *50.8*	2 1/16 *52.4*	3¼ *82.6*	12 *2.7*	35 *15.9*
M5041	2⅜ *60.3*	2 7/16 *61.9*	3⅝ *92.1*	12 *2.7*	41 *18.6*
M5044	2¾ *69.9*	2 13/16 *71.4*	4 *101.6*	12 *2.7*	60 *27.2*
M5048	3¼ *82.6*	3 5/16 *84.1*	4½ *114.3*	12 *2.7*	74 *33.6*
M5052	3¾ *95.3*	3 13/16 *96.8*	5 *127.0*	12 *2.7*	91 *41.3*
M5054	4 *101.6*	4 1/16 *103.2*	5¼ *133.4*	12 *2.7*	100 *45.4*
M5057	4⅜ *111.1*	4 7/16 *112.7*	5⅝ *142.9*	10 *3.4*	115 *52.2*
M5060	4¾ *120.7*	4 13/16 *122.2*	6 *152.4*	10 *3.4*	125 *56.7*

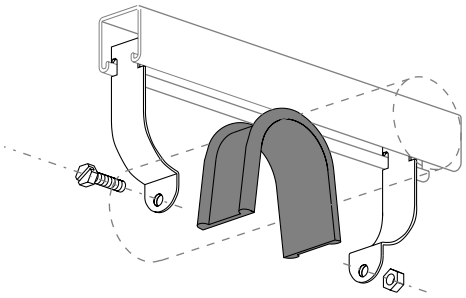
Finish: Electro-galvanized and Aluminum.

P2600

UNICUSHION®: Isolation Material

Wt/Carton: 2.5 Lbs (1.1 kg)





- 25 feet per carton.
- Cut to length as shown in charts.

UNICUSHION FEATURES

- Shock absorption
- Protection from corrosion and abrasion
- Allowance for expansion and contraction
- Sound and vibration isolation
- Stability in use from - 50° F (-47° C) to + 350°F (+177° C)
- Flexible elastomer material
- Will not support combustion

Clamp Selection & Cutting Guide

UNICUSHION®

EMT CONDUIT

Nominal Size	Use with Clamp	UNICUSHION Length In *(mm)*
⅜"	P1426	1¾ *44.5*
½"	P1111	2⅛ *54.0*
¾"	P1112	2¾ *69.9*
1"	P2032	3⅝ *92.1*
1¼"	P2035	4¾ *120.7*
1½"	P2037	5½ *139.7*
2"	P1117	6¾ *171.5*

STANDARD PIPE OR RIGID CONDUIT

Nominal Size	Use with Clamp	UNICUSHION Length In *(mm)*
⅜"	P1111	2⅛ *54.0*
½"	P2030	3 *76.2*
¾"	P2031	3¼ *82.6*
1"	P2034	4¼ *108.0*
1¼"	P2037	5¼ *133.4*
1½"	P2038	6 *152.4*
2"	P2042	7½ *190.5*
2½"	P2046	9 *228.6*
3"	P2051	11 *279.4*
3½"	P2055	12¼ *311.2*
4"	P2059	14 *355.6*
5"	P2067	17½ *444.5*
6"	P2070-66	20¾ *527.1*

COPPER TUBING TYPE K OR L

Nominal Size	Use with Clamp	UNICUSHION Length In *(mm)*
¼"	P2026	1 1/16 *27.0*
⅜"	P2027	1½ *38.1*
½"	P2028	2⅛ *54.0*
⅝"	P2029	2¼ *57.2*
¾"	P2030	3 *76.2*
1"	P2032	3⅝ *92.1*
1¼"	P2034	4½ *114.3*
1½"	P1430	5¼ *133.4*
2"	P2040	6¾ *171.5*
2½"	P2044	8¼ *209.6*
3"	P2048	10 *254.0*
3½"	P2052	11¼ *285.8*
4"	P2056	12½ *317.5*
5"	P2064	16 *406.4*
6"	P2070-62	19 *482.6*
8"	P2070-82	25 *635.0*

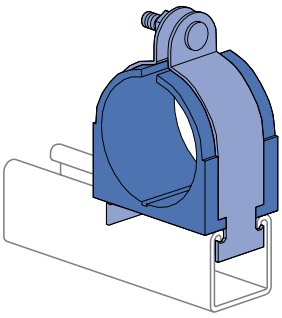
Clamp Selection & Cutting Guide (continued)

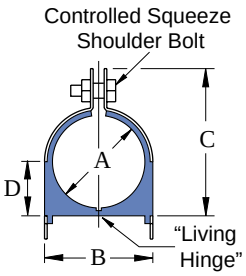
O. D. Size In *(mm)*	Use With Clamp	UNICUSHION Length In *(mm)*
¼ *6.4*	P2025	⅞ *22.2*
⅜ *9.5*	P2026	1 1/16 *27.0*
½ *12.7*	P2027	1½ *38.1*
⅝ *15.9*	P2028	2⅛ *54.0*
¾ *19.1*	P2029	2¼ *57.2*
⅞ *22.2*	P2030	3 *76.2*
1 *25.4*	P2031	3¼ *82.6*
1⅛ *28.6*	P2032	3⅝ *92.1*
1¼ *31.8*	P2033	4 *101.6*
1⅜ *34.9*	P2034	4½ *114.3*
1½ *38.1*	P2035	4⅞ *123.8*
1⅝ *41.3*	P1430	5¼ *133.4*
1¾ *44.5*	P2037	5½ *139.7*
1⅞ *47.6*	P2038	6 *152.4*
2 *50.8*	P2039	6½ *165.1*
2⅛ *54.0*	P2040	6¾ *171.5*
2¼ *57.2*	P1117	7¼ *184.2*
2⅜ *60.3*	P2042	7½ *190.5*
2½ *63.5*	P2043	8 *203.2*
2⅝ *66.7*	P2044	8¼ *209.6*
2¾ *69.9*	P1118	8¾ *222.3*
2⅞ *73.0*	P2046	9¼ *235.0*
3 *76.2*	P2047	9½ *241.3*

O. D. Size In *(mm)*	Use With Clamp	UNICUSHION Length In *(mm)*
3⅛ *79.4*	P2048	10 *254.0*
3¼ *82.6*	P2049	10½ *266.7*
3⅜ *85.7*	P1119	10¾ *273.1*
3½ *88.9*	P2051	11 *279.4*
3⅝ *92.1*	P2052	11¼ *285.8*
3¾ *95.3*	P2053	11½ *292.1*
3⅞ *98.4*	P1120	11¾ *298.5*
4 *101.6*	P2055	12 *304.8*
4⅛ *104.8*	P2056	12½ *317.5*
4¼ *108.0*	P2057	13 *330.2*
4⅜ *111.1*	P1121	13½ *342.9*
4½ *114.3*	P2059	14 *355.6*
4⅝ *117.5*	P2060	14¼ *362.0*
4¾ *120.7*	P2061	14¾ *374.7*
4⅞ *123.8*	P2062	15 *381.0*
5 *127.0*	P2063	15½ *393.7*
5⅛ *130.2*	P2064	16 *406.4*
5¼ *133.4*	P2065	16¼ *412.8*
5⅜ *136.5*	P2066	16½ *419.1*
5½ *139.7*	P2067	17 *431.8*
5⅝ *142.9*	P2068	17½ *444.5*
5¾ *146.1*	P2069	17¾ *450.9*
5⅞ *149.2*	P2070	18¼ *463.6*

O. D. Size In *(mm)*	Use With Clamp	UNICUSHION Length In *(mm)*
6 *152.4*	P2070-61	18½ *469.9*
6⅛ *155.6*	P2070-62	19 *482.6*
6¼ *158.8*	P2070-63	19¼ *489.0*
6⅜ *161.9*	P2070-64	19¾ *501.7*
6½ *165.1*	P1124	20 *508.0*
6⅝ *168.3*	P2070-66	20½ *520.7*
6¾ *171.5*	P2070-67	21 *533.4*
6⅞ *174.6*	P2070-70	21¼ *539.8*
7 *177.8*	P2070-71	21¾ *552.5*
7⅛ *181.0*	P2070-72	22 *558.8*
7¼ *184.2*	P2070-73	22½ *571.5*
7⅜ *187.3*	P2070-74	22¾ *577.9*
7½ *190.5*	P2070-75	23¼ *590.6*
7⅝ *193.7*	P2070-76	23½ *596.9*
7¾ *196.9*	P2070-77	24 *609.6*
7⅞ *200.0*	P2070-80	24½ *622.3*
8 *203.2*	P2070-81	24¾ *628.7*
8⅛ *206.4*	P2070-82	25 *635.0*
8¼ *209.6*	P2070-83	25½ *647.7*
8⅜ *212.7*	P2070-84	26 *660.4*
8½ *215.9*	P1126	26¼ *666.8*

004T008 thru 098N106, 009N012 thru 106N114 — CUSH-A-CLAMP® Assembly





Materials:
Clamp: Electro-galvanized or stainless steel.
Cushion: Thermoplastic elastomer.

Includes cushion, clamp and hardware.

Patent Numbers: 4,516,296; 4,934,635

Part Numbers are "coded" to designate cushion size and clamp size. Examples:

004T008 004 - Cushion Size 7/16" (6.4)
T - With Controlled Squeeze Shoulder Bolt
008 - Clamp Size 8/16" (12.7)

009N012 009 - Cushion Size 9/16" (14.3)
N - With Standard Bolt
012 - Clamp Size 12/16" (19.1)

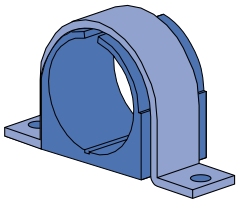
Pipe Series Assembly

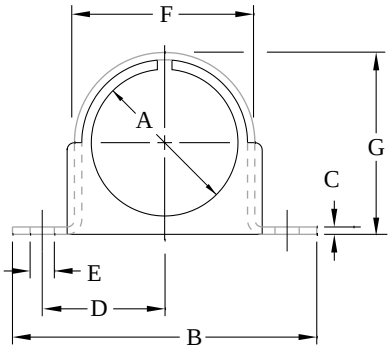
Part Number	Nominal Pipe Size	Dimensions "A" In(mm)	"B" In(mm)	"C" In(mm)	"D" In(mm)	Wt/100 pcs Lbs(kg)
009N012	¼	0.54 (13.7)	0.98 (24.9)	1.34 (34.0)	0.43 (10.9)	13 (5.9)
011N014	⅜	0.67 (17.0)	1.13 (28.7)	1.54 (39.1)	0.49 (12.4)	14 (6.4)
014N018	½	0.84 (21.3)	1.29 (32.8)	1.82 (46.2)	0.58 (14.7)	15 (6.8)
017N022	¾	1.05 (26.7)	1.50 (38.1)	1.95 (49.5)	0.70 (17.8)	17 (7.7)
021N026	1	1.31 (33.3)	1.76 (44.7)	2.34 (59.4)	0.81 (20.6)	19 (8.6)
027N032	1¼	1.66 (42.2)	2.17 (55.1)	2.73 (69.3)	0.99 (25.1)	35 (15.9)
030N034	1½	1.90 (48.3)	2.35 (59.7)	2.86 (72.6)	1.09 (27.7)	39 (17.7)
038N044	2	2.37 (60.2)	2.82 (71.6)	3.67 (93.2)	1.41 (35.8)	49 (22.2)
046N052	2½	2.87 (72.9)	3.32 (84.3)	4.17 (105.9)	1.66 (42.2)	57 (25.9)
056N062	3	3.50 (88.9)	3.95 (100.3)	4.79 (121.7)	1.97 (50.0)	55 (24.9)
064N072	3½	4.00 (101.6)	4.45 (113.0)	5.42 (137.7)	2.28 (57.9)	88 (39.9)
072N080	4	4.50 (114.3)	4.95 (125.7)	5.92 (150.4)	2.53 (64.3)	110 (49.9)
089N096	5	5.56 (141.2)	6.01 (152.7)	6.92 (175.8)	3.06 (77.7)	130 (59.0)
106N114	6	6.62 (168.1)	7.07 (179.6)	8.23 (209.0)	3.59 (91.2)	140 (63.5)

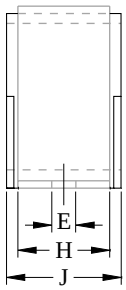
Tube Series Assembly

Part Number	Copper & Steel Tube O. D. Size	Copper Water Pipe (Nominal)	Dimensions "A" In(mm)	"B" In(mm)	"C" In(mm)	"D" In(mm)	Wt/100 pcs Lbs(kg)
004T008	¼		0.25 (6.4)	0.62 (15.7)	0.98 (24.9)	0.27 (6.9)	10 (4.5)
006T010	⅜	¼	0.37 (9.4)	0.82 (20.8)	1.13 (28.7)	0.33 (8.4)	11 (5.0)
008T012	½	⅜	0.50 (12.7)	0.94 (23.9)	1.34 (34.0)	0.40 (10.2)	13 (5.9)
010T014	⅝	½	0.62 (15.7)	1.06 (26.9)	1.54 (39.1)	0.46 (11.7)	14 (6.4)
012T016	¾	⅝	0.75 (19.1)	1.20 (30.5)	1.68 (42.7)	0.52 (13.2)	14 (6.4)
014T018	⅞	¾	0.87 (22.1)	1.31 (33.3)	1.82 (46.2)	0.58 (14.7)	15 (6.8)
016T020	1		1.00 (25.4)	1.44 (36.6)	1.95 (49.5)	0.65 (16.5)	17 (7.7)
018T022	1⅛	1	1.12 (28.4)	1.57 (39.9)	2.08 (52.8)	0.70 (17.8)	18 (8.2)
020T024	1¼		1.25 (31.8)	1.70 (43.2)	2.21 (56.1)	0.77 (19.6)	18 (8.2)
022T026	1⅜	1¼	1.37 (34.8)	1.82 (46.2)	2.34 (59.4)	0.83 (21.1)	20 (9.1)
024N028	1½		1.50 (38.1)	1.95 (49.5)	2.47 (62.7)	0.90 (22.9)	33 (15.0)
026N030	1⅝	1½	1.62 (41.1)	2.07 (52.6)	2.60 (66.0)	0.96 (24.4)	35 (15.9)
028N032	1¾		1.75 (44.5)	2.20 (55.9)	2.73 (69.3)	1.02 (25.9)	37 (16.8)
030N034	1⅞		1.87 (47.5)	2.32 (58.9)	2.86 (72.6)	1.09 (27.7)	39 (17.7)
032N036	2		2.00 (50.8)	2.45 (62.2)	3.04 (77.2)	1.15 (29.2)	46 (20.9)
034N040	2⅛		2.12 (53.8)	2.57 (65.3)	3.23 (82.0)	1.27 (32.3)	47 (21.3)
038N044	2⅜		2.37 (60.2)	2.82 (71.6)	3.67 (93.2)	1.41 (35.8)	49 (22.2)
040N046	2½		2.50 (63.5)	2.94 (74.7)	3.79 (96.3)	1.46 (37.1)	51 (23.1)
042N048	2⅝		2.62 (66.5)	3.07 (78.0)	3.92 (99.6)	1.53 (38.9)	55 (24.9)
046N052	2⅞		2.87 (72.9)	3.32 (84.3)	4.17 (105.9)	1.66 (42.2)	57 (25.9)
050N054	3		3.00 (76.2)	3.57 (90.7)	4.42 (112.3)	1.78 (45.2)	60 (27.2)
050N056	3⅛		3.12 (79.2)	3.57 (90.7)	4.42 (112.3)	1.78 (45.2)	60 (27.2)
053N060	3 5/16		3.31 (84.1)	3.96 (100.6)	4.75 (120.7)	1.90 (48.3)	62 (28.1)
056N062	3½		3.50 (88.9)	3.95 (100.3)	4.79 (121.7)	1.97 (50.0)	55 (24.9)
058N064	3⅝		3.62 (91.9)	4.20 (106.7)	4.99 (126.7)	2.03 (51.6)	70 (31.8)
064N072	4		4.00 (101.6)	4.45 (113.0)	5.42 (137.7)	2.28 (57.9)	88 (39.9)
066N074	4⅛		4.12 (104.6)	4.57 (116.1)	5.54 (140.7)	2.34 (59.4)	94 (42.6)
069N076	4 5/16		4.34 (110.2)	4.96 (126.0)	5.84 (148.3)	2.40 (61.0)	100 (45.4)
072N080	4½		4.50 (114.3)	4.95 (125.7)	5.92 (150.4)	2.53 (64.3)	110 (49.9)
082N090	5⅛		5.12 (130.0)	5.57 (141.5)	6.54 (166.1)	2.84 (72.1)	125 (56.7)
098N106	6⅛		6.12 (155.4)	6.57 (166.9)	7.54 (191.5)	3.34 (84.8)	130 (59.0)

004M007 thru 034M040 — CUSH-A-CLAMP® Assembly Omega Series™





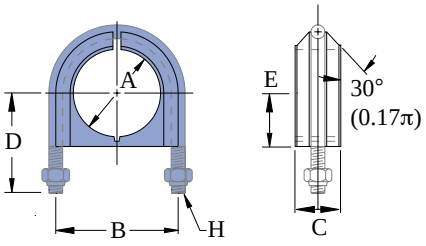


Includes clamp and cushion.
Materials: Clamp: ZD or stainless steel.
Cushion: Thermoplastic elastomer..

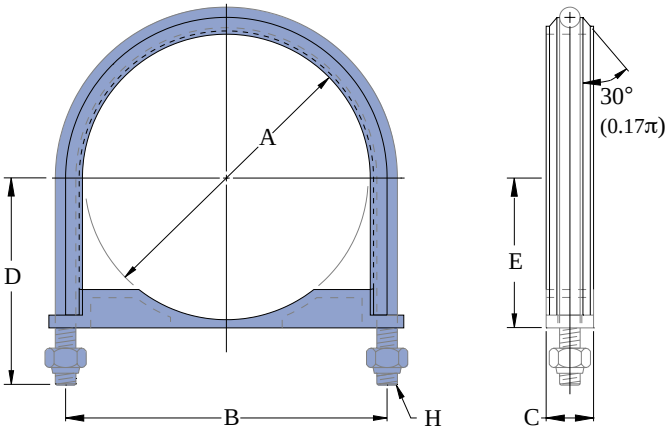
Note: Cannot be mounted on the slotted side of metal framing channel.
Can be mounted to any flat surface.

Part Number	Copper & Steel Tubing O. D. In	Copper Water Pipe (Nominal) In	Pipe Size (Nominal) In	Dimensions "A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	"D" In *(mm)*	"E" In *(mm)*	"F" In *(mm)*	"G" In *(mm)*	"H" In *(mm)*	"J" In *(mm)*	Wt/100 pcs Lbs *(kg)*
004M007	¼			0.25 *6.4*	1.81 *46.0*	0.06 *1.5*	0.60 *15.2*	0.20 *5.1*	0.53 *13.5*	0.48 *12.2*	0.62 *15.7*	0.78 *19.8*	3.4 *1.5*
006M008	⅜	¼		0.37 *9.4*	1.90 *48.3*	0.06 *1.5*	0.65 *16.5*	0.20 *5.1*	0.62 *15.7*	0.62 *15.7*	0.62 *15.7*	0.81 *20.6*	4.0 *1.8*
008M011	½	⅜	¼	0.50 *12.7*	2.20 *55.9*	0.06 *1.5*	0.80 *20.3*	0.26 *6.6*	0.82 *20.8*	0.75 *19.1*	0.75 *19.1*	0.98 *24.9*	5.5 *2.5*
010M013	⅝	½	⅜	0.62 *15.7*	2.32 *58.9*	0.06 *1.5*	0.86 *21.8*	0.26 *6.6*	0.94 *23.9*	0.87 *22.1*	0.75 *19.1*	0.98 *24.9*	6.0 *2.7*
012M015	¾	⅝		0.75 *19.1*	2.41 *61.2*	0.06 *1.5*	0.90 *22.9*	0.26 *6.6*	1.03 *26.2*	1.01 *25.7*	0.75 *19.1*	0.98 *24.9*	6.5 *2.9*
014M017	⅞	¾	½	0.87 *22.1*	2.56 *65.0*	0.06 *1.5*	0.98 *24.9*	0.26 *6.6*	1.18 *30.0*	1.03 *26.2*	0.75 *19.1*	0.98 *24.9*	7.1 *3.2*
016M019	1			1.00 *25.4*	2.68 *68.1*	0.06 *1.5*	1.04 *26.4*	0.26 *6.6*	1.31 *33.3*	1.25 *31.8*	0.75 *19.1*	0.98 *24.9*	7.8 *3.5*
018M020			¾	1.05 *26.7*	2.68 *68.1*	0.06 *1.5*	1.04 *26.4*	0.26 *6.6*	1.31 *33.3*	1.25 *31.8*	0.75 *19.1*	0.98 *24.9*	8.1 *3.7*
018M021	1⅛	1		1.12 *28.4*	2.82 *71.6*	0.06 *1.5*	1.11 *28.2*	0.26 *6.6*	1.44 *36.6*	1.33 *33.8*	0.75 *19.1*	0.98 *24.9*	8.4 *3.8*
020M024	1¼			1.25 *31.8*	3.00 *76.2*	0.08 *2.0*	1.20 *30.5*	0.26 *6.6*	1.65 *41.9*	1.47 *37.3*	1.25 *31.8*	1.56 *39.6*	17 *7.7*
021M026			1	1.31 *33.3*	3.12 *79.2*	0.08 *2.0*	1.26 *32.0*	0.26 *6.6*	1.76 *44.7*	1.71 *43.4*	1.25 *31.8*	1.56 *39.6*	20 *9.1*
022M026	1⅜	1¼		1.37 *34.8*	3.12 *79.2*	0.08 *2.0*	1.26 *32.0*	0.26 *6.6*	1.76 *44.7*	1.71 *43.4*	1.25 *31.8*	1.56 *39.6*	19 *8.6*
024M028	1½			1.50 *38.1*	3.65 *92.7*	0.08 *2.0*	1.42 *36.1*	0.26 *6.6*	1.93 *49.0*	1.88 *47.8*	1.25 *31.8*	1.56 *39.6*	20 *9.1*
026M030	1⅝	1½		1.62 *41.1*	3.77 *95.8*	0.08 *2.0*	1.48 *37.6*	0.26 *6.6*	2.07 *52.6*	2.00 *50.8*	1.25 *31.8*	1.56 *39.6*	23 *10.4*
027M032			1¼	1.66 *42.2*	3.90 *99.1*	0.10 *2.5*	1.55 *39.4*	0.33 *8.4*	2.21 *56.1*	2.12 *53.8*	1.25 *31.8*	1.56 *39.6*	32 *14.5*
028M032	1¾			1.75 *44.5*	3.90 *99.1*	0.10 *2.5*	1.55 *39.4*	0.33 *8.4*	2.21 *56.1*	2.12 *53.8*	1.25 *31.8*	1.56 *39.6*	32 *14.5*
030M034	1⅞		1½	1.87 *47.5*	4.02 *102.1*	0.10 *2.5*	1.61 *40.9*	0.33 *8.4*	2.33 *59.2*	2.25 *57.2*	1.25 *31.8*	1.56 *39.6*	34 *15.4*
032M036	2			2.00 *50.8*	4.15 *105.4*	0.10 *2.5*	1.67 *42.4*	0.33 *8.4*	2.46 *62.5*	2.38 *60.5*	1.25 *31.8*	1.56 *39.6*	36 *16.3*
034M040	2⅛			2.12 *53.8*	4.40 *111.8*	0.10 *2.5*	1.80 *45.7*	0.33 *8.4*	2.71 *68.8*	2.62 *66.5*	1.25 *31.8*	1.56 *39.6*	41 *18.6*
038M044			2	2.37 *60.2*	4.71 *119.6*	0.10 *2.5*	1.94 *49.3*	0.33 *8.4*	2.96 *75.2*	2.88 *73.2*	1.25 *31.8*	1.56 *39.6*	44 *20.0*
082M090	5⅛			5.12 *130.0*	7.64 *194.1*	0.10 *2.5*	3.41 *86.6*	0.40 *10.2*	5.83 *148.1*	6.75 *171.5*	1.25 *31.8*	1.56 *39.6*	120 *54.4*

UB½PA thru UB12PA — CUSH–A–CLAMP® Assembly U-Bolt Series



½" thru 6" assembly.



8" thru 12" assembly.

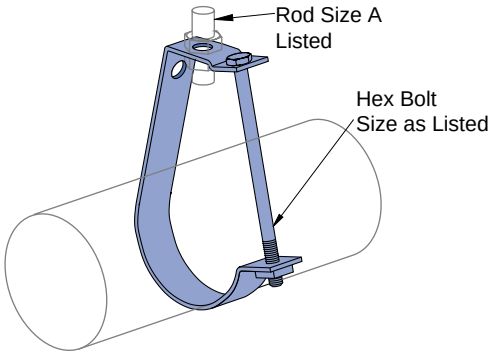
Includes U bolt, cushion, and hardware.

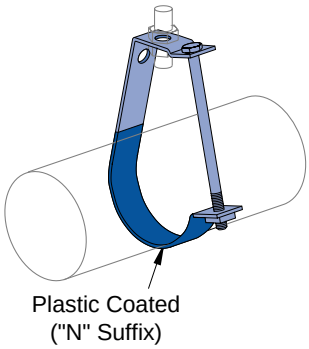
Materials:
U Bolt: Electro-galvanized finish or Type 316SS
Cushion: Thermoplastic elastomer.

Note: Not intended for use with metal framing components due to the length of the thread.

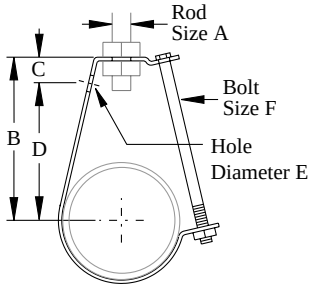
Part Number	Pipe Size (Nominal) In	Dimensions "A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	"D" In *(mm)*	"E" In *(mm)*	"F" In *(mm)*	H	Wt/100 pcs Lbs *(kg)*
UB½PA	½	0.84 *21.3*	1.60 *40.6*	0.68 *17.3*	1.5 *38.1*	0.67 *17.0*	¼ *6.4*	¼-20 UNC-2B	9 *4.1*
UB¾PA	¾	1.05 *26.7*	1.80 *45.7*	0.68 *17.3*	1.6 *40.6*	0.78 *19.8*	¼ *6.4*	¼-20 UNC-2B	10 *4.5*
UB1PA	1	1.31 *33.3*	2.05 *52.1*	0.68 *17.3*	1.7 *43.2*	0.91 *23.1*	¼ *6.4*	¼-20 UNC-2B	12 *5.4*
UB1¼PA	1¼	1.66 *42.2*	2.54 *64.5*	1.24 *31.5*	2.1 *53.3*	1.08 *27.4*	⅜ *9.5*	⅜-16 UNC-2B	36 *16.3*
UB1½PA	1½	1.90 *48.3*	2.78 *70.6*	1.24 *31.5*	2.2 *55.9*	1.19 *30.2*	⅜ *9.5*	⅜-16 UNC-2B	32 *14.5*
UB2PA	2	2.37 *60.2*	3.32 *84.3*	1.24 *31.5*	2.5 *63.5*	1.45 *36.8*	⅜ *9.5*	⅜-16 UNC-2B	42 *19.1*
UB2½PA	2½	2.87 *72.9*	3.88 *98.6*	1.24 *31.5*	3.0 *76.2*	1.69 *42.9*	½ *12.7*	½-13 UNC-2B	72 *32.7*
UB3PA	3	3.50 *88.9*	4.50 *114.3*	1.24 *31.5*	3.3 *83.8*	2.00 *50.8*	½ *12.7*	½-13 UNC-2B	84 *38.1*
UB3½PA	3½	4.00 *101.6*	5.00 *127.0*	1.24 *31.5*	3.7 *94.0*	2.25 *57.2*	½ *12.7*	½-13 UNC-2B	93 *42.2*
UB4PA	4	4.50 *114.3*	5.50 *139.7*	1.24 *31.5*	3.9 *99.1*	2.5 *63.5*	½ *12.7*	½-13 UNC-2B	102 *46.3*
UB5PA	5	5.56 *141.2*	6.59 *167.4*	1.24 *31.5*	4.5 *114.3*	3.03 *77.0*	½ *12.7*	½-13 UNC-2B	123 *55.8*
UB6PA	6	6.62 *168.1*	7.81 *198.4*	1.44 *36.6*	5.4 *137.2*	3.56 *90.4*	⅝ *15.9*	⅝-11 UNC-2B	123 *55.8*
UB8PA	8	8.62 *218.9*	9.84 *249.9*	1.44 *36.6*	6.4 *162.6*	4.56 *115.8*	⅝ *15.9*	⅝-11 UNC-2B	243 *110.2*
UB10PA	10	10.75 *273.1*	12.25 *311.2*	1.65 *41.9*	7.7 *195.6*	5.68 *144.3*	¾ *19.1*	¾-10 UNC-2B	492 *223.2*
UB12PA	12	12.75 *323.9*	14.25 *362.0*	1.65 *41.9*	8.7 *221.0*	6.68 *169.7*	¾ *19.1*	¾-10 UNC-2B	563 *255.4*

J1205 thru J1280, J1205 N thru J 1280 N (Plastic Coated) "J" Conduit & Pipe Hanger

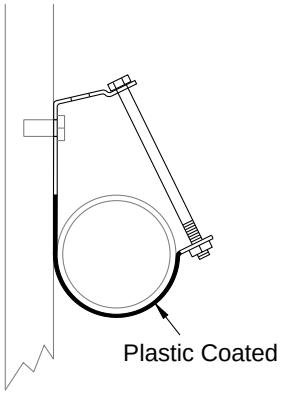




NOTE: Maximum operating temperature is 300°F (148.8°C)



Hanger Rod Suspended



"T" Bolt and Nut Included

Part Number	Wt/100 pcs Lbs *(kg)*	Part Number	Wt/100 pcs Lbs *(kg)*	Pipe Size In	"A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	"D" In *(mm)*	"E" In *(mm)*	"F" In *(mm)*	Load Lbs Lbs *(kg)*
J1205	20 *9.1*	J1205N	21 *9.5*	½	⅜ *9.5*	2⅝ *66.7*	1 *25.4*	2 *50.8*	13/32 *10.3*	¼ x 2¼ *6.4 x 57.2*	400 *181*
J1207	21 *9.5*	J1207N	22 *10.0*	¾	⅜ *9.5*	2⅞ *73.0*	1 *25.4*	2¼ *57.2*	13/32 *10.3*	¼ x 2¼ *6.4 x 57.2*	400 *181*
J1210	24 *10.9*	J1210N*	25 *11.3*	1	⅜ *9.5*	3 *76.2*	1 *25.4*	2⅜ *60.3*	13/32 *10.3*	¼ x 2½ *6.4 x 63.5*	400 *181*
J1212	27 *12.2*	J1212N	29 *13.2*	1¼	⅜ *9.5*	3¼ *82.6*	1 *25.4*	2½ *63.5*	13/32 *10.3*	¼ x 2¾ *6.4 x 69.9*	400 *181*
J1215	29 *13.2*	J1215N*	31 *14.1*	1½	⅜ *9.5*	3½ *88.9*	1 *25.4*	2⅝ *66.7*	13/32 *10.3*	¼ x 3 *6.4 x 76.2*	400 *181*
J1220	33 *15.0*	J1220N*	35 *15.9*	2	⅜ *9.5*	3¾ *95.3*	1⅛ *28.6*	2⅝ *66.7*	13/32 *10.3*	¼ x 3½ *6.4 x 88.9*	400 *181*
J1225	71 *32.2*	J1225N	74 *33.6*	2½	½ *12.7*	4⅜ *111.1*	1⅛ *28.6*	3⅝ *92.1*	9/16 *14.3*	⅜ x 4½ *9.5 x 114.3*	800 *363*
J1230	78 *35.4*	J1230N*	81 *36.7*	3	½ *12.7*	4⅞ *123.8*	1⅛ *28.6*	4 *101.6*	9/16 *14.3*	⅜ x 5 *9.5 x 127.0*	800 *363*
J1235	85 *38.6*	J1235N	88 *39.9*	3½	½ *12.7*	5⅛ *127.1*	1⅛ *28.6*	4¼ *108.0*	9/16 *14.3*	⅜ x 6 *9.5 x 152.4*	800 *363*
J1240	178 *80.7*	J1240N*	182 *82.6*	4	⅝ *15.9*	6⅛ *155.6*	1⅛ *28.6*	5⅛ *130.2*	9/16 *14.3*	⅜ x 6 *9.5 x 152.4*	800 *363*
J1250	199 *90.3*	J1250N	203 *92.1*	5	⅝ *15.9*	6¾ *171.5*	1⅛ *28.6*	5¾ *146.1*	9/16 *14.3*	⅜ x 7½ *9.5 x 190.5*	800 *363*
J1260	231 *104.8*	J1260N*	236 *107.0*	6	¾ *19.1*	7¾ *196.9*	1¼ *31.8*	6½ *165.1*	9/16 *14.3*	⅜ x 8½ *9.5 x 215.9*	1,000 *454*
J1280	449 *203.7*	J1280N	458 *207.7*	8	⅞ *22.2*	9¼ *235.0*	1¼ *31.8*	8 *203.2*	9/16 *14.3*	⅜ x 10 *9.5 x 254.0*	1,200 *544*

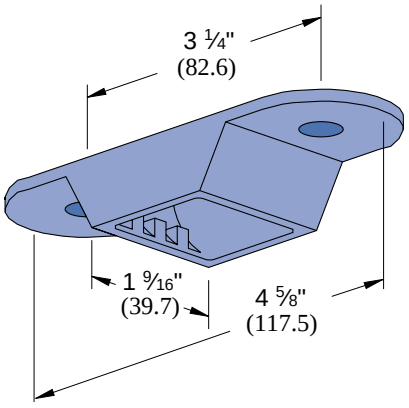
*Standard glass drainline and glass process pipe sizes.
Minimum safety factor of five (5) on ultimate load.

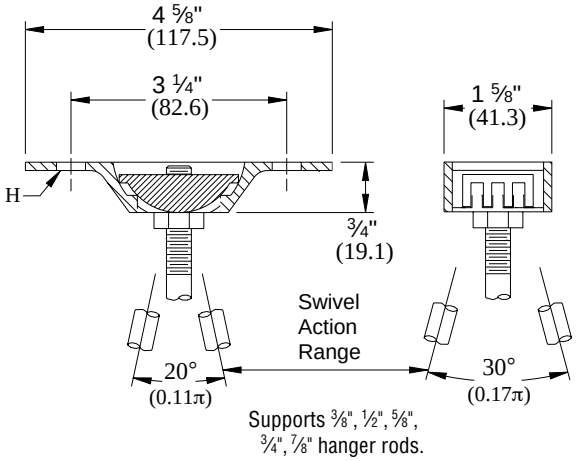
M30 & M31

Swivel Ceiling Flanges

Wt/100 pcs: 40 Lbs (18.1 kg)

for pipe sizes ¾" to 2".





Supports ⅜", ½", ⅝", ¾", ⅞" hanger rods.

Part Number	Mounting Bolt Size	Hole "H" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kg)*
M30	⅜	7/16 *11.1*	40 *18.1*	1,220 *553.4*
M31	½	9/16 *14.3*	40 *18.1*	1,450 *657.7*

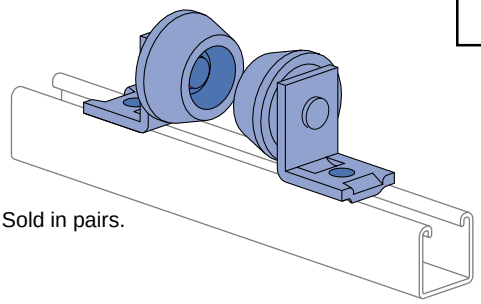
Note: Concrete Insert Section for M26 swivel nuts
Material: Malleable Iron.
Patent No. 2953874.

P2474

Pipe Roller for ½" - 4" Pipe

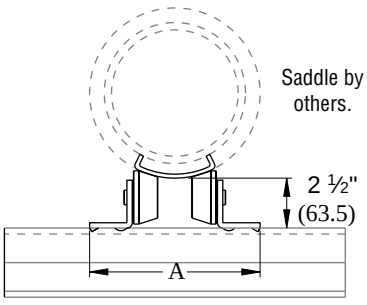
Design Load
500 Lbs (226.8 kg)

Wt/100 pcs: 268 Lbs (121.6 kg)



Sold in pairs.

Requires 2 each ½" x 15/16" bolts and ½" channel nuts per assembly. Sold separately.



Cast iron rollers.

Chart for Dimension A

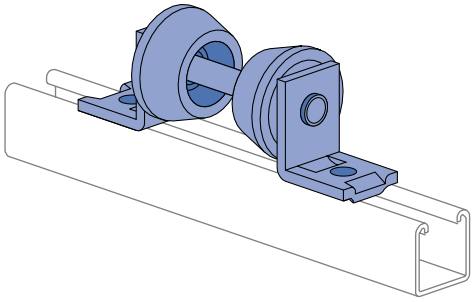
Pipe Size In	Insulation Thickness: No Insulation In *(mm)*	1" In *(mm)*	1½" In *(mm)*	2" In *(mm)*	2½" In *(mm)*	3" In *(mm)*	4" In *(mm)*
½	6½ *165.1*	6½ *165.1*					
¾	6½ *165.1*	6½ *165.1*	6⅝ *168.3*	6⅞ *174.6*			
1	6½ *165.1*	6½ *165.1*	6⅝ *168.3*	6⅞ *174.6*			
1¼	6½ *165.1*	6½ *165.1*	6⅞ *174.6*	7⅛ *181.0*	7⅜ *187.3*		
1½	6½ *165.1*	6½ *165.1*	6⅞ *174.6*	7⅛ *181.0*	7⅜ *187.3*		
2	6½ *165.1*	6⅝ *168.3*	7⅛ *181.0*	7⅜ *187.3*	7½ *190.5*	8 *203.2*	
2½	6½ *165.1*	6⅝ *168.3*	7⅛ *181.0*	7⅜ *187.3*	7½ *190.5*	8 *203.2*	
3	6½ *165.1*	7 *177.8*	7½ *190.5*	7¾ *196.9*	7⅞ *200.0*	8⅛ *206.4*	
3½	6½ *165.1*	7 *177.8*	7½ *190.5*	7¾ *196.9*	7⅞ *200.0*	8⅛ *206.4*	
4	6⅝ *168.3*	7¼ *184.2*	7⅝ *193.7*	7⅞ *200.0*	8 *203.2*	8⅜ *212.7*	9 *228.6*

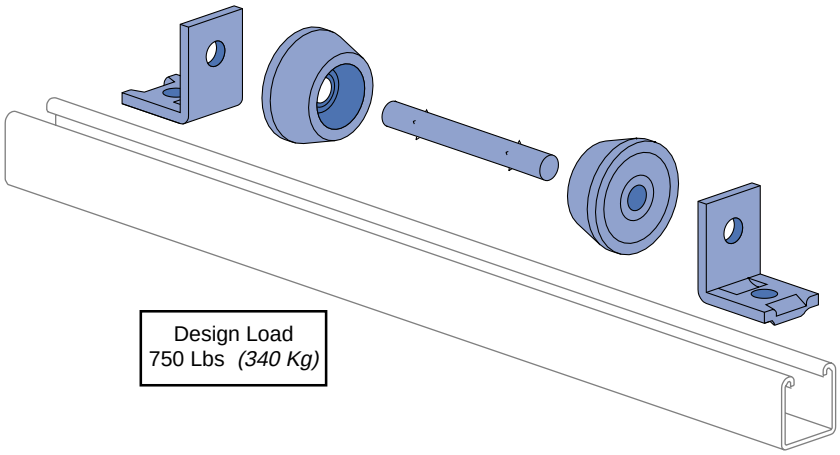
Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

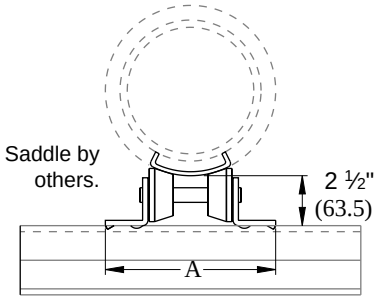
P2474-1 thru P2474-4

Pipe Roller for 1" - 8" Pipe





Design Load
750 Lbs *(340 Kg)*



- Pipe roller will fit standard saddles.
- Select proper roller from chart.
- Requires 2 each ½" x 15⁄16" bolts and ½" channel nuts per assembly. Sold separately.

Part Number	A In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2474-1	6¾ *171.5*	299 *135.6*
P2474-2	7½ *190.5*	304 *137.9*
P2474-3	8½ *215.9*	311 *141.1*
P2474-4	9⁹⁄₁₆ *242.9*	319 *144.7*

Parts are shipped loose and are easily assembled during installation.

Chart for Roller Part Number Selection

Pipe Size	Insulation Thickness						
In	No Insulation	1" *(25.4)*	1½" *(38.1)*	2" *(50.8)*	2½" *(63.5)*	3" *(76.2)*	4" *(101.6)*
½	P2474-1	P2474-1	P2474-1	P2474-2			
¾	P2474-1	P2474-1	P2474-1	P2474-2			
1	P2474-1	P2474-1	P2474-1	P2474-2			
1¼	P2474-1	P2474-1	P2474-1	P2474-2			
1½	P2474-1	P2474-1	P2474-2	P2474-2	P2474-2		
2	P2474-1	P2474-1	P2474-2	P2474-2	P2474-2		
2½	P2474-1	P2474-1	P2474-2	P2474-2	P2474-2		
3	P2474-1	P2474-2	P2474-2	P2474-3	P2474-3	P2474-3	
3½	P2474-1	P2474-2	P2474-2	P2474-3	P2474-3	P2474-3	
4	P2474-1	P2474-2	P2474-2	P2474-3	P2474-3	P2474-3	
5	P2474-2	P2474-3	P2474-3	P2474-3	P2474-3	P2474-4	P2474-4
6	P2474-2	P2474-3	P2474-3	P2474-3	P2474-3	P2474-4	P2474-4
8	P2474-2	P2474-3	P2474-4	P2474-4	P2474-4	P2474-4	P2474-4

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

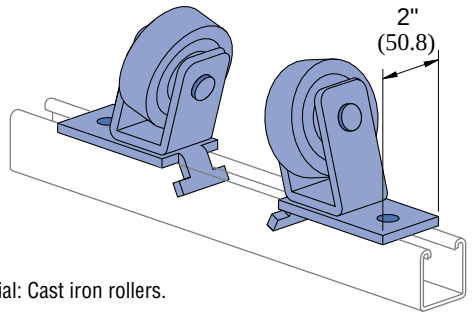
Hole Diameter: 9⁄16" (14.3mm); **Hole Spacing - From End:** 13⁄16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

P2475

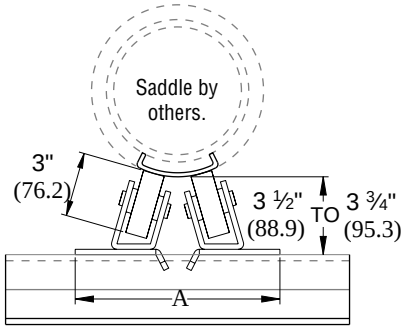
Pipe Roller for 6" - 16" Pipe

Wt/100 pcs: 680 Lbs (308.4 kg)

Sold in pairs.



Material: Cast iron rollers.



- Requires 2 each ½" x 15/16" bolts and ½" channel nuts per assembly. Sold separately.

Design Load
1500 Lbs *(680 Kg)*

Chart for Dimension A

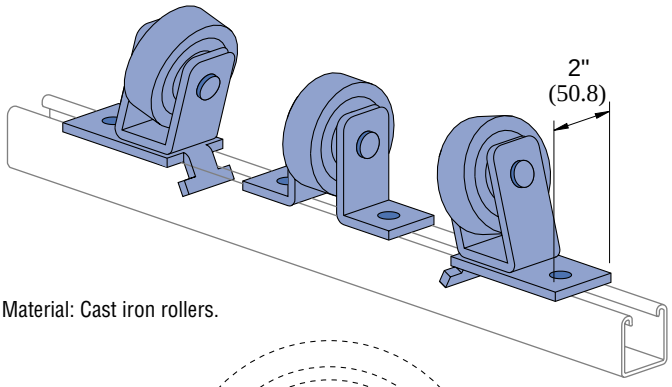
Pipe Size In	No Insulation In *(mm)*	Insulation Thickness 1" In *(mm)*	1½" In *(mm)*	2" In *(mm)*	2½" In *(mm)*	3" In *(mm)*	4" In *(mm)*
6	9½ *241.3*	10¼ *260.4*	10½ *266.7*	10¾ *273.1*	11 *279.4*	11⅜ *288.9*	11⅞ *301.6*
8	10⅛ *257.2*	*	11 *279.4*	11⅜ *288.9*	11¾ *298.5*	12 *304.8*	12½ *317.5*
10	10¾ *273.1*	*	11⅝ *295.3*	12 *304.8*	12¼ *311.2*	12½ *317.5*	13 *330.2*
12	11¼ *285.8*	*	12⅛ *308.0*	12½ *317.5*	12¾ *323.9*	13 *330.2*	13½ *342.9*
14	11⅝ *295.3*	*	12½ *317.5*	12⅞ *327.0*	13 *330.2*	13⅜ *339.7*	14 *355.6*
16	12⅛ *308.0*	*	13 *330.2*	13⅜ *339.7*	13⅞ *352.4*	14 *355.6*	14½ *368.3*

(*Not used for this size)

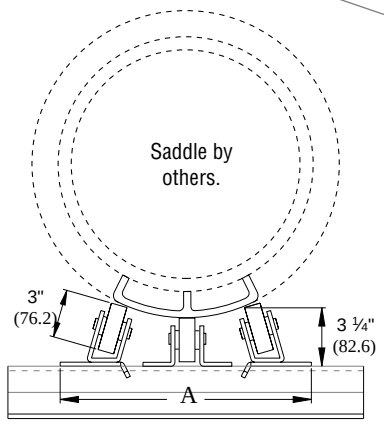
P2476

Pipe Roller for 16" - 24" Pipe

Wt/100 pcs: 1046 Lbs (474.5 kg)



Material: Cast iron rollers.



- Requires 4 each½" x 15/16" bolts and ½" channel nuts per assembly. Sold separately.

Design Load
2000 Lbs *(907 kg)*

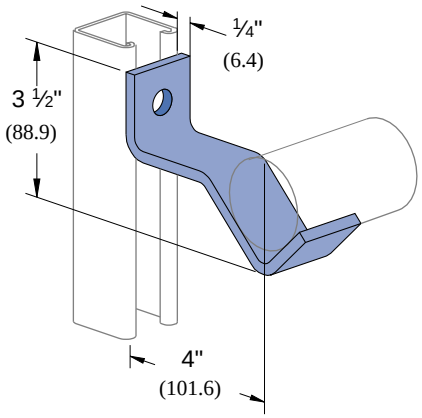
Chart for Dimension A

Pipe Size In	Insulation Thickness 1½" In *(mm)*	2" In *(mm)*	2½" In *(mm)*	3" In *(mm)*	4" In *(mm)*
16			13⅞ *352.4*	14 *355.6*	14½ *368.3*
18	13⅝ *346.1*	14 *355.6*	14⅛ *358.8*	14½ *368.3*	15 *381.0*
20	14⅛ *358.8*	14½ *368.3*	14¾ *374.7*	15 *381.0*	15½ *393.7*
24	15¼ *387.4*	15½ *393.7*	15⅞ *403.2*	16⅛ *409.6*	16⅝ *422.3*

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:**¼" (6.4mm)

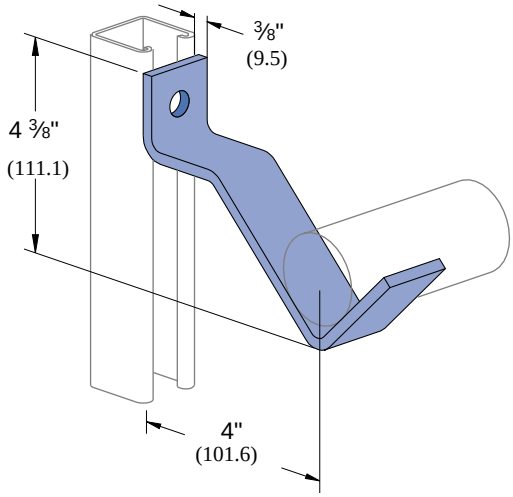
P2481 Pipe Support Bracket



For ½" pipe to 1½" pipe.
Design Load (Channel Upright Listed)

Wt/100 pcs Lbs *(kg)*	P1000 Lbs *(kg)*	P1100 Lbs *(kg)*	P2000 Lbs *(kg)*
90 *40.8*	85 *38.6*	85 *38.6*	85 *38.6*

P2482 Pipe Support Bracket



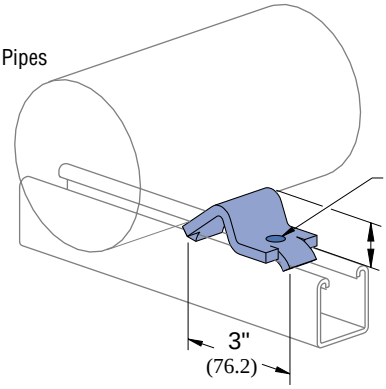
For 2" pipe to 3" pipe.
Design Load (Channel Upright Listed)

Wt/100 pcs Lbs *(kg)*	P1000 Lbs *(kg)*	P1100 Lbs *(kg)*	P2000 Lbs *(kg)*
139 *63.0*	185 *83.9*	120 *54.4*	95 *43.1*

P2243 Pipe Block

Wt/100 pcs: 40 Lbs (18.1 kg)

For 2" (50.8) to 8" (203.2) Pipes



Clamp Requires bolt and channel nut.
Sold seperately

Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); **Hole Spacing - From End:** 13/16" (20.6 mm); **Hole Spacing - On Center:** 1⅞" (47.6 mm); **Width:** 1⅝"(41mm); **Thickness:** ¼" (6.4mm)

Nominal Pipe Dia.		Centerline to Centerline (In/mm)																	
		¾" (19mm)		1" (25mm)			1¼" (32mm)			1½" (38mm)			2" (51mm)			2½" (64mm)		
		T	S	T	F	S	T	F	S	T	F	S	T	F	S	T	F	S
¾" 19mm	T	4¾ 121	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4½ 114	4¾ 108	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
1" 25mm	T	5 127	4¾ 121	5¼ 133	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	F	6 152	5¾ 146	6¼ 159	7¼ 184	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4¾ 121	4½ 114	5 127	6 152	4½ 114	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
1¼" 32mm	T	5¼ 133	5 127	5½ 140	6½ 165	5 127	5½ 140	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	F	6¼ 159	6 152	6½ 165	7½ 191	6¼ 159	6¾ 171	7¾ 197	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4¾ 121	4½ 114	5 127	6 152	4½ 114	5¼ 133	6¼ 159	4¾ 121	– –	– –	– –	– –	– –	– –	– –	– –	– –
1½" 38mm	T	5¼ 133	5 127	5½ 140	6½ 165	5¼ 133	5¾ 146	6¾ 171	5¼ 133	5¾ 146	– –	– –	– –	– –	– –	– –	– –	– –
	F	6½ 165	6¼ 159	6¾ 171	7¾ 197	6¼ 159	6¾ 171	8 203	6½ 165	7 178	8 203	– –	– –	– –	– –	– –	– –	– –
	S	5 127	4¾ 121	5¼ 133	6¼ 159	4¾ 121	5¼ 133	6 152	5 127	5½ 140	6½ 165	5 127	– –	– –	– –	– –	– –	– –
2" 51mm	T	5¾ 146	5½ 140	6 152	7 178	5½ 140	6 152	7¼ 184	5¾ 146	6¼ 159	7¼ 184	5¾ 146	6½ 165	– –	– –	– –	– –	– –
	F	7 178	6¾ 171	7¼ 184	8¼ 210	6¾ 171	7¼ 184	8½ 216	7 178	7½ 191	8½ 216	7 178	7¾ 197	9 229	– –	– –	– –	– –
	S	5¼ 133	5 127	5½ 140	6½ 165	5 127	5½ 140	6¾ 171	5¼ 133	5¾ 146	6¾ 171	5¼ 133	6 152	7¼ 184	5½ 140	– –	– –	– –
2½" 64mm	T	6 152	5¾ 146	6¼ 159	7¼ 184	6 152	6½ 165	7½ 191	6 152	6½ 165	7¾ 197	6¼ 159	7 178	8¼ 210	6½ 165	7¼ 184	– –	– –
	F	7½ 191	7¼ 184	7¾ 197	8¾ 222	7¼ 184	7¾ 197	9 229	7½ 191	8 203	9 229	7½ 191	8¼ 210	9½ 241	7¾ 197	8¾ 222	10 254	– –
	S	5½ 140	5¼ 133	5¾ 146	6¾ 171	5¼ 133	5¾ 146	7 178	5½ 140	6 152	7 178	5½ 140	6¼ 159	7½ 191	5¾ 146	6¾ 171	8 203	6 152
3" 76mm	T	6¼ 159	6 152	6½ 165	7½ 191	6¼ 159	6¾ 171	7¾ 197	6¼ 159	6¾ 171	8 203	6½ 165	7¼ 184	8½ 216	6¾ 171	7½ 191	9 229	7 178
	F	7¾ 197	7½ 191	8 203	9 229	7½ 191	8 203	9¼ 235	7¾ 197	8¼ 210	9¼ 235	7¾ 197	8½ 216	9¾ 248	8 203	9 229	10¼ 260	8¼ 210
	S	5¾ 146	5½ 140	6 152	7 178	5½ 140	6 152	7¼ 184	5¾ 146	6¼ 159	7¼ 184	5¾ 146	6½ 165	7¾ 197	6 152	7 178	8¼ 210	6¼ 159
4" 102mm	T	7½ 191	7¼ 184	7¾ 197	8¾ 222	7¼ 184	7¾ 197	9 229	7½ 191	8 203	9 229	7½ 191	8¼ 210	9½ 241	7¾ 197	8¾ 222	10 254	8 203
	F	9 229	8¾ 222	9¼ 235	10¼ 260	8¾ 222	9¼ 235	10½ 267	9 229	9½ 241	10½ 267	9 229	9¾ 248	11 279	9¼ 235	10¼ 260	11½ 292	9½ 241
	S	6¾ 171	6½ 165	7 178	8 203	6½ 165	7 178	8¼ 210	6¾ 171	7¼ 184	8¼ 210	6¾ 171	7½ 191	8¾ 222	7 178	8 203	9¼ 235	7¼ 184
5" 127mm	T	8 203	7¾ 197	8¼ 210	9¼ 235	7¾ 197	8¼ 210	9½ 241	8 203	8½ 216	9½ 241	8 203	8¾ 222	10 254	8¼ 210	9¼ 235	10½ 267	8½ 216
	F	9½ 241	9¼ 235	9¾ 248	10¾ 273	9¼ 235	9¾ 248	11 279	9½ 241	10 254	11 279	9½ 241	10¼ 260	11½ 292	9¾ 248	10¾ 273	12 305	10 254
	S	7¼ 184	7 178	7½ 191	8¼ 210	7 178	7½ 191	8¾ 222	7¼ 184	7¾ 197	8¾ 222	7¼ 184	8 203	9¼ 235	7½ 191	8½ 216	9¾ 248	7¾ 197
6" 152mm	T	8¾ 222	8½ 216	9 229	10 254	8½ 216	9 229	10¼ 260	8¾ 222	9¼ 235	10¼ 260	8¾ 222	9½ 241	10¾ 273	9 229	10 254	11¼ 286	9¼ 235
	F	10 254	9¾ 248	10¼ 260	11¼ 286	9¾ 248	10¼ 260	11½ 292	10 254	10½ 267	11½ 292	10 254	10¾ 273	12 305	10¼ 260	11¼ 286	12½ 318	10½ 267
	S	7¾ 197	7½ 191	8 203	9 229	7½ 191	8 203	9¼ 235	7¾ 197	8¼ 210	9¼ 235	7¾ 197	8½ 216	9¾ 248	8 203	9 229	10¼ 260	8¼ 210
8" 203mm	T	8¾ 222	9½ 241	10 254	11 279	9¾ 248	10½ 267	11¼ 286	9¾ 248	10¼ 260	11½ 292	10 254	10¾ 273	12 305	10½ 267	11 279	12½ 318	10½ 267
	F	11¼ 286	11 279	11½ 292	12½ 318	11 279	11½ 292	12¾ 324	11¼ 286	11¾ 298	12¾ 324	11¼ 286	12 305	13¼ 337	11½ 292	12½ 318	13¾ 349	11¾ 298
10" 254mm	T	11¼ 286	11 279	11½ 292	12½ 318	11 279	11½ 292	12¾ 324	11¼ 286	11¾ 298	12¾ 324	11¼ 286	12 305	13¼ 337	11½ 292	12½ 318	13¾ 349	11¾ 298
	F	12½ 318	12¼ 311	12¾ 324	13¾ 349	12¼ 311	12¾ 324	14 356	12½ 318	13 330	14 356	12½ 318	13¼ 337	14½ 368	12¾ 324	13¾ 349	15 381	13 330
12" 305mm	T	12¼ 311	12 305	12½ 318	13½ 343	12 305	12½ 318	13¾ 349	12¼ 311	12¾ 324	13¾ 349	12¼ 311	13 330	14¼ 362	12½ 318	13½ 343	14¾ 375	12¾ 324
	F	14 356	13¾ 349	14¼ 362	15¼ 387	13¾ 349	14¼ 362	15½ 394	14 356	14½ 368	15½ 394	14 356	14¾ 375	16 406	14¼ 362	15¼ 387	16½ 419	14½ 368

Pipe Spacing Table

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.

T – denotes threaded IPS pipe. F – denotes flanged fittings on pipe. S – denotes soldered or brazed tubing.

Centerline to Centerline (In/mm)																			Nominal Pipe Dia.
3" *(76mm)*			4" *(102mm)*			5" *(127mm)*			6" *(152mm)*			8" *(203mm)*		10" *(254mm)*		12" *(305mm)*		
T	F	S	T	F	S	T	F	S	T	F	S	T	F	T	F	T	F	
7¾	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T 3"
197	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	*76mm*
9¼	10½	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	F
235	*267*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
7¼	8½	6½	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	S
184	*216*	*165*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
9	10¼	8¼	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T 4"
229	*260*	*210*	*254*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	*102mm*
10½	11¾	9¾	11½	13	–	–	–	–	–	–	–	–	–	–	–	–	–	F
267	*298*	*248*	*292*	*330*	–	–	–	–	–	–	–	–	–	–	–	–	–	
8¼	9½	7½	9¼	10¾	8½	–	–	–	–	–	–	–	–	–	–	–	–	S
210	*241*	*191*	*235*	*273*	*216*	–	–	–	–	–	–	–	–	–	–	–	–	
9½	10¾	8¾	10¼	12	9¾	11	–	–	–	–	–	–	–	–	–	–	–	T 5"
241	*273*	*222*	*260*	*305*	*248*	*279*	–	–	–	–	–	–	–	–	–	–	–	*127mm*
11	12¼	10¼	12	13½	11¼	12½	14	–	–	–	–	–	–	–	–	–	–	F
279	*311*	*260*	*305*	*343*	*286*	*318*	*356*	–	–	–	–	–	–	–	–	–	–	
8¾	10	8	9¾	11¼	9	10¼	11¾	9½	–	–	–	–	–	–	–	–	–	S
222	*254*	*203*	*248*	*286*	*229*	*260*	*298*	*241*	–	–	–	–	–	–	–	–	–	
10¼	11½	9½	11¼	12¾	10½	11¾	13¼	11	12½	–	–	–	–	–	–	–	–	T 6"
260	*292*	*241*	*286*	*324*	*267*	*298*	*337*	*279*	*318*	–	–	–	–	–	–	–	–	*152mm*
11½	12¼	10¾	12½	14	11¾	13	14½	12¼	13¼	15	–	–	–	–	–	–	–	F
292	*311*	*273*	*318*	*356*	*298*	*330*	*368*	*311*	*337*	*381*	–	–	–	–	–	–	–	
9¼	10½	8½	10¼	11¾	9½	10¾	12¼	10	11½	12¾	10½	–	–	–	–	–	–	S
235	*267*	*216*	*260*	*298*	*241*	*273*	*311*	*254*	*292*	*324*	*267*	–	–	–	–	–	–	
11¼	12¾	10¾	12½	14	11¾	13	14½	12¼	13¾	15	12¾	14¾	–	–	–	–	–	T 8"
286	*324*	*273*	*318*	*356*	*298*	*330*	*368*	*311*	*349*	*381*	*324*	*375*	–	–	–	–	–	*203mm*
12¾	14	12	13¾	15¼	13	14¼	15¾	13½	15	16¼	14	16¼	17 .5	–	–	–	–	F
324	*356*	*305*	*349*	*387*	*330*	*362*	*400*	*343*	*381*	*413*	*356*	*413*	*17 .5*	–	–	–	–	
12¾	14	12	13¾	15¼	13	14¼	15¾	13½	15	16¼	14	16¼	17½	17½	–	–	–	T 10"
324	*356*	*305*	*349*	*387*	*330*	*362*	*400*	*343*	*381*	*413*	*356*	*413*	*445*	*445*	–	–	–	*254mm*
14	15¼	13¼	15	16½	14¼	15½	17	14¾	16¼	17½	15¼	17½	18¾	18¾	20	–	–	F
356	*387*	*337*	*381*	*419*	*362*	*394*	*432*	*375*	*413*	*445*	*387*	*445*	*476*	*476*	*508*	–	–	
13¾	15	13	14¾	16¼	14	15¼	16¾	14½	16	17¼	15	17¼	18½	18½	19¾	19½	–	T 12"
349	*381*	*330*	*375*	*413*	*356*	*387*	*425*	*368*	*406*	*438*	*381*	*438*	*470*	*470*	*502*	*495*	–	*305mm*
15½	16¾	14¾	16½	18	15¾	17	18¼	16¼	17¾	19	16¾	14	20¼	20¼	21½	21¼	29	F
394	*425*	*375*	*419*	*457*	*400*	*432*	*464*	*413*	*451*	*483*	*425*	*356*	*514*	*514*	*546*	*540*	*737*	

Channel Selection for Schedule 10 Sprinkler Pipe Trapeze Hangers

Note: Based on NFPA-13-1996 Section Modulus Table 3-10.1.7(a). Each of the following tables indicate the allowable span of the trapeeze and the nominal pipe size for the specified channel . An entry of "–" indicates that the channel cannot be used for this span/pipe size combination. The table is based on a maximum allowable bending stress of 15 KSI and a midspan concentrated load from 15 ft of water-filled pipe, plus 250 lb.

SCHEDULE 10 PIPE

Nominal Pipe Dia. (in)	O.D. (in)	Wall Thickness (in)	I. D. (in)	Pipe Weight (p/f)	Water Weight (p/f)	Total Weight (p/f)
1	1.315	0.109	1.097	1.41	0.42	1.83
1¼	1.660	0.109	1.442	1.81	0.73	2.54
1½	1.900	0.109	1.682	2.09	0.99	3.08
2	2.375	0.109	2.157	2.64	1.63	4.28
2½	2.875	0.120	2.635	3.53	2.44	5.97
3	3.500	0.120	3.260	4.34	3.73	8.07
3½	4.000	0.120	3.760	4.98	4.97	9.95
4	4.500	0.120	4.260	5.62	6.38	12.00
5	5.563	0.134	5.295	7.78	9.85	17.63
6	6.625	0.134	6.357	9.30	14.20	23.50
8	8.625	0.188	8.249	16.96	23.91	40.87
10	10.750	0.188	10.374	21.23	37.82	59.04

NFPA 13 REQUIRED TRAPEZE SECTION MODULUS FOR SCH 10 PIPE

Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	0.08	0.09	0.09	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.24	0.32
2' - 0"	0.11	0.12	0.12	0.13	0.13	0.15	0.16	0.17	0.20	0.24	0.32	0.43
2' - 6"	0.14	0.14	0.15	0.16	0.17	0.18	0.20	0.21	0.25	0.30	0.40	0.54
3' - 0"	0.17	0.17	0.18	0.19	0.20	0.22	0.24	0.26	0.31	0.36	0.48	0.65
4' - 0"	0.22	0.23	0.24	0.25	0.27	0.29	0.32	0.34	0.41	0.48	0.64	0.87
5' - 0"	0.28	0.29	0.30	0.31	0.34	0.37	0.40	0.43	0.51	0.59	0.80	1.08
6' - 0"	0.33	0.35	0.36	0.38	0.41	0.44	0.48	0.51	0.61	0.71	0.97	1.30
7' - 0"	0.39	0.40	0.41	0.44	0.47	0.52	0.55	0.60	0.71	0.83	1.13	1.52
8' - 0"	0.44	0.46	0.47	0.50	0.54	0.59	0.63	0.68	0.81	0.95	1.29	1.73
9' - 0"	0.50	0.52	0.53	0.56	0.61	0.66	0.71	0.77	0.92	1.07	1.45	1.95
10' - 0"	0.56	0.58	0.59	0.63	0.68	0.74	0.79	0.85	1.02	1.19	1.61	2.17

Values taken from NFPA 13 (1994 Edition), Table 2-6.1.5(a)

SINGLE CHANNEL TRAPEZE FOR SCH 10 PIPE

Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	P3000	P3000	P3000	P3000	P3000	P3000	P3000	P3000	P3000	P1000	P5500	P5500
2' - 0"	P3000	P3000	P3000	P3000	P3000	P3000	P1000	P1000	P1000	P5500	P5500	P5000
2' - 6"	P3000	P3000	P3000	P1000	P1000	P1000	P1000	P5500	P5500	P5500	P5000	P5000
3' - 0"	P1000	P1000	P1000	P1000	P1000	P5500	P5500	P5500	P5500	P5500	P5000	N/A
4' - 0"	P5500	P5500	P5500	P5500	P5500	P5500	P5500	P5500	P5000	P5000	N/A	N/A
5' - 0"	P5500	P5500	P5500	P5500	P5500	P5500	P5000	P5000	P5000	P5000	N/A	N/A
6' - 0"	P5500	P5500	P5500	P5500	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A
7' - 0"	P5500	P5000	P5000	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A
8' - 0"	P5000	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A
9' - 0"	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10' - 0"	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DOUBLE CHANNEL TRAPEZE FOR SCH 10 PIPE

Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001
2' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001
2' - 6"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501
3' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P5501	P5501
4' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501	P5501	P5501
5' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P1001	P5501	P5501	P5501	P5001
6' - 0"	P3001	P3001	P3001	P3001	P1001	P1001	P1001	P5501	P5501	P5501	P5001	P5001
7' - 0"	P3001	P3001	P3001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5001	N/A
8' - 0"	P1001	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5001	P5001	N/A
9' - 0"	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5001	N/A	N/A
10' - 0"	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5501	P5001	P5001	N/A	N/A

Channel Selection for Schedule 40 Sprinkler Pipe Trapeze Hangers

Note: Based on NFPA-13-1996 Section Modulus Table 3-10.1.7(a). Each of the following tables indicate the allowable span of the trapeeze and the nominal pipe size for the specified channel . An entry of "–" indicates that the channel cannot be used for this span/pipe size combination. The table is based on a maximum allowable bending stress of 15 KSI and a midspan concentrated load from 15 ft of water-filled pipe, plus 250 lb.

SCHEDULE 40 PIPE						
Nominal Pipe Dia. (in)	O.D. (in)	Wall Thickness (in)	I. D. (in)	Pipe Weight (p/f)	Water Weight (p/f)	Total Weight (p/f)
1	1.315	0.133	1.049	1.68	0.39	2.07
1¼	1.660	0.140	1.380	2.27	0.67	2.94
1½	1.900	0.145	1.610	2.72	0.91	3.63
2	2.375	0.154	2.067	3.66	1.50	5.16
2½	2.875	0.203	2.469	5.80	2.14	7.94
3	3.500	0.216	3.068	7.58	3.31	10.89
3½	4.000	0.226	3.548	9.12	4.42	13.54
4	4.500	0.237	4.026	10.80	5.70	16.50
5	5.563	0.258	5.047	14.63	8.95	23.58
6	6.625	0.280	6.065	18.99	12.93	31.92
8	8.625	0.322	7.981	28.58	22.38	50.96
10	10.750	0.365	10.020	40.52	35.28	75.80

NFPA 13 REQUIRED TRAPEZE SECTION MODULUS FOR SCH 40 PIPE												
Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	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' - 0"	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' - 6"	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' - 0"	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' - 0"	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' - 0"	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' - 0"	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' - 0"	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' - 0"	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' - 0"	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' - 0"	0.56	0.59	0.61	0.65	0.74	0.82	0.90	0.99	1.20	1.44	2.01	2.74

Values taken from NFPA 13 (1994 Edition), Table 2-6.1.5(a)

SINGLE CHANNEL TRAPEZE FOR SCH 40 PIPE												
Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	P3000	P3000	P3000	P3000	P3000	P3000	P3000	P3000	P1000	P5500	P5500	P5000
2' - 0"	P3000	P3000	P3000	P3000	P3000	P1000	P1000	P1000	P5500	P5500	P5000	P5000
2' - 6"	P3000	P3000	P3000	P1000	P1000	P5500	P5500	P5500	P5500	P5500	P5000	N/A
3' - 0"	P1000	P1000	P1000	P1000	P5500	P5500	P5500	P5500	P5500	P5000	P5000	N/A
4' - 0"	P5500	P5500	P5500	P5500	P5500	P5500	P5500	P5000	P5000	P5000	N/A	N/A
5' - 0"	P5500	P5500	P5500	P5500	P5500	P5000	P5000	P5000	P5000	N/A	N/A	N/A
6' - 0"	P5500	P5500	P5500	P5500	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A
7' - 0"	P5500	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A
8' - 0"	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9' - 0"	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10' - 0"	P5000	P5000	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DOUBLE CHANNEL TRAPEZE FOR SCH 40 PIPE												
Trapeze Span	Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001
2' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001
2' - 6"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501
3' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P5501	P5501
4' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501	P5501	P5501
5' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P1001	P5501	P5501	P5501	P5001
6' - 0"	P3001	P3001	P3001	P3001	P1001	P1001	P1001	P5501	P5501	P5501	P5001	P5001
7' - 0"	P3001	P3001	P3001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5001	N/A
8' - 0"	P1001	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5001	P5001	N/A
9' - 0"	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5001	N/A	N/A
10' - 0"	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5501	P5001	P5001	N/A	N/A

Electrical Metallic Tubing (EMT) - *Thin Wall*

Tubing Size (Nominal) In	Outside Diameter In *(mm)*	Inside Diameter In *(mm)*	Weight Of Tubing Lbs/Ft *(kg/m)*
⅜	0.577 *14.7*	0.497 *12.6*	0.23 *0.34*
½	0.706 *17.9*	0.626 *15.9*	0.29 *0.43*
¾	0.922 *23.4*	0.830 *21.1*	0.44 *0.65*
1	1.163 *29.5*	1.055 *26.8*	0.64 *0.95*
1¼	1.510 *38.4*	1.388 *35.3*	0.95 *1.41*
1½	1.740 *44.2*	1.618 *41.1*	1.10 *1.64*
2	2.197 *55.8*	2.075 *52.7*	1.40 *2.08*
2½	2.875 *73.0*	2.731 *69.4*	2.30 *3.42*
3	3.500 *88.9*	3.356 *85.2*	2.70 *4.02*
3½	4.000 *101.6*	3.834 *97.4*	3.40 *5.06*
4	4.500 *114.3*	4.334 *110.1*	4.00 *5.95*

Intermediate Metallic Conduit (IMC)

Conduit Size (Nominal) In	Outside Diameter In *(mm)*	Inside Diameter In *(mm)*	Weight Of Conduit Lbs/Ft *(kg/m)*	Weight of Conduit and Conductor Lbs/Ft *(kg/m)*
½	0.815 *20.7*	0.745 *18.9*	0.60 *0.89*	0.12 *0.18*
¾	1.029 *26.1*	0.954 *24.2*	0.82 *1.22*	1.13 *1.68*
1	1.290 *32.8*	1.205 *30.6*	1.16 *1.73*	1.82 *2.71*
1¼	1.638 *41.6*	1.553 *39.4*	1.50 *2.23*	2.67 *3.97*
1½	1.883 *47.8*	1.793 *45.5*	1.82 *2.71*	3.42 *5.09*
2	2.360 *59.9*	2.266 *57.6*	2.42 *3.60*	5.04 *7.50*
2½	2.857 *72.6*	2.727 *69.3*	4.01 *5.97*	7.75 *11.53*
3	3.476 *88.3*	3.346 *85.0*	4.43 *6.59*	10.69 *15.91*
3½	3.971 *100.9*	3.841 *97.6*	5.73 *8.53*	13.46 *20.03*
4	4.466 *113.4*	4.336 *110.1*	6.38 *9.49*	16.37 *24.36*

Copper Tube (Type L)

Nom. Tube Size	O.D. Tubing In *(mm)*	O.D. In *(mm)*	Wall Thick. In *(mm)*	Wt./Ft. Lbs *(kg)*	Wt. Water/Ft Lbs *(kg)*
¼"	⅜ *10*	0.375 *9.5*	0.030 *0.8*	0.126 *3.2*	0.034 *0.9*
⅜"	½ *13*	0.500 *12.7*	0.035 *0.9*	0.198 *5.0*	0.062 *1.6*
½"	⅝ *16*	0.625 *15.9*	0.040 *1.0*	0.285 *7.2*	0.100 *2.5*
⅝"	¾ *19*	0.750 *19.1*	0.042 *1.1*	0.362 *9.2*	0.151 *3.8*
¾"	⅞ *22*	0.875 *22.2*	0.045 *1.1*	0.455 *11.6*	0.209 *5.3*
1"	1⅛ *29*	1.125 *28.6*	0.050 *1.3*	0.655 *16.6*	0.357 *9.1*
1¼"	1⅜ *35*	1.375 *34.9*	0.055 *1.4*	0.884 *22.5*	0.546 *13.9*
1½"	1⅝ *41*	1.625 *41.3*	0.060 *1.5*	1.140 *29.0*	0.767 *19.5*
2"	2⅛ *54*	2.125 *54.0*	0.070 *1.8*	1.750 *44.5*	1.341 *34.1*
2½"	2⅝ *67*	2.625 *66.7*	0.080 *2.0*	2.480 *63.0*	2.064 *52.4*
3"	3⅛ *79*	3.125 *79.4*	0.090 *2.3*	3.330 *84.6*	2.949 *74.9*
3½"	3⅝ *92*	3.625 *92.1*	0.100 *2.5*	4.290 *109.0*	3.989 *101.3*
4"	4⅛ *105*	4.125 *104.8*	0.110 *2.8*	5.380 *136.7*	5.188 *131.8*
5"	5⅛ *130*	5.125 *130.2*	0.125 *3.2*	7.610 *193.3*	8.081 *205.3*
6"	6⅛ *156*	6.125 *155.6*	0.140 *3.6*	10.200 *259.1*	11.616 *295.0*
8"	8⅛ *206*	8.125 *206.4*	0.200 *5.1*	19.290 *490.0*	20.289 *515.3*
10"	10⅛ *257*	10.125 *257.2*	0.250 *6.4*	30.100 *764.5*	31.590 *802.4*
12"	12⅛ *308*	12.125 *308.0*	0.280 *7.1*	40.400 *1,026.2*	45.426 *1,153.8*

Copper Tube (Type K)

Nom. Tube Size	O.D. Tubing In *(mm)*	O.D. In *(mm)*	Wall Thick. In *(mm)*	Wt./Ft. Lbs *(kg)*	Wt. Water/Ft Lbs *(kg)*
¼"	⅜ *10*	0.375 *9.53*	0.035 *0.89*	0.145 *3.68*	0.032 *0.81*
⅜"	½ *13*	0.500 *12.70*	0.005 *0.13*	0.269 *6.83*	0.055 *1.40*
½"	⅝ *16*	0.625 *15.88*	0.049 *1.24*	0.344 *8.74*	0.094 *2.39*
⅝"	¾ *19*	0.750 *19.05*	0.049 *1.24*	0.418 *10.62*	0.144 *3.66*
¾"	⅞ *22*	0.875 *22.23*	0.065 *1.65*	0.641 *16.28*	0.188 *4.78*
1"	1⅛ *29*	1.125 *28.58*	0.065 *1.65*	0.839 *21.31*	0.337 *8.56*
1¼"	1⅜ *35*	1.375 *34.93*	0.065 *1.65*	1.040 *26.42*	0.527 *13.39*
1½"	1⅝ *41*	1.625 *41.28*	0.072 *1.83*	1.360 *34.54*	0.743 *18.87*
2"	2⅛ *54*	2.125 *53.98*	0.083 *2.11*	2.060 *52.32*	1.310 *33.27*
2½"	2⅝ *67*	2.625 *66.68*	0.095 *2.41*	2.920 *74.17*	2.000 *50.80*
3"	3⅛ *79*	3.125 *79.38*	0.109 *2.77*	4.000 *101.60*	2.960 *75.18*
3½"	3⅝ *92*	3.625 *92.08*	0.120 *3.05*	5.120 *130.05*	3.900 *99.06*
4"	4⅛ *105*	4.125 *104.78*	0.134 *3.40*	6.510 *165.35*	5.060 *128.52*
5"	5⅛ *130*	5.125 *130.18*	0.160 *4.06*	9.670 *245.62*	8.000 *203.20*
6"	6⅛ *156*	6.125 *155.58*	0.192 *4.88*	13.870 *352.30*	11.200 *284.48*
8"	8⅛ *206*	8.125 *206.38*	0.271 *6.88*	25.900 *657.86*	19.500 *495.30*
10"	10⅛ *257*	10.125 *257.18*	0.338 *8.59*	40.300 *1,023.62*	30.423 *772.74*
12"	12⅛ *308*	12.125 *307.98*	0.405 *10.29*	57.800 *1,468.12*	43.675 *1,109.35*

Rigid Steel (Heavy Duty) Conduit

Conduit Size (Nominal) In	I. D. Of Conduit In *(mm)*	O. D. Of Conduit In *(mm)*	O. D. Of Coupling In *(mm)*	Weight of Conduit Lbs/Ft *(kg/m)*	Maximum Weight* Of Conduit And Conductor Lead Covered Lbs/Ft *(kg/m)*	Not Lead Covered Lbs/Ft *(kg/m)*
½	0.622 *15.8*	0.840 *21.3*	1.063 *27.0*	0.85 *1.26*	1.20 *1.79*	1.00 *1.49*
¾	0.824 *20.9*	1.050 *26.7*	1.297 *32.9*	1.13 *1.68*	1.80 *2.68*	1.40 *2.08*
1	1.049 *26.6*	1.315 *33.4*	1.563 *39.7*	1.68 *2.50*	2.60 *3.87*	2.30 *3.42*
1¼	1.380 *35.1*	1.660 *42.2*	1.969 *50.0*	2.28 *3.39*	4.30 *6.40*	3.60 *5.36*
1½	1.610 *40.9*	1.900 *48.3*	2.234 *56.7*	2.73 *4.06*	5.90 *8.78*	4.50 *6.70*
2	2.067 *52.5*	2.375 *60.3*	2.719 *69.1*	3.68 *5.48*	8.50 *12.65*	7.20 *10.71*
2½	2.469 *62.7*	2.875 *73.0*	3.313 *84.2*	5.82 *8.66*	11.50 *17.11*	10.20 *15.18*
3	3.068 *77.9*	3.500 *88.9*	3.938 *100.0*	7.62 *11.34*	16.50 *24.55*	14.50 *21.58*
3½	3.548 *90.1*	4.000 *101.6*	4.438 *112.7*	9.20 *13.69*	19.00 *28.28*	17.50 *26.04*
4	4.026 *102.3*	4.500 *114.3*	4.938 *125.4*	10.89 *16.21*	24.80 *36.91*	21.50 *32.00*
5	5.047 *128.2*	5.563 *141.3*	6.296 *159.9*	14.81 *22.04*	35.90 *53.43*	30.80 *45.84*
6	6.065 *154.1*	6.625 *168.3*	7.358 *186.9*	19.19 *28.56*	50.70 *75.45*	43.40 *64.59*

* Maximum weight equals weight of rigid conduit plus weight of heaviest conductor combination (from the National Electrical Code Handbook.)

Nominal Pipe Size In	Max. Span Ft *(m)*	Nominal Pipe Size In	Max. Span Ft *(m)*
1	7 *2.13*	8	19 *5.79*
1½	9 *2.74*	10	22 *6.71*
2	10 *3.05*	12	23 *7.01*
2½	11 *3.35*	14	25 *7.62*
3	12 *3.66*	16	27 *8.23*
3½	13 *3.96*	18	28 *8.53*
4	14 *4.27*	20	30 *9.14*
5	16 *4.88*	24	32 *9.75*

The above spacing based on a combined bending and shear stress of 1500 PSI when pipe is filled with water and the pitch of the line is such that a sag of 0.1 in. between supports is permissible.

Conduit Supports

346-12. Supports. Rigid metal conduit shall be installed as a complete system as provided in Article 300 and shall be securely fastened in place. Conduit shall be firmly fastened within 3 feet (914 mm) of each outlet box, junction box, cabinet, or fitting. Conduit shall be supported at least every 10 feet (3.05 m).

Exception: If made up with threaded couplings, it shall be permissible to support straight runs of rigid metal conduit in accordance with Table 346-12, provided such supports prevent transmission of stresses to termination where conduit is deflected between supports.

Table 346-12
Support for Rigid Metal Conduit

Conduit Size In *(mm)*	Maximum Distance Between Supports Ft *(m)*
½-¾ *12.7 - 19.1*	10 *3.05*
1 *25.4*	12 *3.66*
1¼- 1½ *31.8 - 38.1*	14 *4.27*
2- 2½ *50.8 - 63.5*	16 *4.88*
3 & larger *76.2 - Larger*	20 *6.10*

Schedule 40: PVC Plastic Pipe

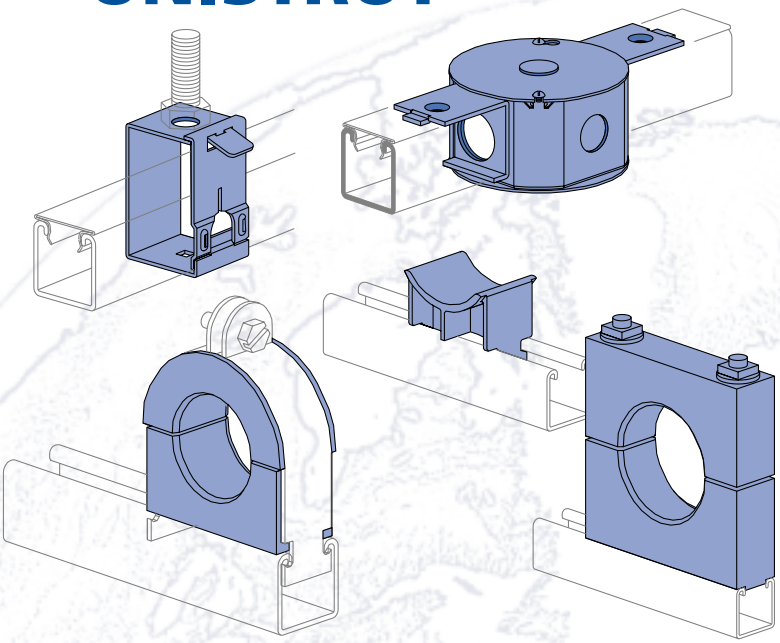
Pipe Size (Nominal) In	Outside Diameter In*(mm)*	Inside Diameter In *(mm)*	Pipe Weight Lbs/Ft *(kg/m)*	Pipe and Water Weight Lbs/Ft *(kg/m)*
¼	0.540 *13.7*	0.354 *9.0*	0.081 *0.12*	0.12 *0.18*
⅜	0.675 *17.1*	0.483 *12.3*	0.109 *0.16*	0.19 *0.28*
½	0.840 *21.3*	0.608 *15.4*	0.161 *0.24*	0.29 *0.43*
¾	1.050 *26.7*	0.810 *20.6*	0.214 *0.32*	0.44 *0.65*
1	1.315 *33.4*	1.033 *26.2*	0.315 *0.47*	0.68 *1.01*
1¼	1.660 *42.2*	1.364 *34.6*	0.426 *0.63*	1.06 *1.58*
1½	1.900 *48.3*	1.592 *40.4*	0.509 *0.76*	1.37 *2.04*
2	2.375 *60.3*	2.049 *52.0*	0.682 *1.01*	2.11 *3.14*
2½	2.875 *73.0*	2.445 *62.1*	1.076 *1.60*	3.11 *4.63*
3	3.500 *88.9*	3.042 *77.3*	1.409 *2.10*	4.55 *6.77*
4	4.500 *114.3*	3.998 *101.5*	2.006 *2.99*	7.44 *11.07*
6	6.625 *168.3*	6.031 *153.2*	3.535 *5.26*	15.90 *23.66*
8	8.625 *219.1*	7.943 *201.8*	5.305 *7.89*	26.75 *39.81*
10	10.750 *273.1*	9.976 *253.4*	7.532 *11.21*	41.35 *61.54*

Data for Schedule Steel Pipe

Nom. Size In	Pipe Schedule	Outside Dia. In *(mm)*	Inside Dia. In *(mm)*	Pipe Weight Lbs/Ft *(kg/m)*	Pipe and Water Weight Lbs/Ft *(kg/m)*
⅛	40	0.405 *10.3*	0.269 *6.8*	0.24 *0.11*	0.27 *0.12*
	80	0.405 *10.3*	0.215 *5.5*	0.31 *0.14*	0.33 *0.15*
¼	40	0.540 *13.7*	0.364 *9.2*	0.42 *0.19*	0.47 *0.21*
	80	0.540 *13.7*	0.302 *7.7*	0.53 *0.24*	0.57 *0.26*
⅜	40	0.675 *17.1*	0.493 *12.5*	0.57 *0.26*	0.65 *0.29*
	80	0.675 *17.1*	0.423 *10.7*	0.74 *0.33*	0.80 *0.36*
½	40	0.840 *21.3*	0.622 *15.8*	0.85 *0.39*	0.98 *0.45*
	80	0.840 *21.3*	0.546 *13.9*	1.09 *0.49*	1.19 *0.54*
	160	0.840 *21.3*	0.464 *11.8*	1.31 *0.59*	1.38 *0.63*
¾	40	1.050 *26.7*	0.824 *20.9*	1.13 *0.51*	1.36 *0.62*
	80	1.050 *26.7*	0.742 *18.8*	1.47 *0.67*	1.66 *0.75*
	160	1.050 *26.7*	0.612 *15.5*	1.94 *0.88*	2.07 *0.94*
1	40	1.315 *33.4*	1.049 *26.6*	1.68 *0.76*	2.05 *0.93*
	80	1.315 *33.4*	0.957 *24.3*	2.17 *0.98*	2.48 *1.13*
	160	1.315 *33.4*	0.815 *20.7*	2.84 *1.29*	3.07 *1.39*
1¼	40	1.660 *42.2*	1.380 *35.1*	2.27 *1.03*	2.92 *1.32*
	80	1.660 *42.2*	1.278 *32.5*	2.99 *1.36*	3.55 *1.61*
	160	1.660 *42.2*	1.160 *29.5*	3.76 *1.71*	4.22 *1.91*
1½	40	1.900 *48.3*	1.610 *40.9*	2.71 *1.23*	3.60 *1.63*
	80	1.900 *48.3*	1.500 *38.1*	3.63 *1.65*	4.39 *1.99*
	160	1.900 *48.3*	1.338 *34.0*	4.85 *2.20*	5.46 *2.48*
2	40	2.375 *60.3*	2.067 *52.5*	3.65 *1.66*	5.10 *2.32*
	80	2.375 *60.3*	1.939 *49.3*	5.02 *2.28*	6.30 *2.86*
	160	2.375 *60.3*	1.687 *42.8*	7.45 *3.38*	8.42 *3.82*
2½	40	2.875 *73.0*	2.469 *62.7*	5.79 *2.62*	7.86 *3.57*
	80	2.875 *73.0*	2.323 *59.0*	7.65 *3.47*	9.49 *4.30*
	160	2.875 *73.0*	2.125 *54.0*	10.00 *4.54*	11.54 *5.23*
3	40	3.500 *88.9*	3.068 *77.9*	7.57 *3.43*	10.77 *4.89*
	80	3.500 *88.9*	2.900 *73.7*	10.24 *4.65*	13.11 *5.94*
	160	3.500 *88.9*	2.624 *66.6*	14.31 *6.49*	16.65 *7.55*
3½	40	4.000 *101.6*	3.548 *90.1*	9.10 *4.13*	13.39 *6.07*
	80	4.000 *101.6*	3.364 *85.4*	12.49 *5.67*	16.35 *7.41*
4	40	4.500 *114.3*	4.026 *102.3*	10.78 *4.89*	16.30 *7.39*
	80	4.500 *114.3*	3.826 *97.2*	14.97 *6.79*	19.95 *9.05*
	120	4.500 *114.3*	3.624 *92.0*	18.98 *8.61*	23.45 *10.64*
	160	4.500 *114.3*	3.438 *87.3*	22.48 *10.20*	26.51 *12.02*
5	40	5.563 *141.3*	5.047 *128.2*	14.60 *6.62*	23.27 *10.56*
	80	5.563 *141.3*	4.813 *122.2*	20.75 *9.41*	28.64 *12.99*
	120	5.563 *141.3*	4.563 *115.9*	27.01 *12.25*	34.09 *15.46*
	160	5.563 *141.3*	4.313 *109.5*	32.92 *14.93*	39.26 *17.81*
6	40	6.625 *168.3*	6.065 *154.1*	18.95 *8.60*	31.48 *14.28*
	80	6.625 *168.3*	5.761 *146.3*	28.54 *12.95*	39.84 *18.07*
	120	6.625 *168.3*	5.501 *139.7*	36.35 *16.49*	46.66 *21.16*
	160	6.625 *168.3*	5.187 *131.7*	45.30 *20.55*	54.47 *24.71*
8	20	8.625 *219.1*	8.125 *206.4*	22.34 *10.13*	44.82 *20.33*
	30	8.625 *219.1*	8.071 *205.0*	24.67 *11.19*	46.85 *21.25*
	40	8.625 *219.1*	7.981 *202.7*	28.52 *12.94*	50.21 *22.78*
	60	8.625 *219.1*	7.813 *198.5*	35.60 *16.15*	56.39 *25.58*
	80	8.625 *219.1*	7.625 *193.7*	43.34 *19.66*	63.14 *28.64*
	100	8.625 *219.1*	7.437 *188.9*	50.89 *23.09*	69.73 *31.63*
	120	8.625 *219.1*	7.187 *182.5*	60.65 *27.51*	78.23 *35.49*
	140	8.625 *219.1*	7.001 *177.8*	67.68 *30.70*	84.37 *38.27*
	160	8.625 *219.1*	6.813 *173.1*	74.61 *33.84*	90.42 *41.01*
10	20	10.750 *273.1*	10.250 *260.4*	28.01 *12.70*	63.78 *28.93*
	30	10.750 *273.1*	10.136 *257.5*	34.20 *15.51*	69.19 *31.38*
	40	10.750 *273.1*	10.020 *254.5*	40.44 *18.34*	74.63 *33.85*
	60	10.750 *273.1*	9.750 *247.7*	54.68 *24.80*	87.05 *39.48*
	80	10.750 *273.1*	9.562 *242.9*	64.36 *29.19*	95.50 *43.32*
	100	10.750 *273.1*	9.312 *236.5*	76.95 *34.90*	106.47 *48.30*
	120	10.750 *273.1*	9.062 *230.2*	89.20 *40.46*	117.16 *53.14*
	140	10.750 *273.1*	8.750 *222.3*	104.02 *47.18*	130.09 *59.01*
	160	10.750 *273.1*	8.500 *215.9*	115.52 *52.40*	140.13 *63.56*

ELECTRICAL FITTINGS

UNISTRUT®



MATERIAL

Unistrut fittings, unless noted, are made from hot-rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A575, A576, A635, or A36. The fitting steel also meets the physical requirements of ASTM A1011 SS GR 33. The pickling of the steel produces a smooth surface free from scale.

Maple cable saddles, cable clamps and bus bar clamps are made from kiln-dry maple treated with paraffin to a depth of 1/16" (1.6mm). Special sizes of clamps can be fabricated upon request. Porcelain cable clamps are made by the dry process and white glazed. Cable saddles are fiberglass-reinforced polyester.

CHANNEL RACEWAYS

The Unistrut Metal Framing System includes an exclusive combination of channel, fittings and hardware listed under new UL classification 5B. This classification covers strut-type channel raceways and fittings for use in accordance with Article 352 of the National Electrical Code, NFPA 70. Included are metal strut-type channel raceways at least .071 inch (1.81mm) thick and metal or non-metal closure strips at least .040 inch (1.02mm) thick.

The Unistrut system requires no welding, drilling or other complex fabrication techniques. This means faster, easier solutions for virtually any electrical support problem.

Unistrut channel offers structural and spanning capabilities not available with conventional surface raceway products and is available in continuous lengths of up to 20 feet. Just as important, it is part of an integrated system that can be used for raceways, trapeze hangers, cable-tray supports, lighting grids, fluorescent-fixture supports and countless other electrical applications.

CHANNEL COMPATABILITY

All of the electrical components in this section are intended for use with any of the 1⅝" wide channel. They are not intended for use with 1¼" or 13/16" framing systems.

FINISHES

Components listed in this section are available in: electro-galvanized (EG), conforming to ASTM B633 Type III SC1; Hot-dipped galvanized (HG), conforming to ASTM A123 or A153, Perma-Green II (GR), and plain (PL).
Note: Many Unistrut Metal Framing components, when used with appropriate closures, are UL® listed, and CSA approved.

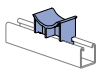
DESIGN LOAD

Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 2.5, unless otherwise noted.

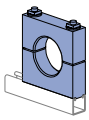
DIMENSIONS

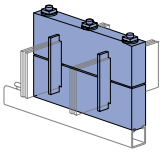
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

Electrical Fittings


P1753-Pg 163


P2649 A-Pg 163


P2645 A-Pg 163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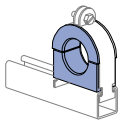
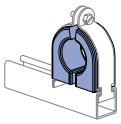
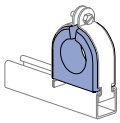
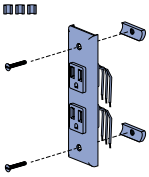
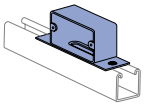
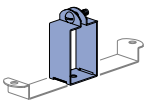

P1690-Pg 164


P1787-Pg 165


P1787 A-Pg 166


P2557-Pg 167


P2567-Pg 167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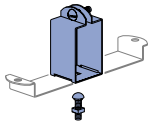
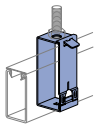
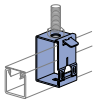
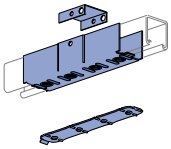
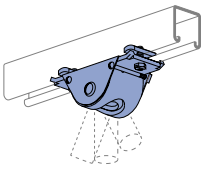
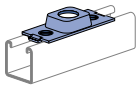

P2539-Pg 168

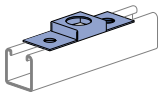

P2755-Pg 168

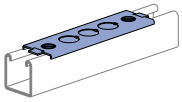

P2855-Pg 168


P3922-Pg 169


P2534-50-Pg 169


P2535-Pg 170


P2536-Pg 170


P2522-Pg 170


P3521-50-Pg 170


P2521-50-Pg 170


P5521-50-Pg 170

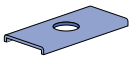

P5021-50-Pg 171


P2521-100-Pg 171


P5021-100-Pg 171

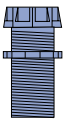

P5521-100-Pg 171


P1180 W-Pg 171

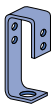

P2541-Pg 172

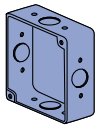

P2552-Pg 172

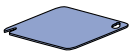

P2540-Pg 172


P2603-Pg 172


P3116-125-Pg 172


P2602-Pg 173


P2801-Pg 173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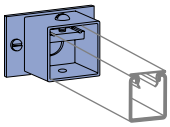
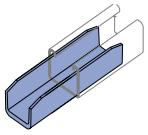
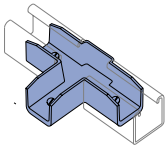
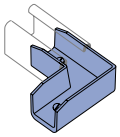
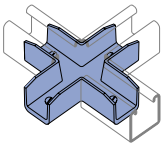
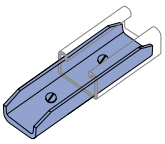

P2803-Pg 173


P2900-Pg 174

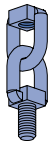

P2901-Pg 174


P2902-Pg 174

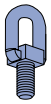

P2903-Pg 174


P2904-Pg 174


M2037-Pg 175

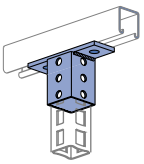

M2137-Pg 175

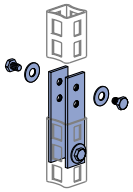

M2250-Pg 175

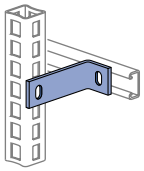

M2350-Pg 175

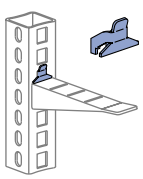

P16F-Pg 176

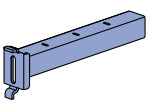

P21H-Pg 176

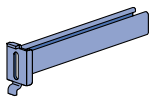

P2820-Pg 178


P2822-Pg 178

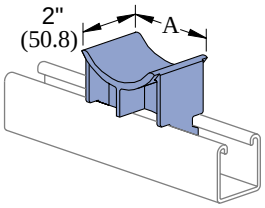

P2823-Pg 178


P2821-Pg 178


P2920-Pg 179


P2928-Pg 179

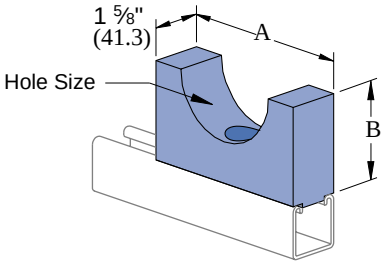
P1753, P1754 — Cable Saddles



Part Number	"A" In *(mm)*	Maximum Cable Diameter In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1753 FG	2 13/16 *71.4*	3 *76.2*	12 *5.4*
P1754 FG	3¾ *95.3*	4½ *114.3*	17 *7.7*
P1753 PO	3 *76.2*	3 *76.2*	75 *34.0*
P1754 PO	4 *101.6*	4½ *114.3*	95 *43.1*

Material: FG - Fiberglass Reinforced Polyester,
PO - Dry Process White Glazed Porcelain

P2649A thru P2649H — Maple Cable Saddles

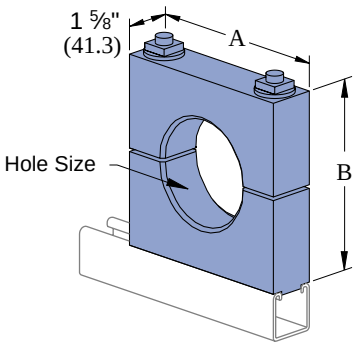


Part Number	Hole Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2649A	0 - 1 *0 - 25.4*	3 *76.2*	1¾ *44.5*	31 *14.1*
P2649B	1 - 1½ *25.4 x 38.1*	3½ *88.9*	2 *50.8*	38 *17.2*
P2649C	1½ - 2 *38.1 - 50.8*	4 *101.6*	2¼ *57.2*	47 *21.3*
P2649D	2 - 2½ *50.8 x 63.5*	4½ *114.3*	2½ *63.5*	57 *25.9*
P2649E	2½ - 3 *63.5 - 76.2*	5 *127.0*	2¾ *69.9*	68 *30.8*
P2649F	3 - 3½ *76.2 x 88.9*	5½ *139.7*	3 *76.2*	80 *36.3*
P2649G	3½ - 4 *88.9 - 101.6*	6 *152.4*	3¼ *82.6*	94 *42.6*
P2649H	over 4 *over 101.6*			

- ⅜" Flat Head Machine Screw included.
- Specify hole size when ordering.
- Order channel nuts as required.

Material: Maple hardwood paraffin impregnated.

P2645A thru P2645H — Maple Cable Clamps

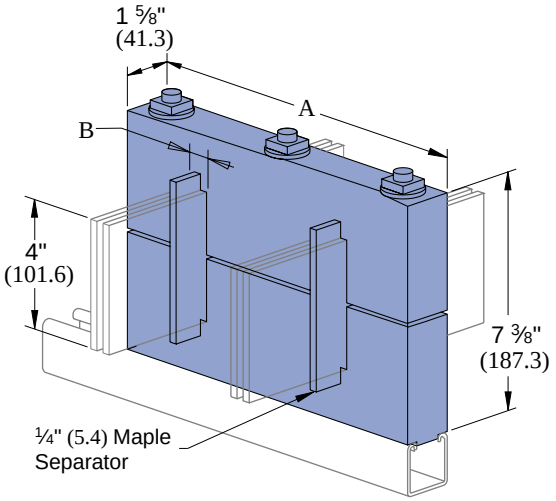


Part Number	Hole Size In *(mm)*	"A" & "B" Dimensions In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2645A	0 - 1 *0 - 25.4*	3½ *88.9*	84 *38.1*
P2645B	1 - 1½ *25.4 x 38.1*	4 *101.6*	102 *46.3*
P2645C	1½ - 2 *38.1 - 50.8*	4½ *114.3*	121 *54.9*
P2645D	2 - 2½ *50.8 x 63.5*	5½ *139.7*	165 *74.8*
P2645E	2½ - 3 *63.5 - 76.2*	6 *152.4*	189 *85.7*
P2645F	3 - 3½ *76.2 x 88.9*	6½ *165.1*	215 *97.5*
P2645G	3½ - 4 *88.9 - 101.6*	7 *177.8*	243 *110.2*
P2645H	over 4 *over 101.6*		

- ⅜" studs, square nuts and washers included.
- Specify hole size when ordering.
- Order channel nuts as required.

Material: Maple hardwood paraffin impregnated.

P2647A thru P2647F — 4" (101.6) Bus Bar Maple Clamps

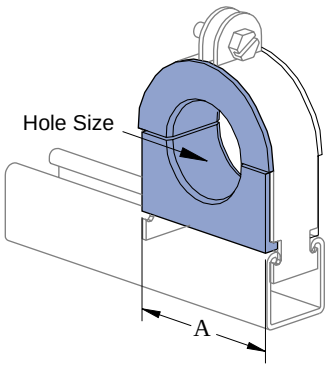


- ½" studs, square nuts and washers are included.
- Channel nuts must be ordered separately.
- Bus bar maple clamps also available in ¼" (6.4) x 2" (50.8) and ¼" (6.4) x 6" (152.4).

Part Number	"A" In *(mm)*	"B" In *(mm)*	No. Bus Separators	No. Bars Per Leg	Wt/100 pcs Lbs *(kg)*
P2647A	8½ *215.9*	9/32 *7.1*	0	1	421 *191.0*
P2647B	9½ *241.3*	13/16 *20.6*	2	2	465 *210.9*
P2647C	10½ *266.7*	1 5/16 *33.3*	4	3	509 *230.9*
P2647D	11½ *292.1*	1 13/16 *46.0*	6	4	553 *250.8*
P2647E	12½ *317.5*	2⅜ *60.3*	8	5	597 *270.8*
P2647F	13½ *342.9*	2⅞ *73.0*	10	6	631 *286.2*

Material: Paraffin impregnated maple hardwood.

P1690 thru P1697 — Maple Cable Clamps



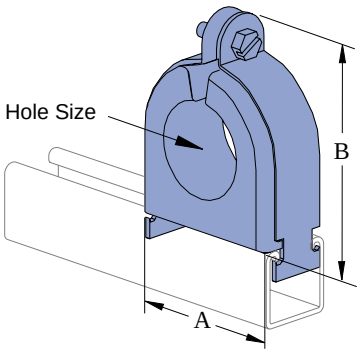
- Use with steel clamp and Everdur hardware. Order clamp separately.
- Specify hole size when ordering.

Part Number	Order Steel Clamp Number	Hole Size In *(mm)*	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1690	P1113 E	0 - 5/8 *0 - 15.9*	1½ *38.1*	24 *10.9*
P1691	P1115 E	½ - 1 *12.7- 25.4*	2⅛ *54.0*	42 *19.1*
P1692	P1117 E	¾ - 1½ *19.1 x 38.1*	2⅝ *66.7*	54 *24.5*
P1693	P1118 E	1¼ - 1¾ *31.8 x 44.5*	3 *76.2*	65 *29.5*
P1694	P1119 E	1½ - 2¼ *38.1 x 57.2*	3⅝ *92.1*	84 *38.1*
P1695	P1120 E	2 - 2½ *50.8 x 63.5*	4⅛ *104.8*	107 *48.5*
P1696	P1121 E	2¼ - 3 *57.2 - 76.2*	4⅝ *117.5*	123 *55.8*
P1697	P1123 E	3 - 4 *76.2 - 101.6*	5¾ *146.1*	163 *73.9*

Material: Paraffin impregnated maple hardwood.

P1787 thru P1795

Porce-A-Clamp™

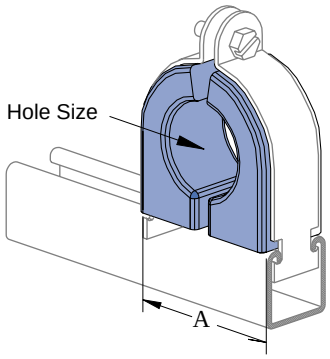


Patents Pending
Strap Material: Electro-galvanized Steel (EG) or Stainless Steel (SS)
Use With: All 1⅝" channel

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

Part Number	Hole Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1787A	⅜ *9.5*	1.36 *34.5*	1.82 *46.2*	25 *11.3*
P1787B	½ *12.7*			
P1787C	⅝ *15.9*			
P1788	¾ *19.1*	1.86 *47.2*	2.34 *59.4*	37 *16.8*
P1788A	⅞ *22.2*			
P1788B	1 *25.4*			
P1788C	1⅛ *28.6*			
P1789	1¼ *31.8*	2.36 *59.9*	2.86 *72.6*	58 *16.8*
P1789A	1⅜ *34.9*			
P1789B	1½ *38.1*			
P1789C	1⅝ *41.3*			
P1790	1¾ *44.5*	2.86 *72.6*	3.50 *88.9*	76 *34.5*
P1790A	1⅞ *47.6*			
P1790B	2 *50.8*			
P1790C	2⅛ *54.0*			
P1791	2¼ *57.2*	3.36 *85.3*	4.05 *102.9*	90 *40.8*
P1791A	2⅜ *60.3*			
P1791B	2½ *63.5*			
P1791C	2⅝ *66.7*			
P1792	2¾ *69.9*	3.86 *98.0*	4.75 *120.7*	109 *49.4*
P1792A	2⅞ *73.0*			
P1792B	3 *76.2*			
P1792C	3⅛ *79.4*			
P1793	3¼ *82.6*	4.36 *110.7*	5.125 *130.2*	130 *59.0*
P1793A	3⅜ *85.7*			
P1793B	3½ *88.9*			
P1793C	3⅝ *92.1*			
P1794	3¾ *95.3*	4.86 *184.2*	5.54 *140.7*	160 *72.6*
P1794A	3⅞ *98.4*			
P1794B	4 *101.6*			
P1794C	4⅛ *104.8*			
P1795	4¼ *108.0*	5.24 *133.1*	5.92 *150.4*	160 *72.6*
P1795A	4⅜ *111.1*			
P1795B	4½ *114.3*			

P1787A thru P1795B — Porcelain Cable Clamps



- Use with steel clamp and Everdur hardware.
- Order clamp separately.

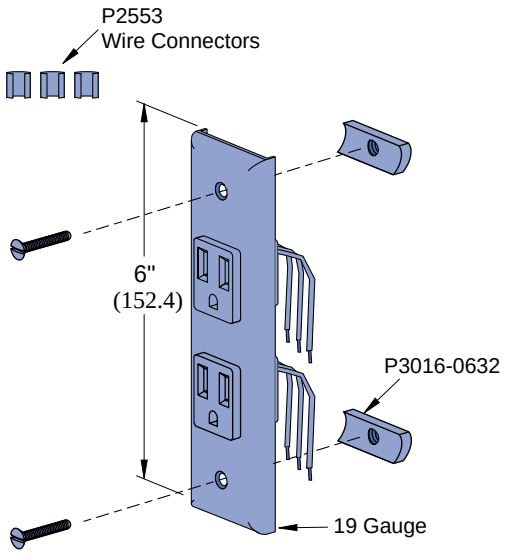
Material: Dry process porcelain white glaze (specified by PO suffix).

Part Number	Order Steel Clamp Number	Hole Size In *(mm)*	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1787A PO		⅜ *9.5*		51 *23.1*
P1787B PO	P1113E	½ *12.7*	1⅞ *47.6*	47 *21.3*
P1787C PO		⅝ *15.9*		46 *20.9*
P1788 PO		¾ *19.1*		85 *38.6*
P1788A PO		⅞ *22.2*		84 *38.1*
P1788B PO	P1115E	1 *25.4*	2⅜ *60.3*	83 *37.6*
P1788C PO		1⅛ *28.6*		76 *34.5*
P1789 PO		1¼ *31.8*		116 *52.6*
P1789A PO		1⅜ *34.9*		115 *52.2*
P1789B PO	P1117E	1½ *38.1*	2⅞ *73.0*	108 *49.0*
P1789C PO		1⅝ *41.3*		100 *45.4*
P1790 PO		1¾ *44.5*		229 *103.9*
P1790A PO		1⅞ *47.6*		224 *101.6*
P1790B PO	P1119E	2 *50.8*	4 *101.6*	204 *92.5*
P1790C PO		2⅛ *54.0*		184 *83.5*
P1791 PO		2¼ *57.2*		255 *115.7*
P1791A PO		2⅜ *60.3*		255 *115.7*
P1791B PO	P1120E	2½ *63.5*	4½ *114.3*	250 *113.4*
P1791C PO		2⅝ *66.7*		245 *111.1*

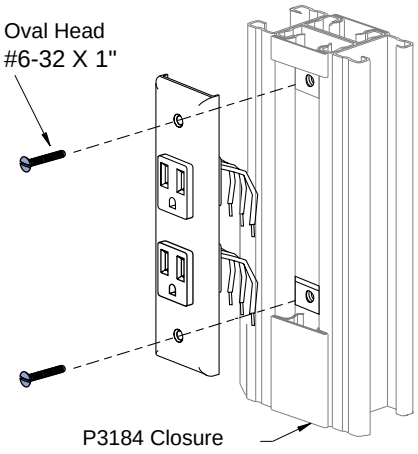
Part Number	Order Steel Clamp Number	Hole Size In *(mm)*	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1792 PO		2¾ *69.9*		322 *146.1*
P1792A PO	P1121E	2⅞ *73.0*		301 *136.5*
P1792B PO		3 *76.2*	5⅛ *130.2*	301 *136.5*
P1792C PO		3⅛ *79.4*		296 *134.3*
P1793 PO		3¼ *82.6*		460 *208.7*
P1793A PO		3⅜ *85.7*		440 *199.6*
P1793B PO	P1123E	3½ *88.9*	6⅛ *155.6*	433 *196.4*
P1793C PO		3⅝ *92.1*		423 *191.9*
P1794 PO		3¾ *95.3*		698 *316.6*
P1794A PO		3⅞ *98.4*		678 *307.5*
P1794B PO	P1124E	4 *101.6*	7¼ *184.2*	648 *293.9*
P1794C PO		4⅛ *104.8*		638 *289.4*
P1795 PO		4¼ *108.0*		648 *293.9*
P1795A PO	P1124E	4⅜ *111.1*	7¼ *184.2*	598 *271.2*
P1795B PO		4½ *114.3*		588 *266.7*

P2557 Duplex Grounded Receptacle

Wt/100 pcs: 38 Lbs (17.2 kg)



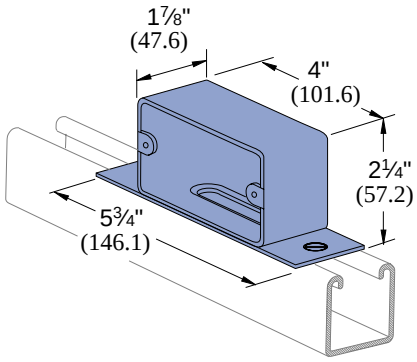
- 125 V, 15 amp receptacle, NEMA configuration 5-15R, cover plate.
- #6 screws, nuts and wire connectors included.
- Leads are 14 gauge 105°C plastic covered.
- Ground wire is green 16 gauge.



Finish: White powder coat.

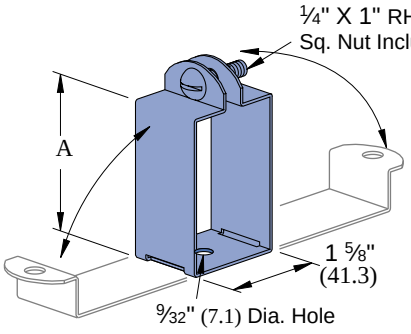
P2567 Outlet Box

Wt/100 pcs: 88 Lbs (47.8 kg)



Material: 14 Gauge (.075)
Assembly: 1 Box, 2 Screws, 2 Channel Nuts

P2537, P5537
Fluorescent Fixture Hangers



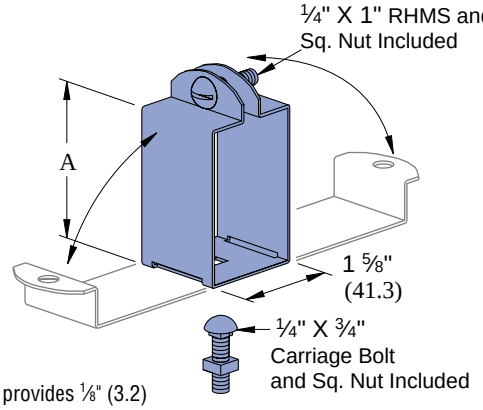
- Hanger provides more than ½" (12.7) space between channel and fixtures.

Materials: 18 gauge (1.2).

Design Load
120 Lbs (54.4 kg)

Part Number	Use With Channel	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2537	P1000 P1100 P3000	2 7⁄16 *61.9*	19 *8.6*
P5537	P5500	3¼ *82.6*	22 *10.0*

P2539, P3539, P5539
Fluorescent Fixture Hangers



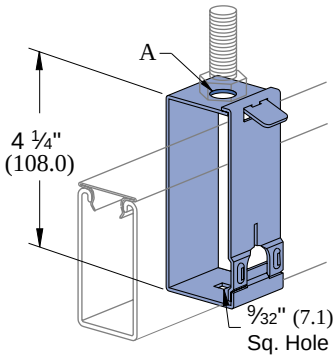
- Hanger provides ⅛" (3.2) space between channel and fixtures.

Materials: 18 gauge (1.2).

Design Load
120 Lbs (54.4 kg)

Part Number	Use With Channel	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2539	P1000 P1100	1¾ *44.5*	17 *7.7*
P3539	P3000	1½ *38.1*	15 *6.8*
P5539	P5500	2 9⁄16 *65.1*	18 *8.2*

P2755, P2756, P2757 Raceway Hangers



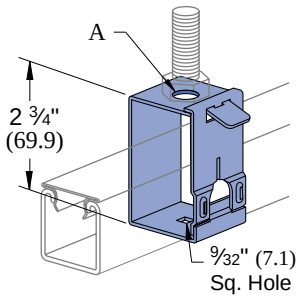
Use with Channels:
P1001, P1101, P2001, P5000, & P5500.

Material: 14 gauge (1.9).

Design Load
120 Lbs (54.4 kg)

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2755	9⁄16 *14.3*	44 *20.0*
P2756	⅞ *22.2*	44 *20.0*
P2757	13⁄32 *10.3*	44 *20.0*

P2855, P2856, P2857 Raceway Hangers



Use with Channels:
P1000, P1100, P3000, P3300

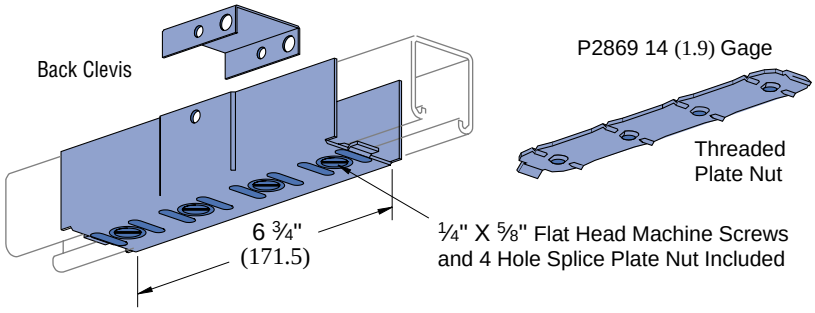
Material: 14 gauge (1.9).

Design Load
120 Lbs (54.4 kg)

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2855	9⁄16 *14.3*	32 *14.5*
P2856	⅞ *22.2*	32 *14.5*
P2857	13⁄32 *10.3*	32 *14.5*

P3922 thru P3926

Splice Fittings



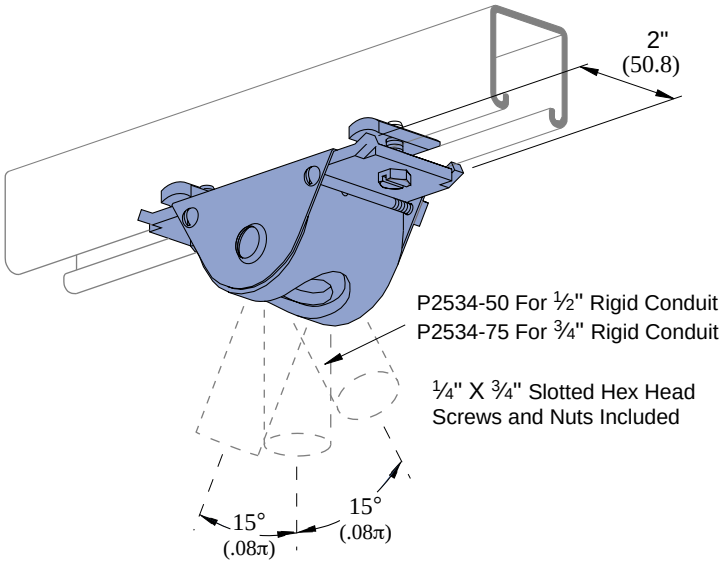
Assembly Number	Use With Channel	"A" In *(mm)*	Clevis Number	Back Clevis Number	Plate Nut Number	Wt/100 pcs Lbs *(kg)*
P3922	P1000 P1100	1⅝ *41.3*	P2377	P2517	P2869	100 *45.4*
P3923	P3000	1⅜ *34.9*	P3377	P2517	P2869	97 *44.0*
P3924	P4000	13⁄16 *20.6*	P5377	P2517	P2869	80 *36.3*
P3925	P5500	1⅝ *41.3*	P2377	P5517	P2869	103 *46.7*
P3926	P5000	1⅝ *41.3*	P2377	P5017	P2869	106 *48.1*

Material: 16 gauge (1.6).

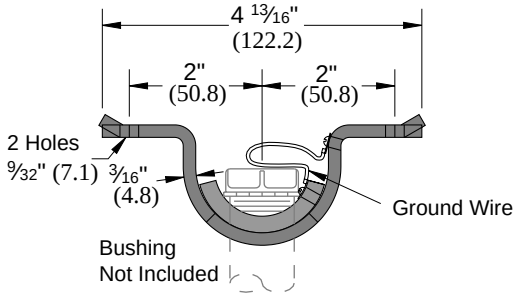
P2534-50, P2534-75

Conduit Swing Fitting

Wt/100 pcs: 96 Lbs (43.5 kg)



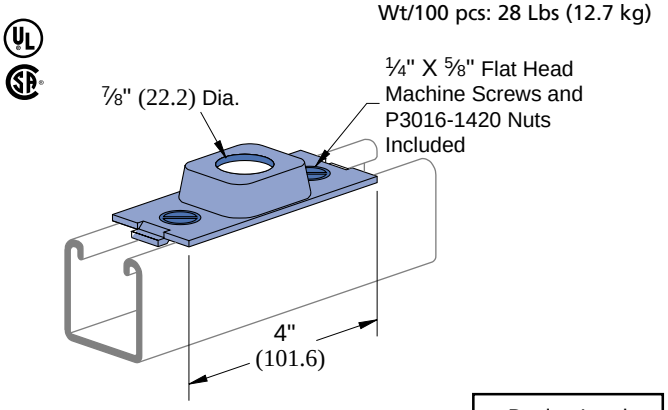
Design Load
300 Lbs (136.1 kg)



- Conduit hanger fittings allow a free swivel of 15° in one direction.
- Fitting may be mounted to the slot side of the Unistrut channel or to the back.

P2535 Conduit Hanger Connection

For ½"Conduit
Wt/100 pcs: 28 Lbs (12.7 kg)

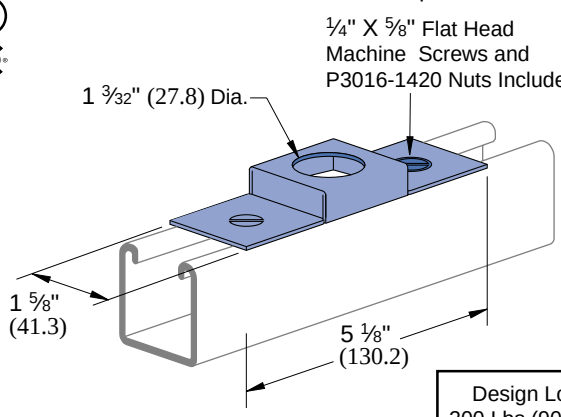


Design Load 400 Lbs (181.4 kg)

Material: 12 gauge (2.7).

P2536 Conduit Hanger Connection

For ¾"Conduit
Wt/100 pcs: 36 Lbs (16.3 kg)

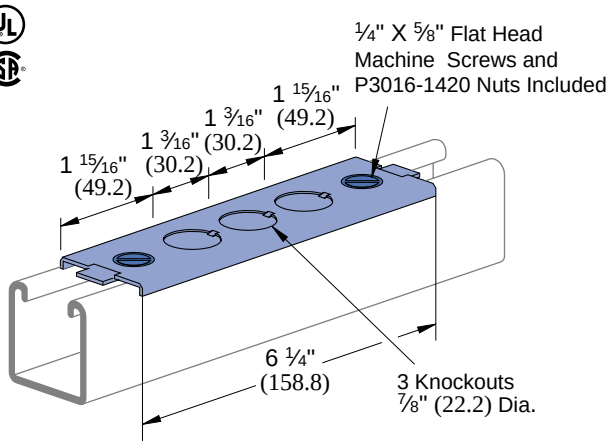


Design Load 200 Lbs (90.7 kg)

Material: 16 gauge (1.5)

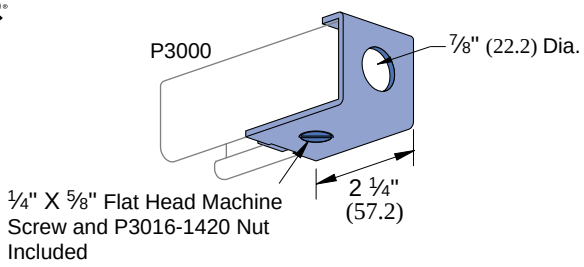
P2522 Outlet Box Connection

Wt/100 pcs: 35 Lbs (15.9 kg)



P3521-50 End Connectors

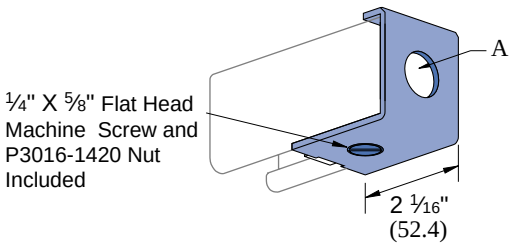
For ½"Conduit
Wt/100 pcs: 27 Lbs (12.2 kg)



Material: 12 gauge (2.7).

P2521-50, P2521-75 End Connectors

For ½" and ¾" Conduit

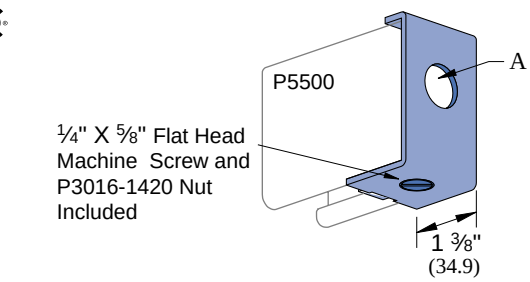


Part Number	Conduit Size A In	Wt/100 pcs Lbs *(kg)*
P2521-50	½	27 *12.2*
P2521-75	¾	26 *11.8*

Use with channels:
P1000 and P1100.
Material: 12 gauge (2.7)

P5521-50, P5521-75 End Connectors

For ½" and ¾" Conduit

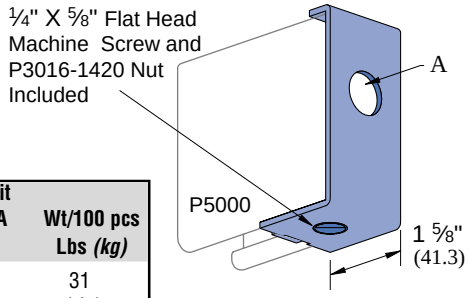


Part Number	Conduit Size A In	Wt/100 pcs Lbs *(kg)*
P5521-50	½	27 *12.2*
P5521-75	¾	26 *11.8*

Material: 12 gauge (2.7).

P5021-50, P5021-75 End Connector

For ½" and ¾" Conduit

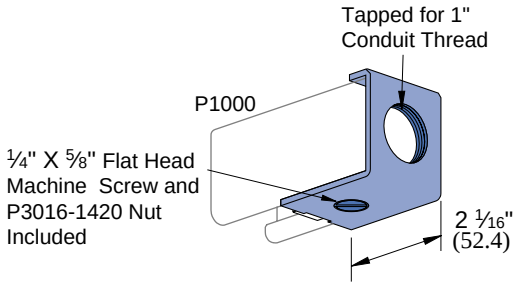


Part Number	Conduit Size A In	Wt/100 pcs Lbs *(kg)*
P5021-50	½	31 *14.1*
P5021-75	¾	30 *13.6*

Material: 12 gauge (2.7).

P2521-100 End Connector

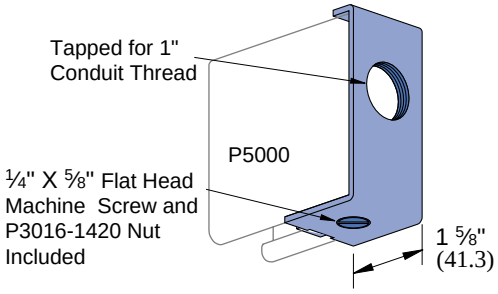
For 1" Conduit
Wt/100 pcs: 24 Lbs (10.9 kg)



Material: 12 gauge (2.7).

P5021-100 End Connector

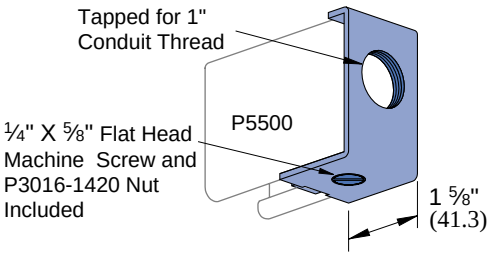
For 1" Conduit
Wt/100 pcs: 28 Lbs (12.7 kg)



Material: 12 gauge (2.7).

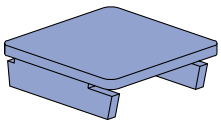
P5521-100 End Connector

For 1" Conduit
Wt/100 pcs: 24 Lbs (10.9 kg)



Material: 12 gauge (2.7).

P1180W thru P5580 End Caps

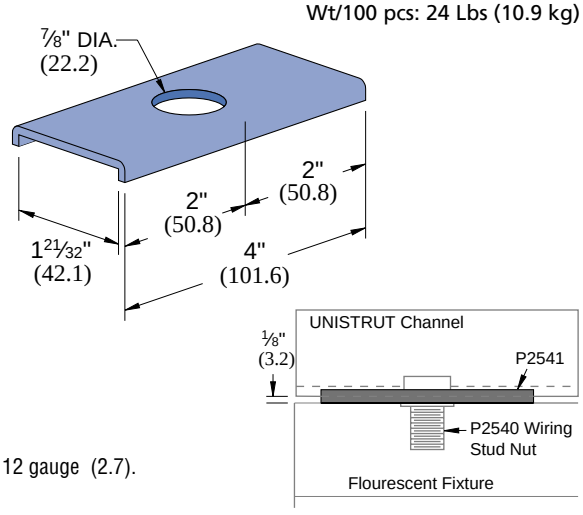


Part Number	Use With	Wt/100 pcs Lbs *(kg)*
P1180W	P1100	12 *5.4*
P1280W	P1000	11 *5.0*
P2280W	P2000	11 *5.0*
P3280W	P3000	8 *3.6*
P4280W	P4000	5 *2.3*
P5280W	P5000	22 *10.0*
P5580W	P5500	18 *8.2*

Material: 14 gauge (1.9)

P2541 Spacer Clevis

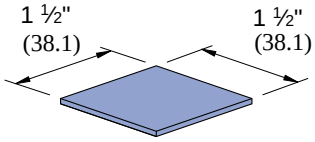
Wt/100 pcs: 24 Lbs (10.9 kg)



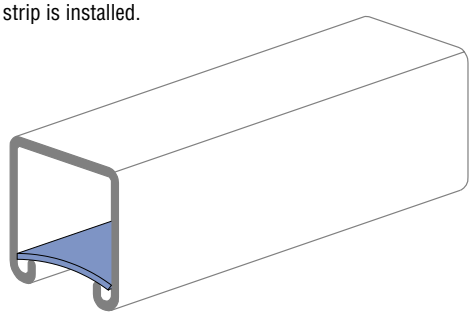
Material: 12 gauge (2.7).

P2552 Polypropylene Wire Retainer

Wt/100 pcs: .30 Lbs (.1 kg)

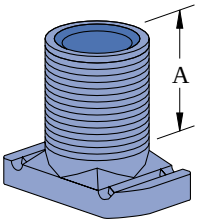


Retainer may be easily pushed into channel to support wires until closure strip is installed.



P2540, P2540A Wiring Stud Nut

½" American Standard Straight Pipe Thread



Stamped Ident. No.
P2540 – 121961
P2540A – 121960

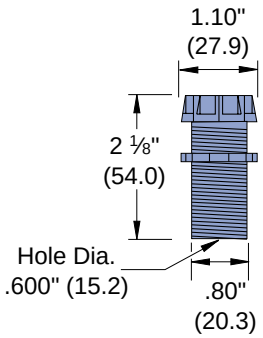
Design Load
320 Lbs (145.1 kg)

Material: Sintered metal.

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2540	1 5/64 *28.6*	10.0 *4.5*
P2540A	5/8 *15.9*	8 *3.6*

P2603 Fixture Wiring Nipple

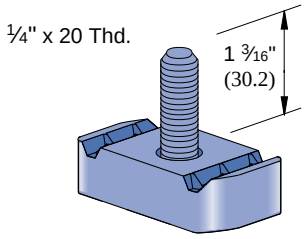
Wt/100 pcs: 14 Lbs (6.4 kg)



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

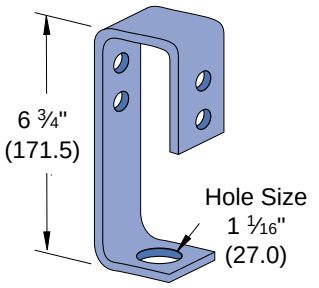
P3116-125 Fixture Stud Nut

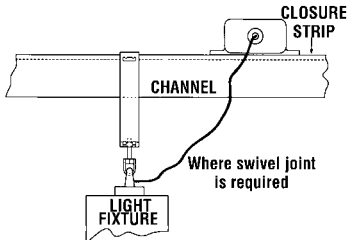
Wt/100 pcs: 11 Lbs (5.0 kg)

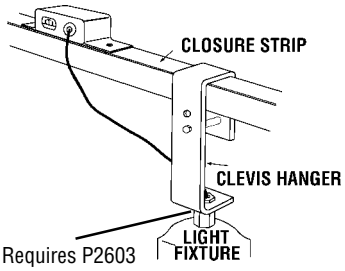


P2602 Mecury Vapor Fixture Hanger

Wt/100 pcs: 154 Lbs (69.9 kg)





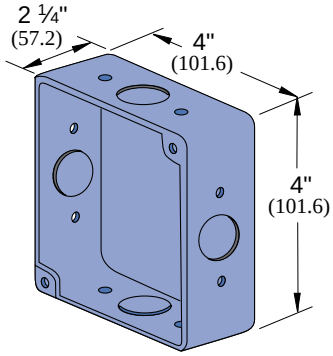


Requires P2603 wiring nipple

Use with 1⅝" Channel
Finish: Electro-galvanized
Stock Size: ¼"
NOTE: Supports fixture in slot up or down system.

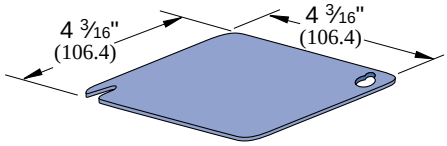
P2801 Junction Box

Wt/100 pcs: 113 Lbs (51.4 kg)



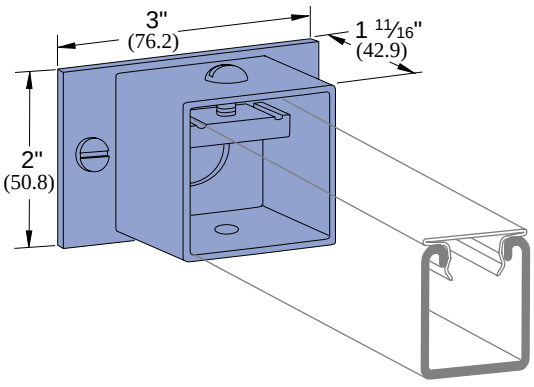
P2802 Junction Box Cover

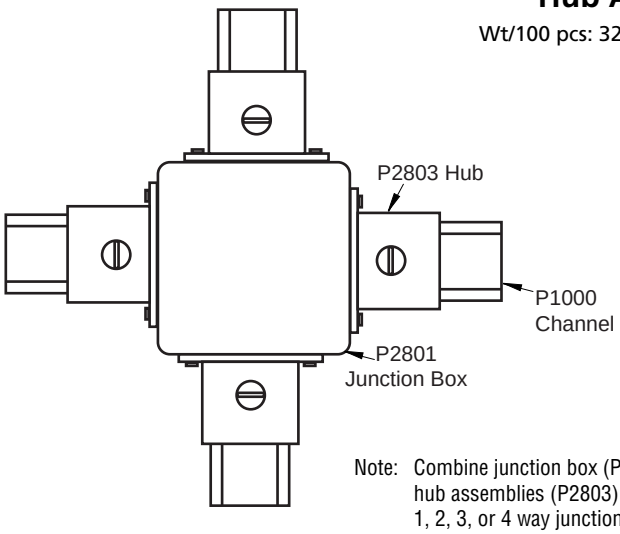
Wt/100 pcs: 30 Lbs (13.6kg)



P2803 Hub Assembly

Wt/100 pcs: 32 Lbs (14.5 kg)

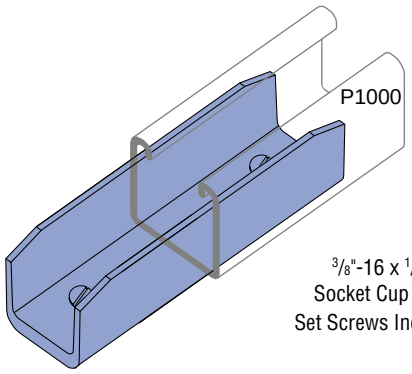




Note: Combine junction box (P2801) and hub assemblies (P2803) to make 1, 2, 3, or 4 way junction box.

P2900

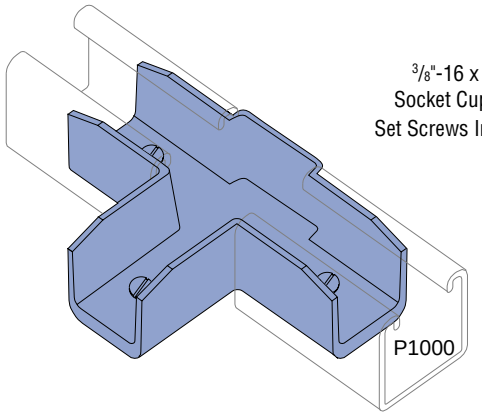
Wt/100 pcs: 20 Lbs (9.1 kg)



Material: Cast aluminum.

P2901

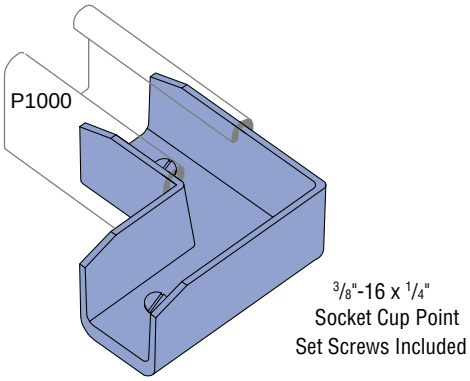
Wt/100 pcs: 35 Lbs (15.9 kg)



Material: Cast aluminum.

P2902

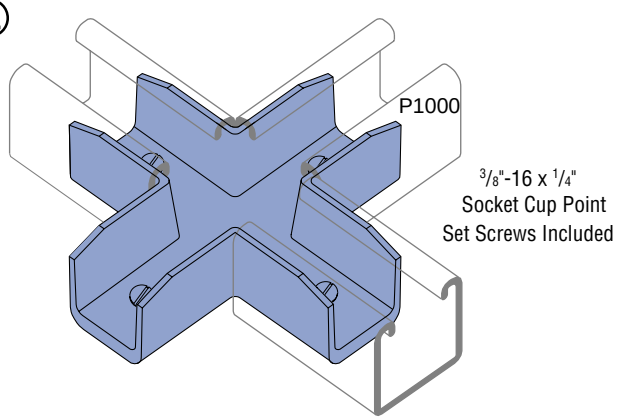
Wt/100 pcs: 27 Lbs (12.2 kg)



Material: Cast aluminum.

P2903

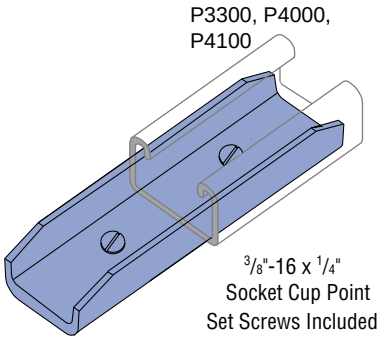
Wt/100 pcs: 45 Lbs (20.4 kg)



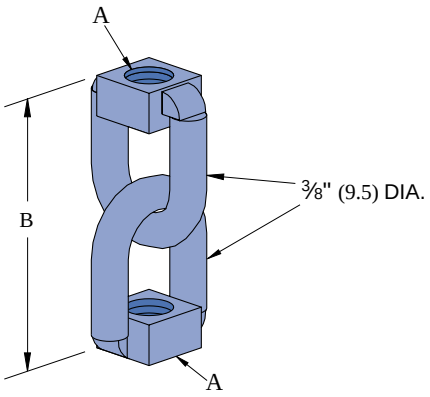
Material: Cast aluminum.

P2904

Wt/100 pcs: 12 Lbs (5.4kg)



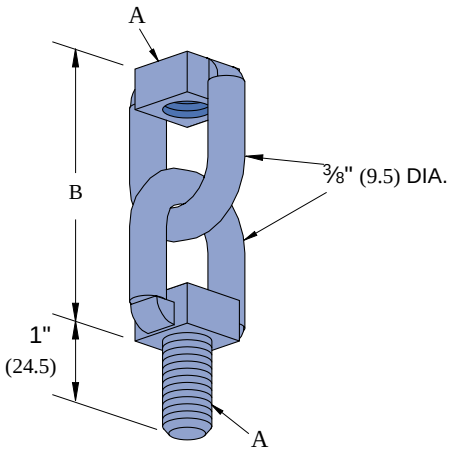
M2037, M2050 Swivel Hangers



Design Load
600 Lbs (271.8 kg)

Part Number	"A" In	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
M2037	3⁄8" - 16	2 31⁄32 *75.4*	23 *10.4*
M2050	1⁄2" - 13	2 3⁄4 *69.9*	32 *14.5*

M2137, M2150 Swivel Hangers

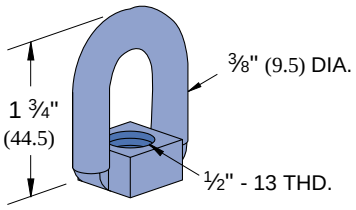


Design Load
600 Lbs (271.8 kg)

Part Number	"A" In	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
M2137	3⁄8" - 16	2 29⁄32 *73.8*	27 *12.2*
M2150	1⁄2" - 13	2 3⁄4 *69.9*	45 *20.4*

M2250 Swivel Hanger

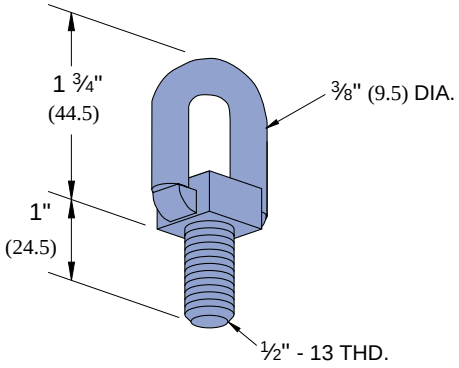
Wt/100 pcs: 18 Lbs (8.2 kg)



Design Load
600 Lbs (271.8 kg)

M2350 Swivel Hanger

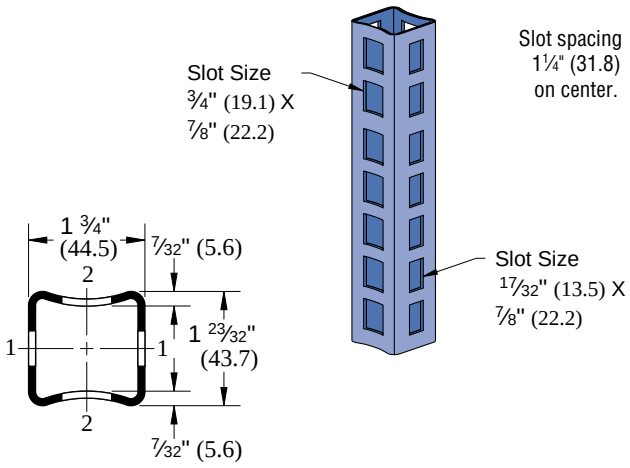
Wt/100 pcs: 20 Lbs (9.1 kg)



Design Load
600 Lbs (271.8 kg)

P16F

Wt/100 Ft: 178 Lbs (260 kg/100 m)
Allowable Moment 4,800 In-Lbs (540 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



Tubing Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

COLUMN LOADING – P16F

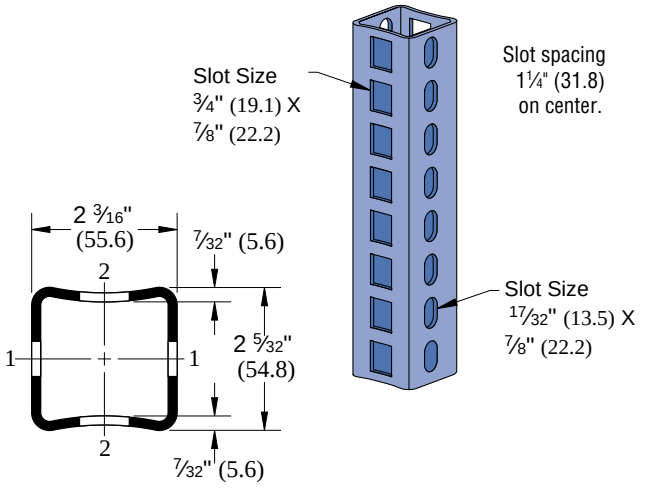
Unbraced Height In	Max. Allowable Load Column Loaded at C.G. Lbs	Max. Allowable Load Column Loaded at Slot Face Lbs
24	9,600	3,300
36	9,000	3,100
48	8,300	2,900
60	7,500	2,700
72	6,600	2,400
84	5,600	2,200
96	4,500	1,900
108	3,600	1,600
120	2,900	1,400
144	2,000	1,100

COLUMN LOADING – P16F *(METRIC)*

Unbraced Height *mm*	Max. Allowable Load Column Loaded at C.G. *kg*	Max. Allowable Load Column Loaded at Slot Face *kg*
610	*4,354*	*1,497*
914	*4,082*	*1,406*
1,219	*3,765*	*1,315*
1,524	*3,402*	*1,225*
1,829	*2,994*	*1,089*
2,134	*2,540*	*998*
2,438	*2,041*	*862*
2,743	*1,633*	*726*
3,048	*1,315*	*635*
3,658	*907*	*499*

P21H

Wt/100 Ft: 297 Lbs (440 kg/100 m)
Allowable Moment 11,370 In-Lbs (540 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)



Tubing Finishes: PL, GR, HG, PG; Standard Lengths: 10' & 20'

COLUMN LOADING –P21F

Unbraced Height In	Max. Allowable Load Column Loaded at C.G. Lbs	Max. Allowable Load Column Loaded at Slot Face Lbs
24	17,700	6,200
36	16,900	6,000
48	16,000	5,700
60	15,000	5,400
72	13,900	5,100
84	12,600	4,700
96	11,300	4,300
108	9,900	3,900
120	8,300	3,500
144	5,800	2,800
168	4,230	2,300

COLUMN LOADING –P21F *(METRIC)*

Unbraced Height *mm*	Max. Allowable Load Column Loaded at C.G. *kg*	Max. Allowable Load Column Loaded at Slot Face *kg*
610	*8,029*	*2,812*
914	*7,666*	*2,722*
1,219	*7,257*	*2,585*
1,524	*6,804*	*2,449*
1,829	*6,305*	*2,313*
2,134	*5,715*	*2,132*
2,438	*5,126*	*1,950*
2,743	*4,491*	*1,769*
3,048	*3,765*	*1,588*
3,658	*2,631*	*1,270*
4,267	*1,919*	*1,043*

BEAM LOADING – P16F

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
24	1,600	0.06	1,600	1,600	1,600
36	1,070	0.13	1,070	1,070	820
48	800	0.23	800	690	460
60	640	0.36	590	440	290
72	530	0.52	410	310	200
84	460	0.71	300	220	150
96	400	0.93	230	170	110
108	360	1.18	180	140	90
120	320	1.45	150	110	70
144	270	2.09	100	80	50
168	230	2.85	70	60	40

BEAM LOADING – P21F

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
24	3,790	0.05	3,790	3,790	3,790
36	2,530	0.11	2,530	2,530	2,380
48	1,900	0.19	1,900	1,900	1,340
60	1,520	0.29	1,520	1,280	860
72	1,260	0.42	1,190	890	590
84	1,080	0.58	870	660	440
96	950	0.76	670	500	330
108	840	0.96	530	400	260
120	760	1.18	430	320	210
144	630	1.70	300	220	150
168	540	2.31	220	160	110

BEAM LOADING – P16F *(METRIC)*

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
600	*737*	*1*	*737*	*737*	*737*
750	*590*	*2*	*590*	*590*	*550*
1,000	*442*	*4*	*442*	*442*	*309*
1,250	*354*	*6*	*354*	*297*	*198*
1,500	*295*	*9*	*275*	*206*	*138*
1,750	*253*	*12*	*202*	*152*	*101*
2,000	*221*	*16*	*155*	*116*	*77*
2,500	*177*	*25*	*99*	*74*	*50*
3,000	*148*	*36*	*69*	*52*	*34*
3,500	*126*	*49*	*51*	*38*	*25*
4,000	*111*	*64*	*39*	*29*	*19*

BEAM LOADING – P21F *(METRIC)*

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
600	*1747*	*1*	*1747*	*1747*	*1747*
750	*1397*	*2*	*1397*	*1397*	*1397*
1,000	*1048*	*3*	*1048*	*1048*	*902*
1,250	*838*	*5*	*838*	*838*	*578*
1,500	*699*	*7*	*699*	*602*	*401*
1,750	*599*	*10*	*589*	*442*	*295*
2,000	*524*	*13*	*451*	*338*	*226*
2,500	*419*	*20*	*289*	*217*	*144*
3,000	*349*	*29*	*201*	*150*	*100*
3,500	*299*	*40*	*147*	*111*	*74*
4,000	*262*	*52*	*113*	*85*	*56*

Notes:

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

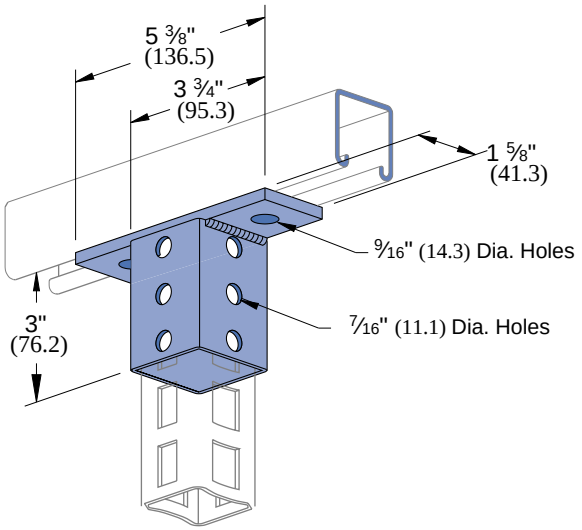
ELEMENTS OF SECTION – P16F

Parameter	P16F	P16F (metric)
Area of Section	0.416 In^2	2.68 cm^2
Axis 1-1		
Moment of Inertia (I)	0.168 In^4	7.0 cm^4
Section Modulus (S)	0.192 In^3	3.1 cm^3
Radius of Gyration (r)	0.650 In	1.7 cm
Axis 2-2		
Moment of Inertia (I)	0.210 In^4	8.7 cm^4
Section Modulus (S)	0.240 In^3	3.9 cm^3
Radius of Gyration (r)	0.725 In	1.8 cm

ELEMENTS OF SECTION – P21H

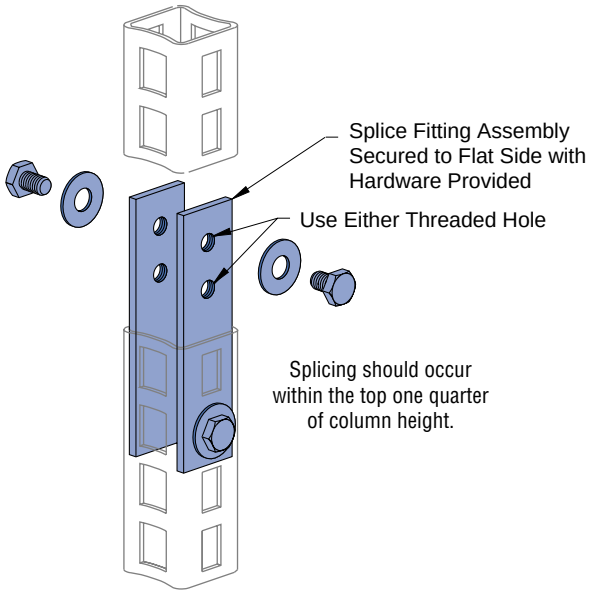
Parameter	P21H	P21H (metric)
Area of Section	0.749 In^2	4.83 cm^2
Axis 1-1		
Moment of Inertia (I)	0.490 In^4	20.4 cm^4
Section Modulus (S)	0.455 In^3	7.5 cm^3
Radius of Gyration (r)	0.820 In	2.1 cm
Axis 2-2		
Moment of Inertia (I)	0.590 In^4	24.6 cm^4
Section Modulus (S)	0.540 In^3	8.8 cm^3
Radius of Gyration (r)	0.900 In	2.3 cm

P2820, P2940 Channel/Tube Connectors



Part Number	Use With	Wt/100 pcs Lbs *(kg)*
P2820	P16F	116 *2.6*
P2940	P21H	148 *67.1*

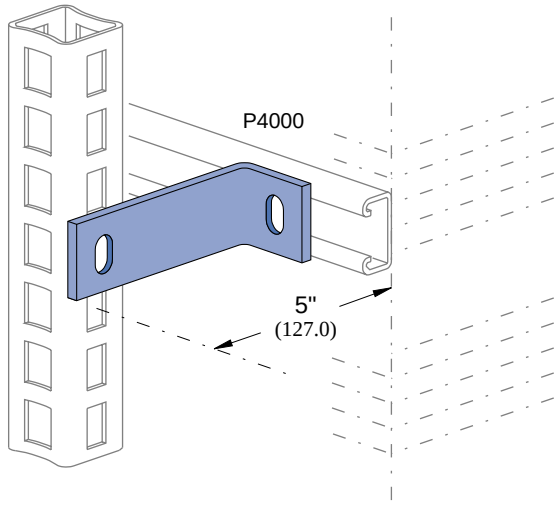
P2822, P2932 Splice Fittings



Part Number	Use With	Wt/100 pcs Lbs *(kg)*
P2822	P16F	97 *44.0*
P2932	P21H	122 *55.3*

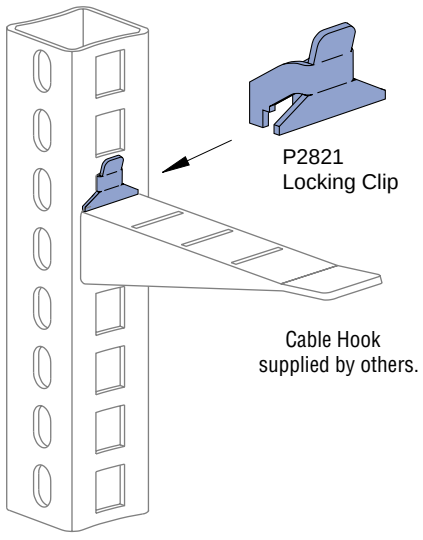
P2823 90° Rack Fitting

Wt/100 pcs: 66 Lbs (29.9 kg)



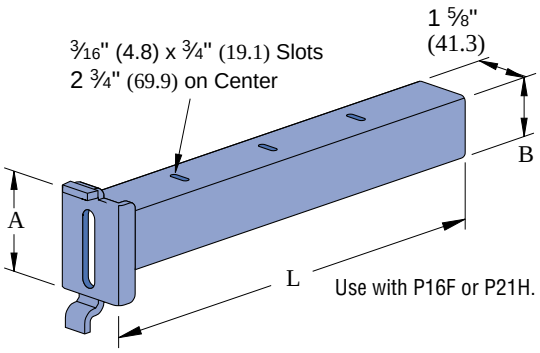
P2821 Locking Clip

Wt/100 pcs: 3 Lbs (1.4 kg)



Exclusive Cable Hook Locking Clip prevents Cable Hook removal.

P2920 thru P2924 Cable Brackets

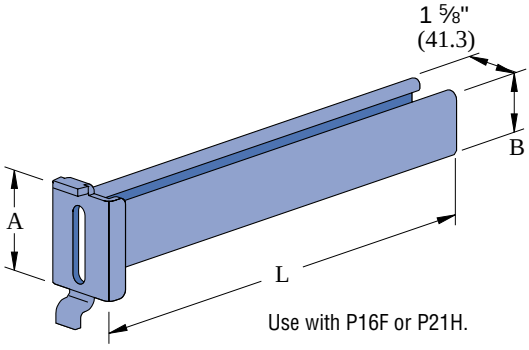


Material: 12 gauge steel.

Part Number	"L"	"A"	"B"	Wt/100 pcs Lbs *(kg)*	Uniform Design Load Lbs *(kg)*
P2920	5½ *139.7*	3½ *88.9*	⅞ *22.2*	90 *40.8*	500 *2.2*
P2921	8¼ *209.6*	3½ *88.9*	⅞ *22.2*	120 *54.4*	325 *1.4*
P2922	11 *279.4*	3½ *88.9*	1⅝ *41.3*	300 *136.1*	275 *1.2*
P2923	13¾ *349.3*	3½ *88.9*	1⅝ *41.3*	340 *154.2*	220 *1.0*
P2924	19¼ *489.0*	3½ *88.9*	1⅝ *41.3*	430 *195.0*	160 *0.7*

Safety factor of 3.

P2928, P2929 and P2930 Cable Brackets



Material: 12 gauge steel.

Part Number	"L"	"A"	"B"	Wt/100 pcs Lbs *(kg)*	Uniform Design Load Lbs *(kg)*
P2928	6 *152.4*	3½ *88.9*	⅞ *22.2*	92 *41.7*	500 *2.2*
P2929	12 *304.8*	3½ *88.9*	1⅝ *41.3*	320 *145.1*	250 *1.1*
P2930	18 *457.2*	3½ *88.9*	1⅝ *41.3*	420 *190.5*	170 *0.8*

Safety factor of 3.

U.L. Listed

Unistrut channel is listed by Underwriters' Laboratories as a surface metal raceway. Snap-in closure strip is used to complete the raceway. Accessory parts listed by Underwriters are noted on drawings.

The following tables represent maximum number of conductors when raceway is not employed with fixtures or where the clearance between fixtures and raceway is greater than ½" (12.7). In all cases the snap-in cover is required to complete raceway enclosure.

P3300

	Number and Conductor Size (AWG)				
Gauge	14	12	10	8	6
THWN, THHN	40	30	19	9	6
XHHW	26	21	16	7	5
T, TW	26	20	15	7	4
THW	17	14	11	6	4
RH	15	12	7	4	3
RHH, RHW	10	9	7	4	2

P1000, & -KO, P1100 & -KO

	Number and Conductor Size (AWG)				
Gauge	14	12	10	8	6
THWN, THHN	88	66	42	20	14
XHHW	58	46	35	16	12
T, TW	57	44	34	16	9
THW	37	30	24	12	9
RH	33	27	16	9	6
RHH, RHW	23	20	16	9	6

	Channel Size and Inside Area			
Channel Part Number	Size	Area	40% Area	25% Area
P3300 & KO	1⅝" x ⅞"	0.975	0.390	0.244
		629	252	157
P3000 & KO	1⅝" x 1⅜"	1.677	0.671	0.419
		1,082	433	270
P1000 & KO, P1100 & KO	1⅝" x 1⅝"	2.028	0.811	0.507
		1,308	523	327
P5500 & KO	1⅝" x 2 7/16"	3.169	1.268	0.792
		2,045	818	511
P5000 & KO	1⅝" x 3¼"	4.308	1.723	1.077

P3000, & -KO

	Number and Conductor Size (AWG)				
Gauge	14	12	10	8	6
THWN, THHN	72	54	34	17	12
XHHW	48	37	29	13	10
T, TW	46	36	28	13	7
THW	30	25	20	10	7
RH	27	22	13	7	5
RHH, RHW	19	16	13	7	5

P5500, & -KO

	Number and Conductor Size (AWG)				
Gauge	14	12	10	8	6
THWN, THHN	141	105	66	33	23
XHHW	93	73	57	27	19
T, TW	91	58	55	26	15
THW	59	49	39	20	15
RH	53	44	26	14	10
RHH, RHW	37	32	26	14	10

P5000, & -KO

	Number and Conductor Size (AWG)				
Gauge	14	12	10	8	6
THWN, THHN	193	105	91	45	32
XHHW	128	101	78	37	27
T, TW	125	98	75	35	20
THW	81	67	54	28	20
RH	73	60	36	19	13
RHH, RHW	51	44	36	19	13

Note: Raceways with external joiners shall use a 40% wire fill calculation to determine the number of conductors permitted.

Raceways with internal joiners shall use a 25% wire fill calculation to determine the number of conductors permitted

C.S.A. APPROVED

Suitable for number of wires in Column A when installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 75° C except wire suitable for 60° C may be used when clearance between fixtures and raceways is at least ½" (12.7). Also suitable for number of wires in column B when installed to support electric discharge type lighting fixtures when raceway wiring is suitable for at least 75° C and clearance between fixtures and raceway is at least ⅛" (3.2).

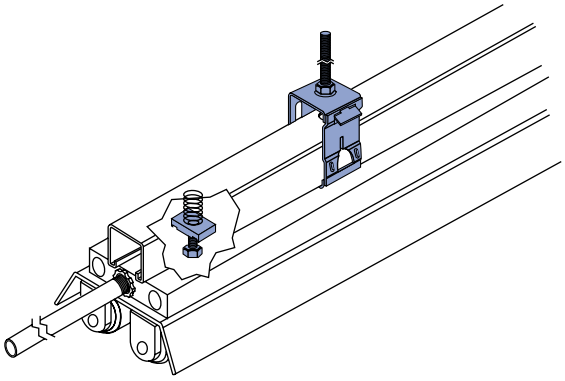
Maximum number of wires for types T, THHN, THW, THWN, TW, R, RH, RHH, RHW or XHHW

Raceway Wire Size AWG	P1000, &-KO P1100, &-KO A	B	P3000, &-KO A	B	P3300 A	B	P5000 &-KO A	B	P5500, &-KO A	B
14	6	10	5	10	4	6	10	10	10	10
12	6	10	4	10	3	6	10	10	10	10
10	5	8	4	6	-	-	8	10	8	10
8	4	6	3	4	-	-	6	9	6	8
6	2	3	2	2	-	-	4	6	4	6

Unistrut channels are also certified by Canadian Standards Association.

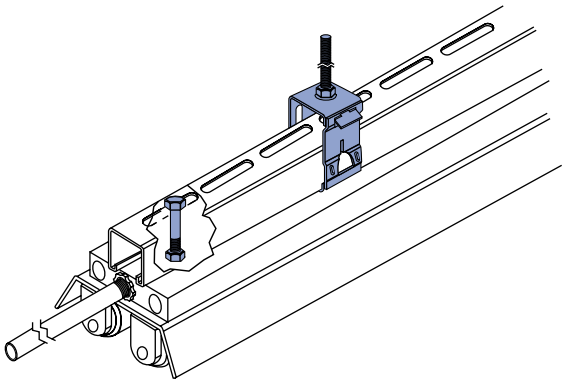
Fluorescent Fixtures - Support Applications

Spring-Nut attachment system



Conduit connects through knockout in fixture. Fixture is supported by P1006-1420 spring nut and 1/4" round head machine screw. Assembly is supported by P2855 hinged hanger.

Slotted channel attachment system



Conduit connects through knockout in fixture. Fixture is supported by HCSS series hex bolt and hex nut. Raceway is supported by P2855 hanger. To splice a continuous run, use P3922.

Recommended Support Spacing for Fixtures

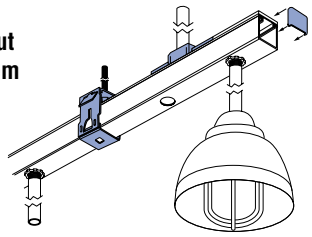
Deflections are based on continuity of span and use of 4 ft. fixtures weighing approximately 30 lbs. each. Do not use joiner fittings between supporting hangers. When using knock-out or slotted channels deflections will be increased approximately 5%. With fixtures spaced 2' - 0" apart, deflection is 60-70% of table. When spaced 4' - 0" apart, deflection is 50-60% of table.

Deflection Table

	Distance Between Supports								
Channel	8' (2.4m) In *(mm)*	10' (3m) In *(mm)*	12' (3.7m) In *(mm)*	14' (4.3m) In *(mm)*	16' (4.9m) In *(mm)*	18' (5.5m) In *(mm)*	20' (6.1m) In *(mm)*	22' (6.7m) In *(mm)*	24' (7.3m) In *(mm)*
P3300	0.187 *4.7*								
P3000	0.100 *2.5*	0.250 *6.4*	0.500 *12.7*						
P1100	0.088 *2.2*	0.250 *6.4*	0.437 *11.1*	0.875 *22.2*					
P1000		0.180 *4.6*	0.312 *7.9*	0.625 *15.9*	1.000 *25.4*	1.625 *41.3*			
P5500				0.250 *6.4*	0.500 *12.7*	0.812 *20.6*	1.620 *41.1*		
P5000					0.310 *7.9*	0.625 *15.9*	1.000 *25.4*	1.800 *45.7*	2.500 *63.5*
P1001					0.310 *7.9*	0.625 *15.9*	1.000 *25.4*	1.800 *45.7*	2.500 *63.5*
P5001						0.200 *5.1*	0.250 *6.4*	0.400 *10.2*	0.500 *12.7*

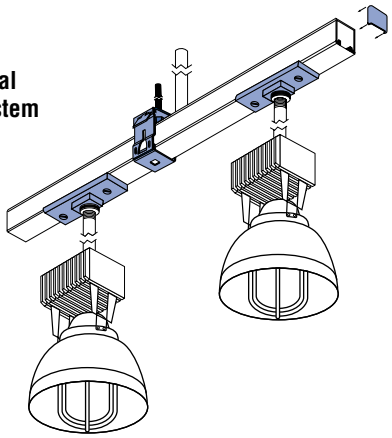
High-Bay Fixture Raceway Applications

H.I.D. Knockout mounted system

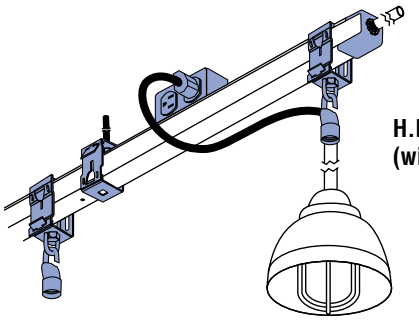


Fixture attached to and wired from raceway by ½" nipple assembly of desired length at channel knockout. P1280W end cap, P3184 closure strip, P2535 conduit connector, and P2855 channel hanger complete assembly. For splicing channels into continuous raceway runs, use joiner fitting P3922.

High-Bay dual mounted system



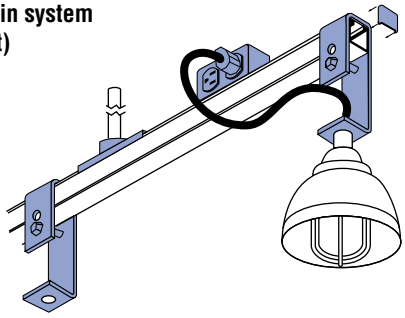
Fixtures are connected to and wired form raceway by conduit connector fitting P2536. Raceway is supported by P2855 hanger. P1280W endcaps and P3184 closure strip complete the assembly. Conduit connected to raceway through channel knockout.



H.I.D. Plug-in system (with swivel)

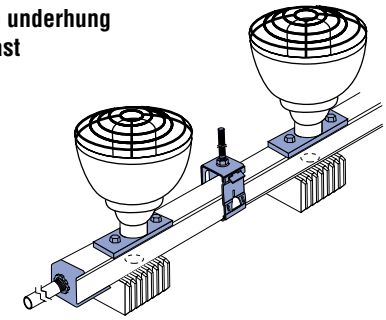
Fixtures, supported by P2855 hangers and M2250 eyelets, plug into receptacle mounted in P2763 outlet box. P2855 hangers also support raceway. P2521-75 end connector joins conduit to raceway. P1280W end caps (not shown) and P3184 closure strip complete assembly.

H.I.D. Plug-in system (rigid mount)



Fixtures are supported by P2602 clevis hangers. Cover plate on P2761 outlet box provides access to receptacle box. Raceway is supported and wired by top mounted P2535 conduit connectors. P1280W end caps and P3184 closure strip complete assembly.

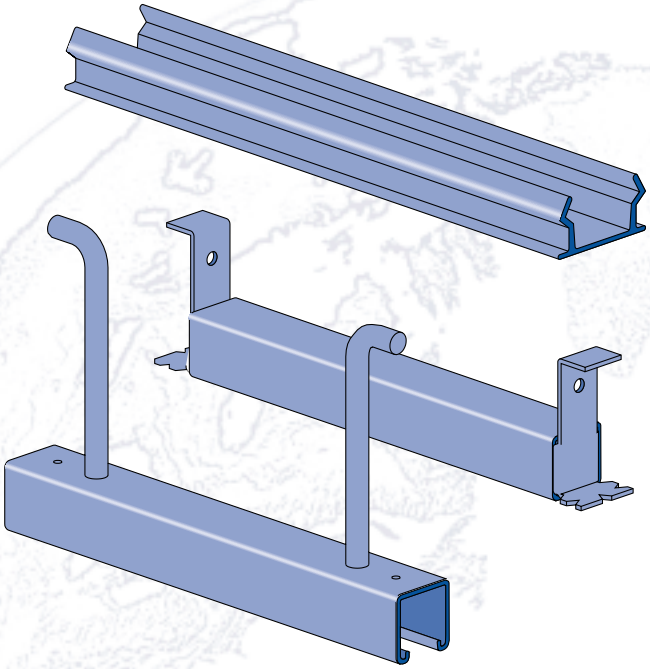
Uplighting with underhung or remote ballast

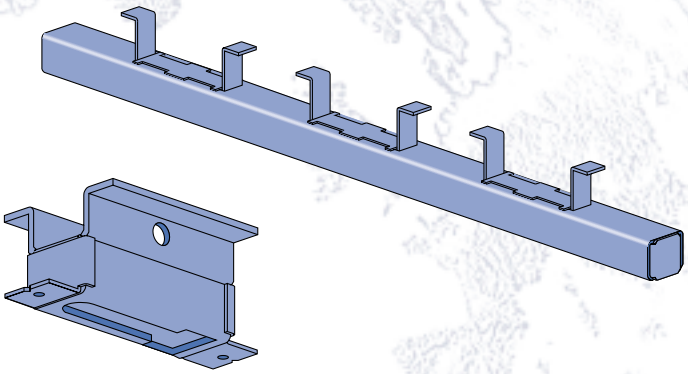


Fixtures attached to and wired from P2535 conduit fittings mounted to slot side of channel. Raceway can be wired by P2521 as shown or, conduit can enter through available knockout. Ballasts in P2521 are connected at the knockout by fixture adapter. In remote ballast installations, follow manufacturers instructions. P2855 hinged hangers support both types of installations. P3184 closure strip and P1280W end caps complete assembly. For continuous raceways, use joiner fitting P3922. P2521-75 end connector joins conduit to raceway.

CONCRETE INSERTS

UNISTRUT®





MATERIAL

Cold-formed inserts are manufactured from standard 12 gauge (2.7 mm) Unistrut channel sections conforming to ASTM A1011 SS GR 33 or ASTM A653 GR 33, unless otherwise noted.

Hot-rolled inserts, as noted, are manufactured from carbon steel meeting physical requirements of ASTM A283 GR D.

To inhibit concrete seepage, all inserts (except spot inserts) are provided with closure strips and end caps or foam filler, unless otherwise requested.

Most concrete inserts are available in stainless steel on special order. Consult factory for ordering information.

APPLICATION

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

FINISHES

Cold-formed, standard-duty, light-duty and spot concrete inserts are available in Perma-Green II (GR), hot dipped galvanized (HG), conforming to ASTM A123 or A153; pre-galvanized (PG), conforming to ASTM A653 GR 33 and plain (PL).

DESIGN LOAD

Design loads, where shown, are based on 3,000 PSI concrete, unless noted.

STANDARD LENGTHS

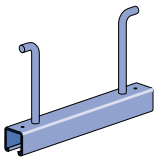
Insert lengths range from 3 inches (76 mm) to 20 feet (6.10m) with a tolerance of ±¼-inch (6.4mm).

DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parentheses or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

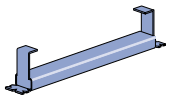
Custom-designed inserts are available on special order. Consult factory for ordering information.

Heavy Duty

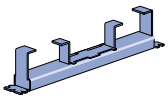


P3754-Pg 185

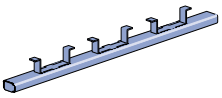
Light Duty



P3349-Pg 188

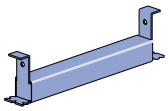


P3352-Pg 188

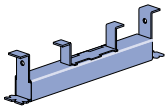


P3354-Pg 188

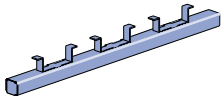
Standard Duty



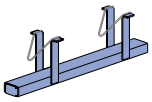
P3249-Pg 186



P3253-Pg 186



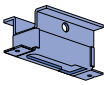
P3253-Pg 186



P3165-Pg 187

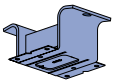
P2865-Pg 187

Spot Inserts and Components



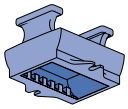
P3245-Pg 189

P3245N4-Pg 189

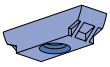


M24-Pg 189

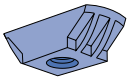
M2506-Pg 189



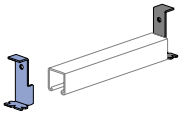
M26-Pg 190



M2808-Pg 190

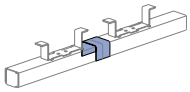


M2708-Pg 190



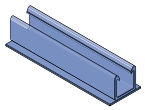
P1703-Pg 191

P2407-Pg 191

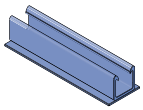


P3663-Pg 191

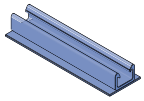
Fiberglass Concrete Inserts



Heavy Duty-Pg 240

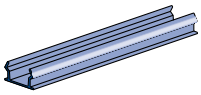


Standard Duty-Pg 244

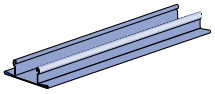


Light Duty-Pg 242

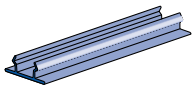
Closure Strips



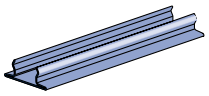
P3712-Pg 59



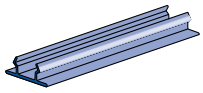
P1184-Pg 59



P1184 PVC-Pg 59



P3184-Pg 59



P3184P-Pg 59

Channel Nuts

Heavy Duty-Pg 78

Heavy Duty-Pg 78

Standard Duty-Pg 78

Standard Duty-Pg 78

Light Duty-Pg 78

Light Duty-Pg 78

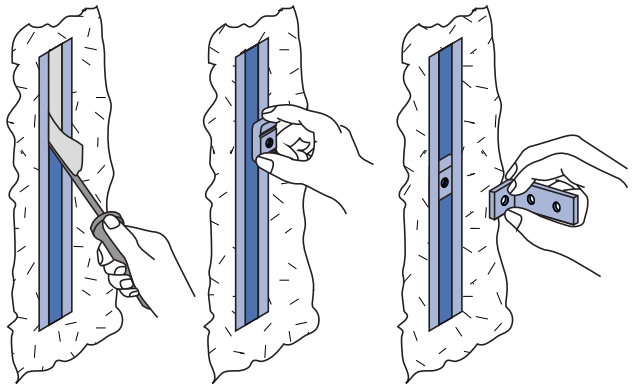
Installing Concrete Inserts

1. Nail insert to concrete form using prepunched nail holes

2. Attach rebars to flanges on insert

The Unistrut concrete insert is firmly fixed to the concrete side of the form before pouring. When the forms are removed, the insert is ready for use. Brackets and other components can be attached at any point of the continuous entry channel.

Using Installed Concrete Insert

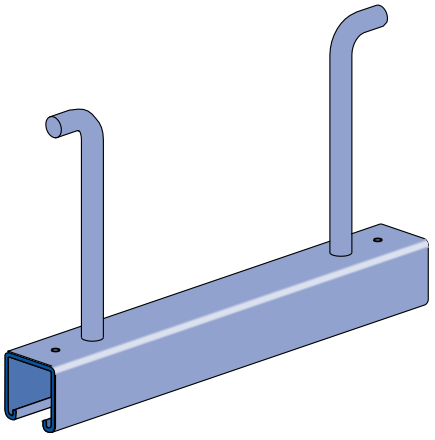


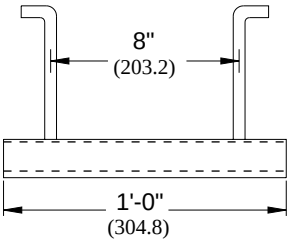
1. Scrape out filler
2. Insert channel nut.
3. Attach fitting

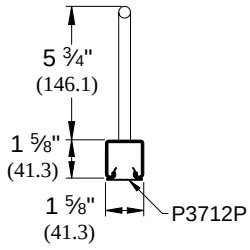
P3754 Series

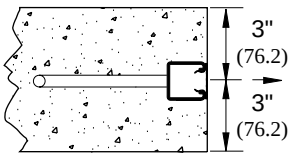
1⅝" x 1⅝" Channel

- Closure strip P3712 P and a styrene bead end cap that fits inside the channel to inhibit concrete seepage are included.
- The recommended design load when used for curtain wall anchorage is 5,000 pounds and is based on use in average, good concrete. The design load includes ⅓ increase in load as permitted by AISI Specifications and Uniform Building Code when stresses are produced by wind or earthquake and other loads.
- The recommended design load is based on using two P1010 nuts at no less than 3" O.C. and no closer than 2" to either end of the insert. The distance between the insert centerline and the concrete edge must be a minimum of 3".
- All nuts and fittings for P3200 series concrete inserts will fit.
- Material: Cold formed from 12 Ga. (2.7mm) steel conforming to ASTM A1011 SS GR 33 or ASTM A653 GR 33 A. Stainless steel available on special order.
- Finish: Choice of Perma-Green II (GR), hot-dipped galvanized (HG) conforming to ASTM A123 or A153, pre-galvanized (PG) conforming to ASTM A653-G90, or plain (PL).





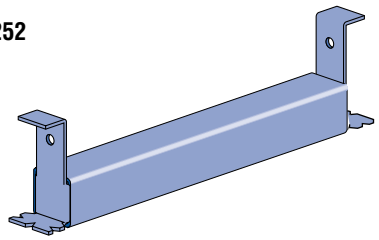




Part Number	Insert Length ±¼" *(6.4mm)* In *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Anchor Spacing In *(mm)*	Max. Allowable Point Load Lbs *(kg)*	Spacing of Point Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kg)*
P3754	12 *304.8*	210 *95.3*	8 *203.2*	2,500 *1,134.0*	3 *76.2*	5,000 *2,268.0*

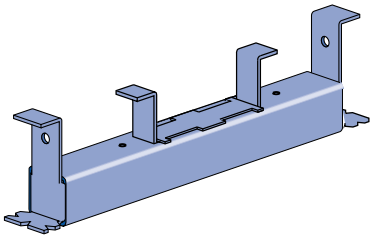
P3200 Series — 1⅝" x 1⅜" Channel

P3249 thru P3252



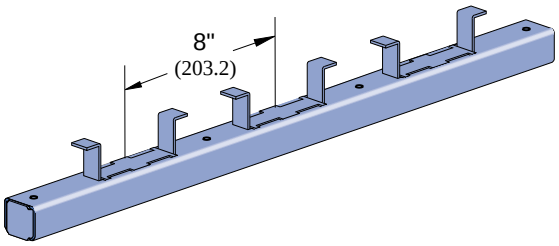
"NC" Suffix – No Closure Strip, With End Caps
"WC" Suffix – With Closure Strip & End Caps

P3253

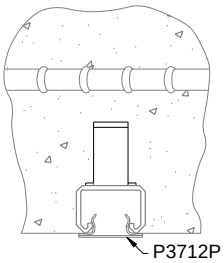


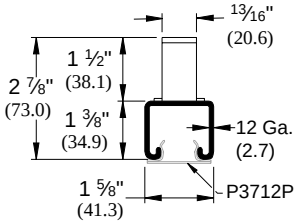
"NC" Suffix – No Closure Strip, With End Caps & Back Plates
"WC" Suffix – With Closure Strip, End Caps & Back Plates

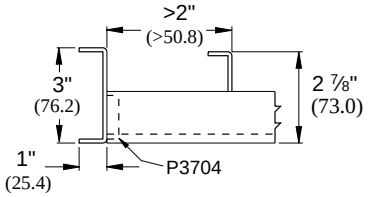
P3253 thru P3270



"NC" Suffix – No Closure Strip, W/End Caps & Back Plates
"WC" Suffix – W/Closure Strip, End Caps & Back Plates
"X" – No Closure Strip, No End Caps, W/Back Plates





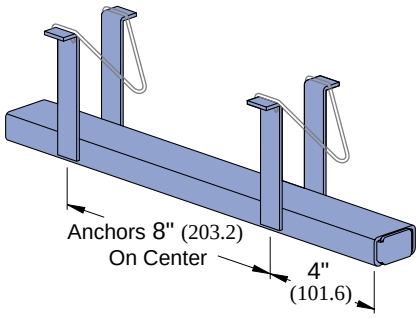


- FM APPROVED when used for sprinkler systems.
- Includes closure and end caps unless otherwise requested.
- P3280 end cap used when distance to first anchor is up to 2" (50.8 mm).
- P3704 end cap is used when end distance to first anchor is over 2" (50.8 mm).
- Nail or anchor inserts to forms every 16" (406 mm) to 24" (610 mm).
- Anchors are 8" (203.2 mm) on center.
- Material: Cold formed from 12 Ga. (2.7 mm) steel conforming to ASTM A1011 SS GR 33 or ASTM A653 GR 33. A. Stainless steel available on special order.
- Finish: Choice of Perma-Green II (GR), hot-dipped galvanized (HG) conforming to ASTM A123 or A153, pre-galvanized (PG) conforming to ASTM A653-G90, or plain (PL).

Part Number	Insert Length In/Ft *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Allowable Point Load Lbs *(kg)*	Min. Spacing of Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kg)*
P3249	3" *76.2*	85 *38.6*	500 *226.8*	—	500 *226.8*
P3250	4" *101.6*	100 *45.4*	800 *362.9*	—	800 *362.9*
P3251	6" *152.4*	130 *59.0*	1,000 *453.6*	—	1,000 *453.6*
P3252	8" *203.2*	159 *72.1*	1,200 *544.3*	—	1,200 *544.3*
P3253	12" *304.8*	227 *103.0*	2,000 *907.2*	—	2,000 *907.2*
P3254	16" *406.4*	270 *122.5*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3255	20" *508.0*	357 *161.9*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3256	24" *609.6*	399 *181.0*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3257	32" *812.8*	527 *239.0*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3257A	36" *914.4*	616 *279.4*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3258	40" *1,016.0*	661 *299.8*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3259	4' *1,219.2*	786 *356.5*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3260	5' *1,524.0*	1,003 *455.0*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3261	6' *1,828.8*	1,173 *532.1*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3262	7' *2,133.6*	1,390 *630.5*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3263	8' *2,438.4*	1,560 *707.6*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3264	9' *2,743.2*	1,741 *789.7*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3265	10' *3,048.0*	1,947 *883.1*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3266	12' *3,657.6*	2,334 *1,058.7*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3267	14' *4,267.2*	2,717 *1,232.4*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3268	16' *4,876.8*	3,116 *1,413.4*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3269	18' *5,486.4*	3,530 *1,601.2*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3270	20' *6,096.0*	3,882 *1,760.8*	2,000 *907.2*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*

Safety factor 3.

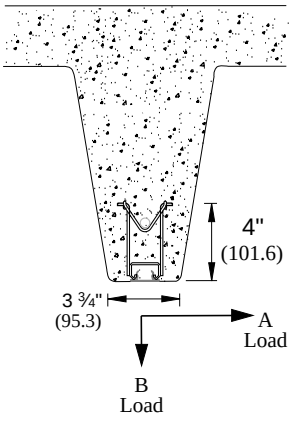
P3165 Series — 1⅝" x ⅞" Channel



"X" Suffix – No Closure Strip, No End Caps
"WC" Suffix – With Closure Strip & End Caps

Part Number	Length Ft *(M)*	Wt/100 pcs Lbs *(kg)*
P3165	10 *3.05*	1,650 *748.4*
P3170	20 *6.10*	3,280 *1,487.8*

Safety factor 3.



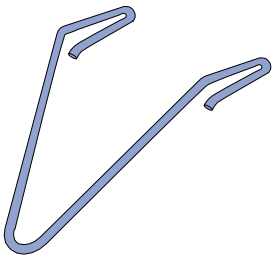
Maximum allowable load/ft.

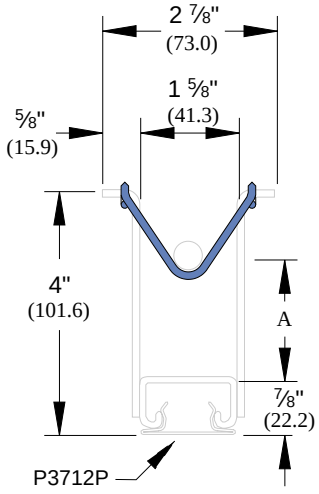
Concrete	A Lbs *(kg)*	B Lbs *(kg)*
Light Weight	425 *192.8*	800 *362.9*
Normal Weight	500 *226.8*	1,000 *453.6*

Safety factor 3.

- Designed for use in prestressed concrete.
- Anchors 8" (203.2 mm) on center; first anchor 4" (101.6 mm) from end.
- Includes closure and end caps unless otherwise requested.
- Material: Cold formed from 12 Ga. (2.7 mm) streel conforming to ASTM A1011 SS GR 33 or ASTM A653 GR 33. A. Stainless steel available on special order.
- Finish: Choice of Perma-Green II (GR), hot-dipped galvanized (HG) conforming to ASTM A123 or A153, pre-galvanized (PG) conforming to ASTM A653-G90, or plain (PL).

P2865-10, -15, -20 — Hold-Down Springs





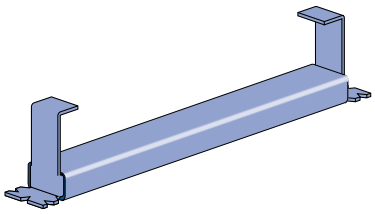
Part Number	A In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2865-10	1 *25.4*	2 *0.9*
P2865-15	1½ *38.1*	2 *0.9*
P2865-20	2 *50.8*	2 *0.9*

Finish: Plain

P3300 Series

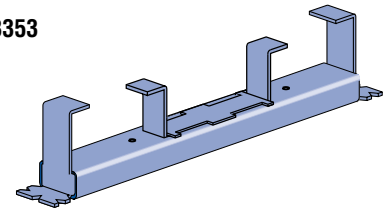
1⅝ x ⅞ Channel

P3349 thru P3351



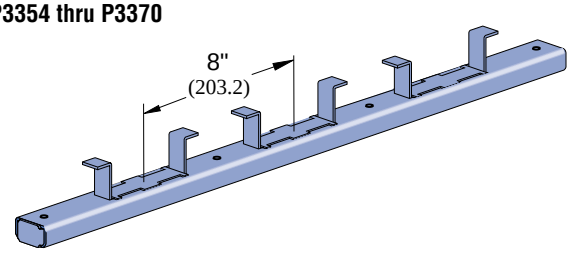
"NC" Suffix – No Closure Strip, With End Caps
"WC" Suffix – With Closure Strip & End Caps

P3352 thru P3353

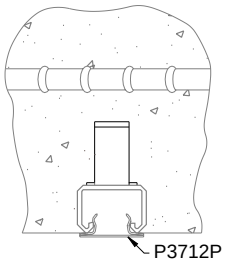


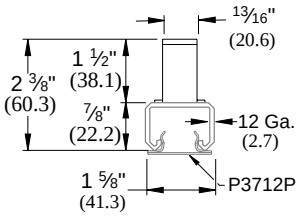
"NC" Suffix – No Closure Strip, With End Caps & Back Plates
"WC" Suffix – With Closure Strip, End Caps & Back Plates

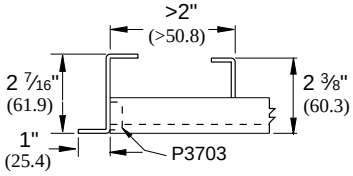
P3354 thru P3370

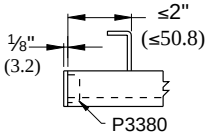


"NC" Suffix – No Closure Strip, W/End Caps & Back Plates
"WC" Suffix – W/Closure Strip, End Caps & Back Plates
"X" – No Closure Strip, No End Caps, W/Back Plates







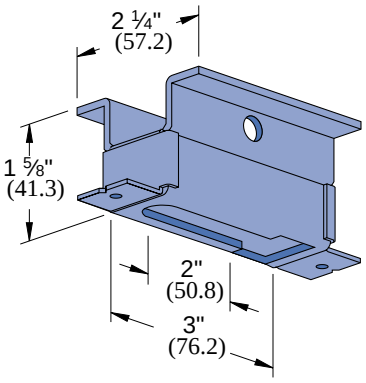


- FM APPROVED when used for sprinkler systems.
- Includes closure and end caps unless otherwise requested.
- P3380 end cap used when distance to first anchor is up to 2" (50.8 mm).
- P3703 end cap is used when end distance to first anchor is over 2" (50.8 mm).
- Nail or anchor inserts to forms every 16" (406 mm) to 24" (610 mm).
- Anchors are 8" (203.2mm) on center.
- Material: Cold formed from 12 Ga. (2.7 mm) steel conforming to ASTM A1011 SS GR. 33 or A653 GR 33. A. Stainless steel available on special order.
- Finish: Choice of Perma-Green II (GR), hot-dipped galvanized (HG) conforming to ASTM A123 or A153, pre-galvanized (PG) conforming to ASTM A653-G90, or plain (PL).

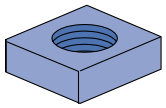
Part Number	Insert Length In/Ft. *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Allowable Point Load Lbs *(kg)*	Min. Spacing of Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kg)*
P3349	3" *76.2*	68 *30.8*	400 *181.4*	—	400 *181.4*
P3350	4" *101.6*	81 *36.7*	500 *226.8*	—	500 *226.8*
P3351	6" *152.4*	102 *46.3*	750 *340.2*	—	750 *340.2*
P3352	8" *203.2*	122 *55.3*	1,000 *453.6*	—	1,000 *453.6*
P3353	12" *304.8*	174 *78.9*	1,500 *680.4*	—	1,500 *680.4*
P3354	16" *406.4*	185.0 *83.9*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*
P3355	20" *508.0*	231 *104.8*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*
P3356	24" *609.6*	277 *125.6*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*
P3357	32" *812.8*	370 *167.8*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3357A	36" *914.4*	416 *188.7*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3358	40" *1,016.0*	463 *210.0*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3359	4' *1,219.2*	555 *251.7*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3360	5' *1,524.0*	694 *314.8*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3361	6' *1,828.8*	832 *377.4*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3362	7' *2,133.6*	971 *440.4*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3363	8' *2,438.4*	1,110 *503.5*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3364	9' *2,743.2*	1,249 *566.5*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3365	10' *3,048.0*	1,387 *629.1*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3366	12' *3,657.6*	1,665.0 *755.2*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3367	14' *4,267.2*	1,942 *880.9*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3368	16' *4,876.8*	2,220 *1,007.0*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3369	18' *5,486.4*	2,497 *1,132.6*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*
P3370	20' *6,096.0*	2,775 *1,258.7*	1,500 *680.4*	12 *304.8*	1,500 Lbs./Ft. *2,232.2 (kg/m)*

Safety factor 3.

P3245



Part Number	Wt/100 pcs Lbs *(kg)*	Max. Allowable Pt. Load Lbs *(kg)*
P3245	54 *24.5*	1,000 *453.6*



Square Nut for P3245 Insert

Part Number	Size/Thread In	Wt/100 pcs Lbs *(kg)*
P3245-N4	¼" — 20	6 *2.7*
P3245-N6	⅜" — 16	5 *2.3*
HSQN050	½" — 13	6 *2.7*

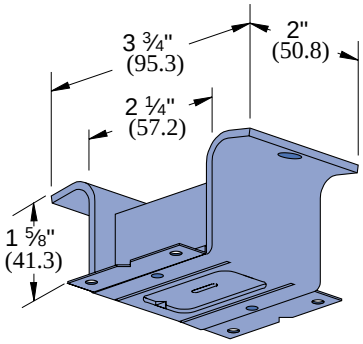
Finish: Electro-galvanized

Finish: Pre-galvanized
Safety factor of 3
- For ¼", ⅜", or ½" size attachment or hanger rod.
- Insert nuts to be ordered separately.

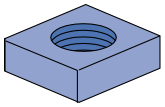
M24

Spot Insert

(When used for sprinkler systems only.)



Part Number	Wt/100 pcs Lbs *(kg)*	Max. Allowable Pt. Load Lbs *(kg)*
M24	52 *23.6*	800 *362.9*



Square Nut for M24

Part Number	Size/Thread In	Wt/100 pcs Lbs *(kg)*
M2506	¼" — 20	13 *5.9*
M2508	⅜" — 16	14 *6.4*
M2510	½" — 13	14 *6.4*
M2512	⅝" — 11	12 *5.4*
M2523	¾" — 10	11 *5.0*
M2524	⅞" — 9	10 *4.5*

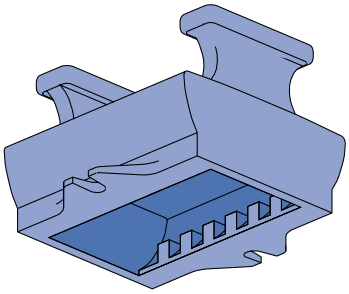
Finish: Electro-galvanized

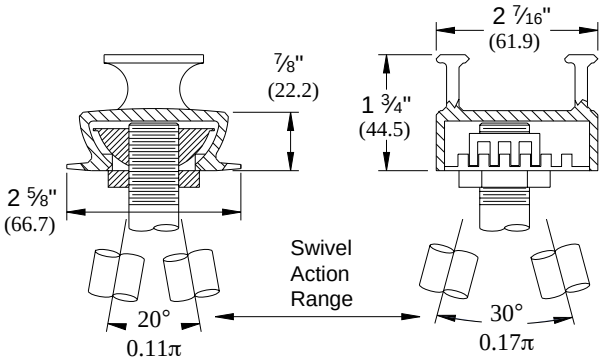
Finish: Electro-galvanized
Safety factor of 5
- Ribs along sides of slot give extra strength to case.
- Insert nuts M2506 thru M2524 to be ordered separately.

M26

Spot Insert

(When used for sprinkler systems only.)

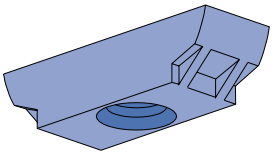




Part Number	Wt/100 pcs Lbs *(kg)*	Max. Allowable Pt. Load Lbs *(kg)*
M26	63 *28.6*	1,500 *680.4*

Finish: Malleable Iron
Material: Cadmium
Safety factor of 5

Rigid Nut for M26 Insert



Part Number	Size/Thread In	Max. Allowable Load* Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
M2808	⅜" — 16	610 *276.7*	12 *5.4*
M2810	½" — 13	950 *430.9*	11 *5.0*
M2812	⅝" — 11	1,500 *680.4*	14 *6.4*
M2823	¾" — 10	1,500 *680.4*	13 *5.9*
M2824	⅞" — 9	1,500 *680.4*	11 *5.0*

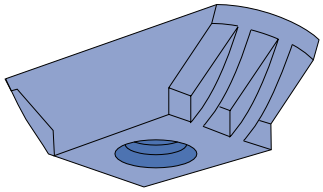
Finish: Cadmium

*The Fixed Position safe load ratings are for inserts and nut only and are based on the miniumum of the following two conditions:

(1) Load carrying capacities of threaded hanger rod as listed in the American Standard Code for 1.

(2) Laboratory tests of ultimate strength in any fixed rigid position with a safety factor of 5.

Swivel Nut for M26 Insert

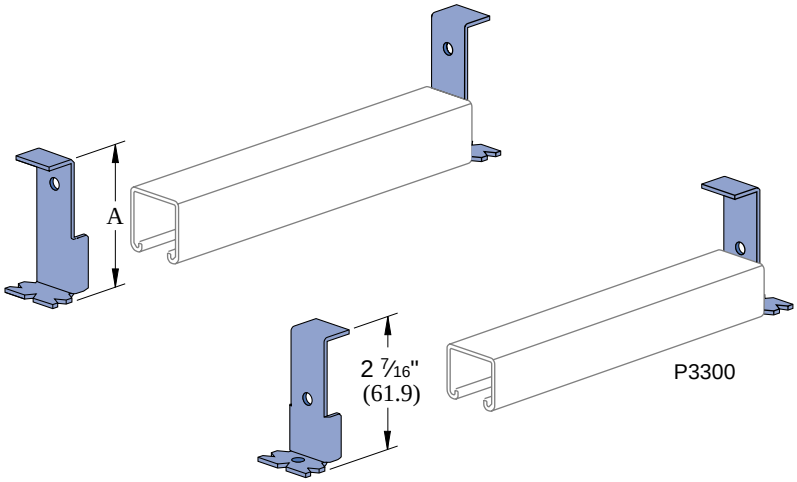


Part Number	Size/Thread In	Max. Allowable Load Swivel** Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
M2708	⅜" — 16	75 *34.0*	15 *6.8*
M2710	½" — 13	180 *81.6*	15 *6.8*
M2712	⅝" — 11	360 *163.3*	20 *9.1*
M2723	¾" — 10	640 *290.3*	18 *8.2*
M2724	⅞" — 9	1,000 *453.6*	15 *6.8*

Finish: Cadmium

** The Swivel Action safe load ratings assures the swivel movement of the nut before the hanger is subjected to a severe bending stress, in conformance with the American Standard Code for Piping, 1967.

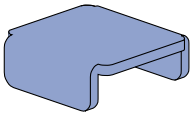
P1703, P1704, P3704, P3703 — End Cap Anchors



Part Number	Channel	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1703	P1000	2 13/32 *61.1*	30 *13.6*
P1704	P1000	3 17/32 *89.7*	37 *16.8*
P3703	P3300	2 7/16 *61.9*	17 *7.7*
P3704	P3000	3 *76.2*	20 *9.1*
P4703	P4000	2 3/8 *60.3*	27 *12.2*

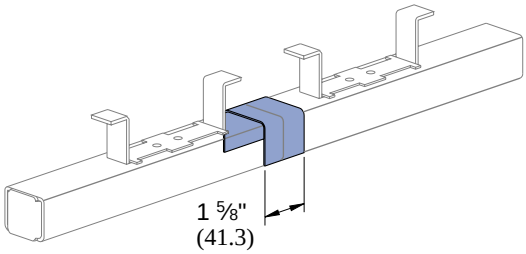
Note: End cap anchor for use with 1 5/8" wide standard Unistrut inserts only.

P2407, P3280, P3380 — End Caps



Part Number	Fits Channel	Wt/100 pcs Lbs *(kg)*
P2407	P1000	10 *4.5*
P3280	P3000	8 *3.6*
P3380	P3300	5 *2.3*

P3663, P4663 — Joint Covers



Part Number	Use With Insert Series	Wt/100 pcs Lbs *(kg)*
P3663	P3270	10 *4.5*
P4663	P3370	6 *2.7*

NOTE: Joint cover for use with 1 5/8" wide standard Unistrut inserts only.

Load Chart by Length

Part Number	Insert Length In *(mm)*	Wt/100 ft Lbs *(kg)*	Anchor Spacing In *(mm)*	Max. Allowable Point Load Lbs *(kg)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kg)*
P3249	3 *76.2*	85 *38.6*	3 *76.2*	500 *226.8*	–	500 *226.8*
P3349		68 *30.8*	3 *76.2*	400 *181.4*	–	400 *181.4*
P3250	4 *101.6*	100 *45.4*	4 *101.6*	800 *362.9*	–	800 *362.9*
P3350		81 *36.7*	4 *101.6*	500 *226.8*	–	500 *226.8*
P3251	6 *152.4*	130 *59.0*	6 *152.4*	1,000 *453.6*	–	1,000 *453.6*
P3351		102 *46.3*	6 *152.4*	750 *340.2*	–	750 *340.2*
P3252	8 *203.2*	159 *72.1*	8 *203.2*	1,200 *544.3*	–	1,200 *544.3*
P3352		122 *55.3*	8 *203.2*	1,000 *453.6*	–	1,000 *453.6*
P3754	12 *304.8*	210 *95.3*	8 *203.2*	2,500 *1,134.0*	3 *76.2*	5,000 *2,268.0*
P3253		227 *103.0*	4 *101.6*	2,000 *907.2*	–	2,000 *907.2*
P3353		174 *78.9*	4 *101.6*	1,500 *680.4*	–	1,500 *680.4*
P3254	16 *406.4*	270 *122.5*	4 *101.6*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3354		185 *83.9*	4 *101.6*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*
P3255	20 *508.0*	357 *161.9*	4 *101.6*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3355		231 *104.8*	4 *101.6*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*
P3256	24 *609.6*	399 *181.0*	4 *101.6*	2,000 *907.2*	12 *304.8*	4,000 *1,814.4*
P3356		277 *125.6*	4 *101.6*	1,500 *680.4*	12 *304.8*	3,000 *1,360.8*

Continuous Concrete Insert Load Chart

Up to 20 Ft. *(6.10m)*

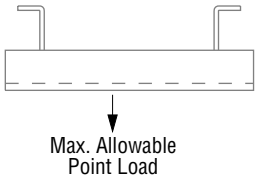
Part Number	Wt/100 ft Lbs *(kg)*	Anchor Spacing In *(mm)*	Max. Allowable Point Load Lbs *(kg)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs/Ft *(kg/m)*
P3270	194 *88.0*	4 *101.6*	2,000 *907.2*	12 *304.8*	2,000 *2,976.3*
P3370	139 *63.0*	4 *101.6*	1,500 *680.4*	12 *304.8*	1,500 *2,232.2*
P3170*	165 *74.8*	8 *203.2*	1,000 *453.6*	12 *304.8*	1,000 *1,488.2*

*When used in prestressed concrete "T" Beam.
Load data is based on use of 3000 PSI concrete.

Spot Insert Load Chart

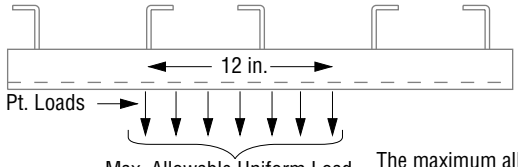
Part Number	Wt/100 pcs Lbs *(kg)*	Anchor Spacing In *(mm)*	Max. Allowable Point Load Lbs *(kg)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs/Ft *(kg/m)*
M26/M2812	54 *24.5*	–	1,500 *680.4*	–	1,500 *680.4*
M3245	52 *23.6*	–	1,000 *453.6*	–	1,000 *453.6*
M24/M2512	52 *23.6*	–	800 *362.9*	–	800 *362.9*

Maximum Allowable Point Load



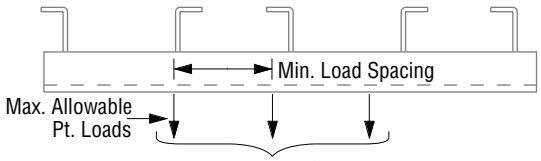
The maximum allowable point load may be placed anywhere along the insert.
All loads placed less than 2" from the end of an insert must be reduced by 50%.

Maximum Allowable Uniform Load



The maximum allowable uniform load must be placed as a series of point loads.

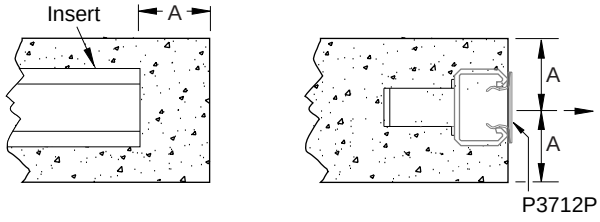
Spacing of Multiple Point Loads



Pull-Out Load

Minimum Edge Distance to Achieve Rated Pull-Out Capacity

A = 1⅞" (48mm); P3170
3" (76mm); all others

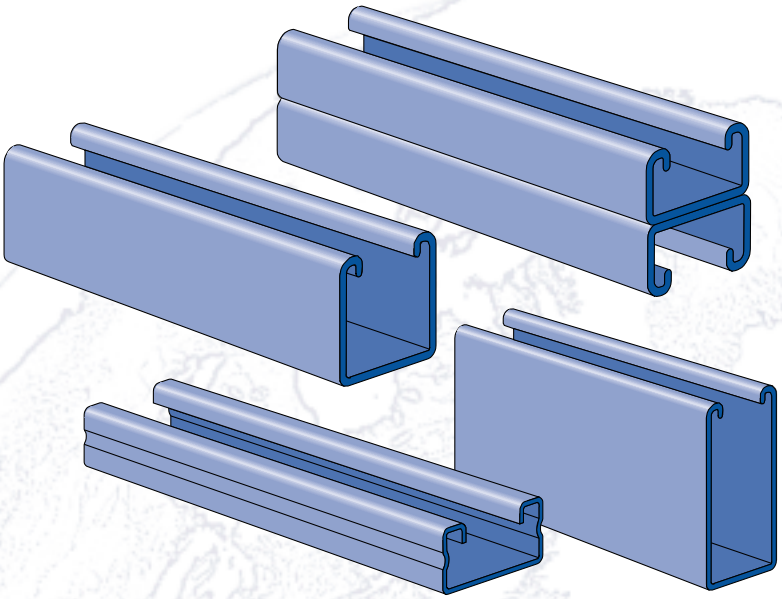


Note

When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

1¼" FRAMING SYSTEM

UNISTRUT®



MATERIAL

Unistrut channels are accurately and carefully cold formed to size from low-carbon strip steel.

STEEL: PLAIN
14 Gauge (1.9 mm), ASTM A1011 SS GR 33
19 Gauge (1.0 mm) ASTM A1008

STEEL: PRE-GALVANIZED
14 Gauge (1.9 mm),
19 Gauge (1.0 mm) ASTM A653 GR 33

Channel nuts are manufactured from mild steel bars conforming to ASTM A576, GR 1015, and are case hardened.

Fittings are made from hot rolled, pickled and oiled steel plate or strip and conform to ASTM A1011 SS GR 33.

Many framing channels are available in special metal on request. Consult factory for ordering information.

FINISHES

All channels and fittings are available in: Perma-Green II (GR), Pre-galvanized (PG), conforming to ASTM A653 GR 33 and plain (PL).

Nuts are available in plain or electro-galvanized (EG) finish.

Fittings are available in Perma-Green II or plain.

STANDARD LENGTHS

Standard lengths are 10 feet (3.05M) and 20 feet (6.10M).

Tolerances are: +⅛" (3.2 mm) to +½" (12.7 mm) to allow for cutting. Special lengths are available for a small cutting charge with a tolerance of ±⅛" (3.2mm).

APPLICATION

A framing system designed for medium loads, the 1¼" series is especially suitable for use in the OEM, commercial and display markets. It maintains a lightness in scale and a clean line that makes it aesthetically pleasing as well as functional.

THREADS

All threads on the nuts and bolts are Unified and American coarse screw threads.

DESIGN BOLT TORQUE

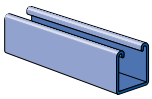
BOLT SIZE	¼" 20	5/16" 18	⅜" 16
FOOT LBS.	6	11	19
N·m	8	15	25

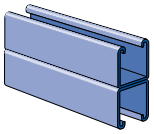
DIMENSIONS

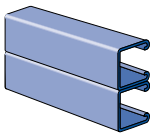
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

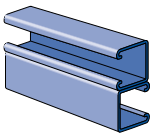
A1000 Series

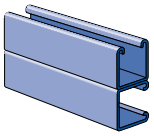
1¼" x 1¼"
14 Ga.


A1000-Pg 196


A1001-Pg 196

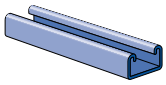

A1001 A-Pg 196

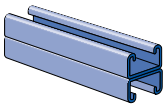

A1001 B-Pg 196


A1001 C-Pg 196

A3300 Series

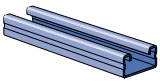
1¼" x ¾"
14 Ga.

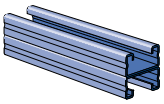

A3300-Pg 199


A3301-Pg 199

A4000 Series

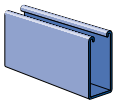
1¼" x ⅝"
19 Ga.


A4000-Pg 201


A4001-Pg 201

A5000 Series

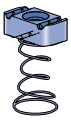
1¼" x 2½"
14 Ga.


A5000-Pg 203

Channel Nuts & Closures


A1006-1420-Pg 205


A4006-1420-Pg 205

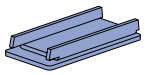

A5006-1420-Pg 205

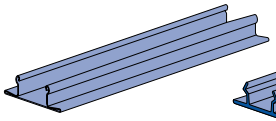

A3006-1420-Pg 205

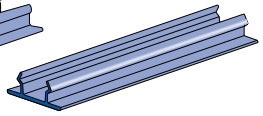

A3016-0832-Pg 205


A1280-Pg 206

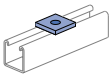

A4280-Pg 206

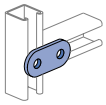

A5280-Pg 206

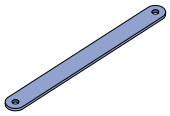

A1184-Pg 206

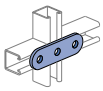

A1184P-Pg 206

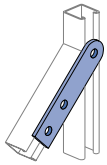
A Series Fittings

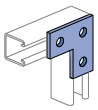

A1063-Pg 207

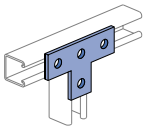

A1065-Pg 207

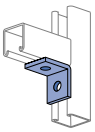

A1191-Pg Pg 207

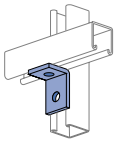

A1066-Pg 207

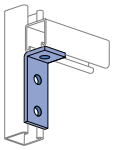

A2324-Pg 207

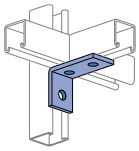

A1036-Pg 207

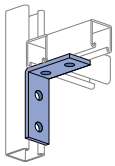

A1031-Pg 208

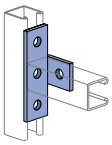

A1026-Pg 208

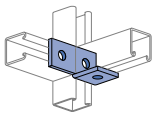

A1068-Pg 208

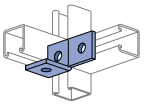

A1326-Pg 208

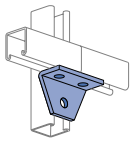

A1458-Pg 208

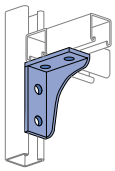

A1325-Pg 208

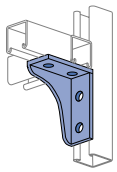

A1033-Pg 209

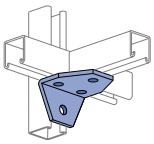

A1037-Pg 209

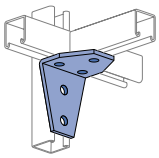

A1038-Pg 209

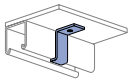

A1357-Pg 209

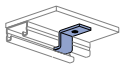

A1331-Pg 209

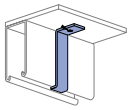

A1332-Pg 209

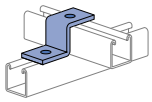

A1579-Pg 210

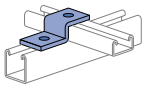

A2235-Pg 210

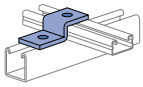

A2120-Pg 210

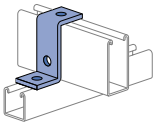

A4120-Pg 210

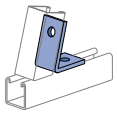

A5120-Pg 210

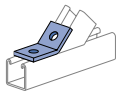

A1045-Pg 210

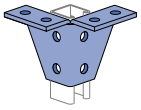

A3345-Pg 211

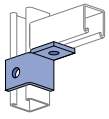

A4045-Pg 211

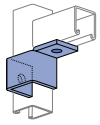

A5045-Pg 211

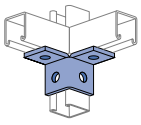

A2109-Pg 211

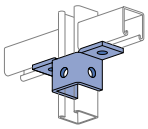

A2125-Pg 211

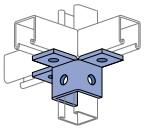

A2084-Pg 211

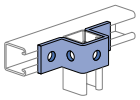

A2341 R-L-Pg 212

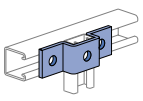

A2472 R-L-Pg 212

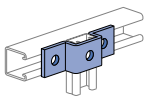

A2223-Pg 212

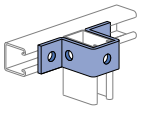

A2345-Pg 212

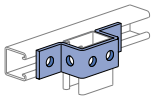

A2227-Pg 212


A1047-Pg 212

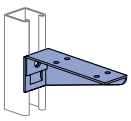

A3347-Pg 213

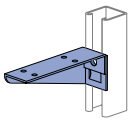

A4047-Pg 213

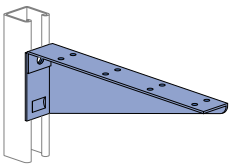

A5047-Pg 213

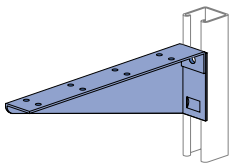

A5043-Pg 213


A2608-Pg 213


A2491 R-Pg 214

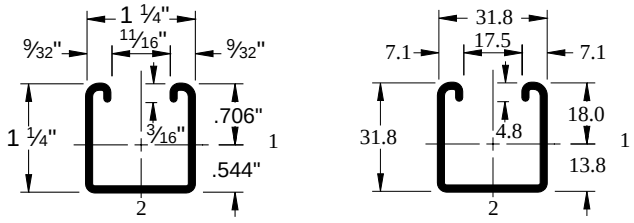

A2491 L-Pg 214

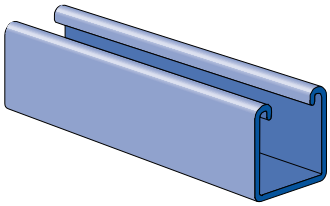

A2494 R-Pg 214


A2494 L-Pg 214

A1000 – 1¼" x 1¼"

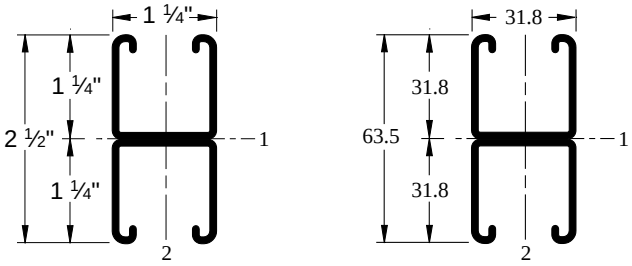
Wt/100 Ft: 104 Lbs(155 kg/100m)
Allowable Moment 2,160 In-Lbs (240 N•m)
14 Gauge Nominal Thickn,ess .075" (1.9mm)

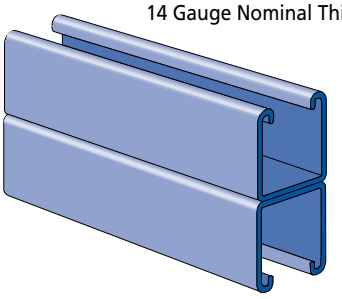




A1001 – 1¼" x 2½"

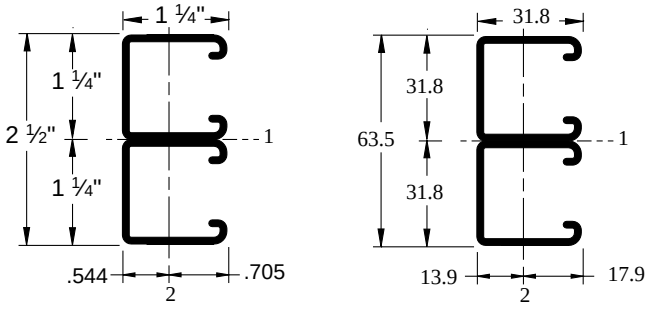
Wt/100 Ft: 208 Lbs (310 kg/100m)
Allowable Moment 6,090 In-Lbs (690 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

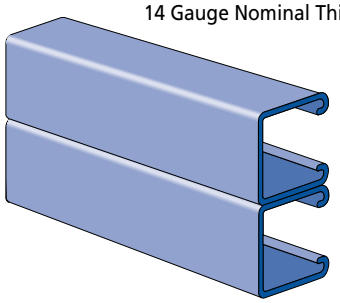




A1001A – 1¼" x 2½"

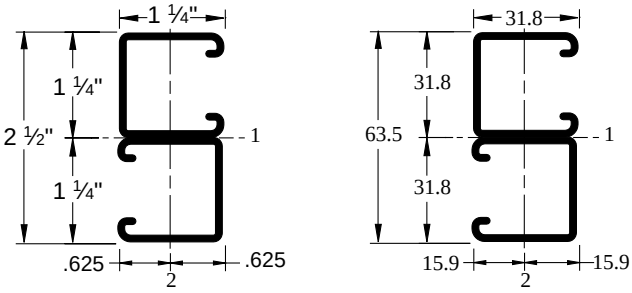
Wt/100 Ft: 208 Lbs (310 kg/100m)
Allowable Moment 7,920 In-Lbs (895 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

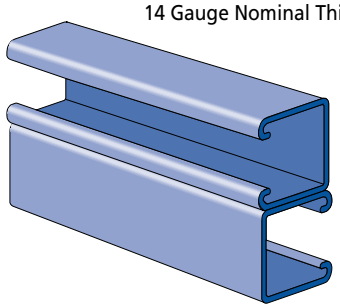




A1001B – 1¼" x 2½"

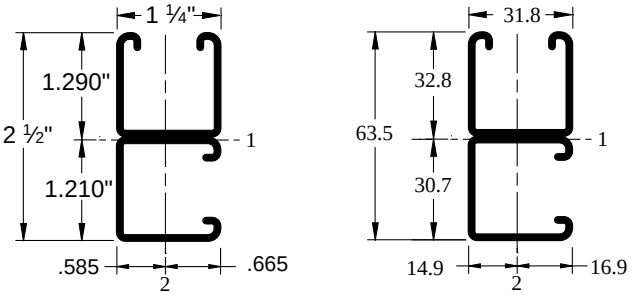
Wt/100 Ft: 208 Lbs (310 kg/100m)
Allowable Moment 7,920 In-Lbs (895 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

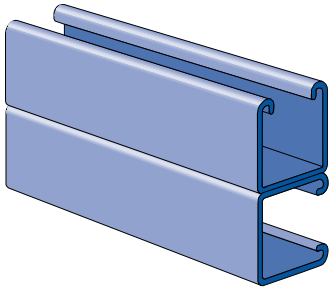




A1001C – 1¼" x 2½"

Wt/100 Ft: 208 Lbs (310 kg/100m)
Allowable Moment 6,770 In-Lbs (765 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)





Finishes: PL, GR, HG, PG Standard Lengths: 10' & 20'

BEAM LOADING – A1000

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Defl. Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
24	720	0.07	720	720	670
36	480	0.16	480	440	300
48	360	0.29	330	250	170
60	290	0.45	210	160	110
72	240	0.65	150	110	70
84	210	0.88	110	80	50
96	180	1.15	80	60	40
108	160	1.46	70	50	30
120	140	1.80	50	40	30

BEAM LOADING – A1001

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Defl. Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
24	1,400 *	0.04	1,400 *	1,400 *	1,400 *
36	1,350	0.09	1,350	1,350	1,350
48	1,010	0.16	1,010	1,010	830
60	810	0.26	810	790	530
72	680	0.37	680	550	370
84	580	0.50	540	410	270
96	510	0.65	410	310	210
108	450	0.83	330	250	160
120	410	1.02	260	200	130

COLUMN LOADING – A1000

Unbraced Height In	Maximum 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	1,790	5,390	4,880	4,270	3,750
36	1,550	4,340	3,750	3,110	2,580
48	1,320	3,520	2,930	2,300	1,860
60	1,120	2,880	2,300	1,770	1,400
72	960	2,360	1,860	1,400	1,080
84	830	1,980	1,530	1,130	**
96	720	1,680	1,280	**	**
108	630	1,450	1,080	**	**

COLUMN LOADING – A1001

Unbraced Height In	Maximum 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	3,410	12,730	12,170	11,450	10,790
36	3,220	11,530	10,790	9,980	9,170
48	3,030	10,500	9,750	8,270	6,510
60	2,780	9,700	8,270	6,090	4,270
72	2,480	8,490	6,510	4,270	2,970
84	2,150	7,050	4,910	3,140	2,180
96	1,860	5,680	3,760	2,400	**
108	1,620	4,500	2,970	**	**
120	1,420	3,640	2,400	**	**

ELEMENTS OF SECTION A1000/A1001

Parameter	A1000	A1001
Area of Section	0.305 In^2	0.610 In^2
Axis 1-1		
Moment of Inertia (I)	0.061 In^4	0.303 In^4
Section Modulus (S)	0.086 In^3	0.242 In^3
Radius of Gyration (r)	0.447 In	0.705 In
Axis 2-2		
Moment of Inertia (I)	0.078 In^4	0.156 In^4
Section Modulus (S)	0.125 In^3	0.250 In^3
Radius of Gyration (r)	0.506 In	0.506 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r} > 200$

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

BEAM LOADING – A1000 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	332	2	332	332	312
750	266	3	266	266	200
1,000	199	5	199	169	112
1,250	160	8	144	108	72
1,500	133	11	100	75	50
1,750	114	15	73	55	37
2,000	100	20	56	42	28
2,500	80	31	36	27	18
3,000	67	44	25	19	13

BEAM LOADING – A1001 *(METRIC)*

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kg	mm	kg	kg	kg
600	635 *	1	635 *	635 *	635 *
750	635 *	2	635	635	635
1,000	561	3	561	561	558
1,250	449	4	449	449	357
1,500	374	6	374	372	248
1,750	321	9	321	273	182
2,000	281	11	279	209	140
2,500	224	17	179	134	89
3,000	187	25	124	93	62

COLUMN LOADING – A1000 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	818	2,463	2,231	1,956	1,722
750	762	2,212	1,956	1,669	1,433
1,000	672	1,854	1,586	1,296	1,061
1,250	591	1,566	1,296	1,013	818
1,500	516	1,329	1,061	818	648
1,750	455	1,126	888	673	523
2,000	402	968	755	561	**
2,500	318	740	561	**	**

COLUMN LOADING – A1001 *(METRIC)*

Unbraced Height	Maximum Allowable Load at Slot Face	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
mm	kg	kg	kg	kg	kg
600	1,549	5,791	5,541	5,217	4,922
750	1,507	5,521	5,217	4,854	4,553
1,000	1,435	5,090	4,747	4,385	3,814
1,250	1,366	4,721	4,385	3,647	2,837
1,500	1,272	4,424	3,814	2,837	2,001
1,750	1,160	4,023	3,154	2,117	1,470
2,000	1,042	3,481	2,533	1,621	1,126
2,500	822	2,455	1,621	1,037	**
2,750	734	2,029	1,340	**	**

ELEMENTS OF SECTION A1000/A1001 *(METRIC)*

Parameter	A1000	A1001
Area of Section	1.97 cm^2	3.94 cm^2
Axis 1-1		
Moment of Inertia (I)	2.5 cm^4	12.6 cm^4
Section Modulus (S)	1.41 cm^3	3.97 cm^3
Radius of Gyration (r)	1.1 cm	1.8 cm
Axis 2-2		
Moment of Inertia (I)	3.2 cm^4	6.5 cm^4
Section Modulus (S)	2.05 cm^3	4.10 cm^3
Radius of Gyration (r)	1.3 cm	1.3 cm

Notes:

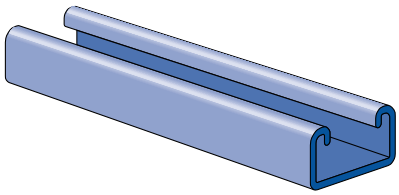
* Load limited by spot weld shear.

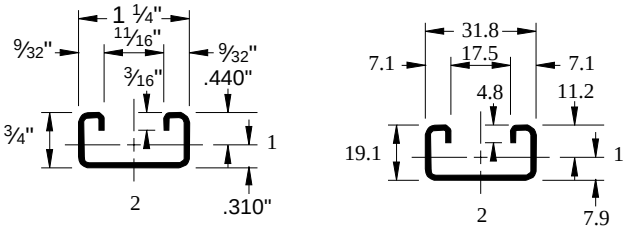
** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

A3300 – 1¼" x ¾"

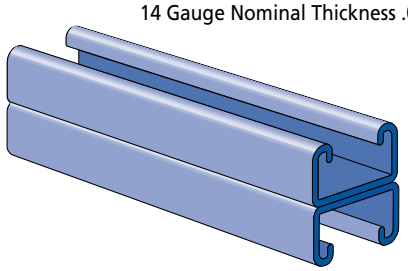
Wt/100 Ft: 78 Lbs (116 kg/100m)
Allowable Moment 960 In-Lbs (110 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

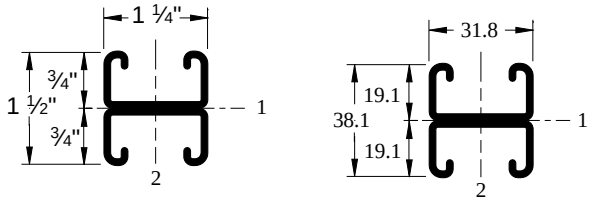




A3301 – 1¼" x 1½"

Wt/100 Ft: 156 Lbs (232 kg/100m)
Allowable Moment 2,590 In-Lbs (290 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)





BEAM LOADING – A3300

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
24	320	0.11	320	280	190
36	210	0.26	170	120	80
48	160	0.46	90	70	50
60	130	0.71	60	40	30
72	110	1.03	40	30	20
84	90	1.40	30	20	20
96	80	1.83	20	20	10

BEAM LOADING – A3301

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
24	840 *	0.07	840 *	840 *	840 *
36	580	0.15	580	570	380
48	430	0.27	430	320	210
60	350	0.42	270	200	140
72	290	0.61	190	140	90
84	250	0.83	140	100	70
96	220	1.08	110	80	50

COLUMN LOADING – A3300

Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Max. Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
24	1,120	3,570	2,900	2,040	1,420
36	760	2,150	1,420	910	630
48	520	1,210	800	510	**
60	380	770	510	**	**

COLUMN LOADING – A3301

Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Max. Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
24	2,380	9,580	9,300	8,740	7,980
36	2,150	8,830	7,980	6,750	5,510
48	1,870	7,580	6,340	4,710	3,320
60	1,580	6,230	4,710	3,060	2,130
72	1,320	4,910	3,320	2,130	**
84	1,100	3,700	2,440	**	**
96	930	2,830	1,870	**	**

ELEMENTS OF SECTION A3300/A3301

Parameter	A3300	A3301
Area of Section	0.230 In^2	0.460 In^2
Axis 1-1		
Moment of Inertia (I)	0.017 In^4	0.078 In^4
Section Modulus (S)	0.038 In^3	0.103 In^3
Radius of Gyration (r)	0.269 In	0.411 In
Axis 2-2		
Moment of Inertia (I)	0.052 In^4	0.104 In^4
Section Modulus (S)	0.084 In^3	0.167 In^3
Radius of Gyration (r)	0.477 In	0.477 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

BEAM LOADING – A3300 *(METRIC)*

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kg	Span/240 kg	Span/360 kg
600	147	3	147	131	87
750	118	4	111	84	56
1,000	88	8	63	47	31
1,250	71	12	40	30	20
1,500	59	18	28	21	14
1,750	50	24	20	15	10
2,000	44	31	16	12	8

BEAM LOADING – A3301 *(METRIC)*

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kg	Span/240 kg	Span/360 kg
600	381 *	2	381 *	381 *	381 *
750	318	3	318	318	255
1,000	239	5	239	216	144
1,250	191	7	*380	138	92
1,500	159	10	128	96	64
1,750	136	14	94	70	47
2,000	119	18	72	54	36

COLUMN LOADING – A3300 *(METRIC)*

Unbraced Height mm	Maximum Allowable Load at Slot Face kg	Max. Column Load Applied at C.G. K = 0.65 kg	K = 0.80 kg	K =1.0 kg	K = 1.2 kg
600	513	1,641	1,340	957	665
750	431	1,315	957	613	426
1,000	309	816	539	345	239
1,250	229	522	345	221	**

COLUMN LOADING – A3301 *(METRIC)*

Unbraced Height mm	Maximum Allowable Load at Slot Face kg	Max. Column Load Applied at C.G. K = 0.65 kg	K = 0.80 kg	K =1.0 kg	K = 1.2 kg
600	1,082	4,353	4,229	3,988	3,653
750	1,035	4,220	3,988	3,565	3,108
1,000	939	3,853	3,415	2,798	2,192
1,250	834	3,377	2,798	2,049	1,434
1,500	729	2,875	2,192	1,434	996
1,750	626	2,377	1,646	1,053	**
2,000	539	1,909	1,260	806	**

ELEMENTS OF SECTION A3300/A3301 *(METRIC)*

Parameter	A3300	A3301
Area of Section	1.48 cm^2	2.97 cm^2
Axis 1-1		
Moment of Inertia (I)	0.7 cm^4	3.2 cm^4
Section Modulus (S)	0.62 cm^3	1.69 cm^3
Radius of Gyration (r)	0.7 cm	1.0 cm
Axis 2-2		
Moment of Inertia (I)	2.2 cm^4	4.3 cm^4
Section Modulus (S)	1.38 cm^3	2.74 cm^3
Radius of Gyration (r)	1.2 cm	1.2 cm

Notes:

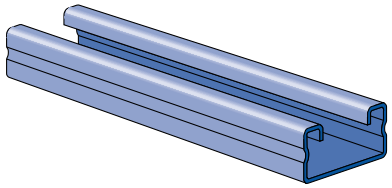
* Load limited by spot weld shear.

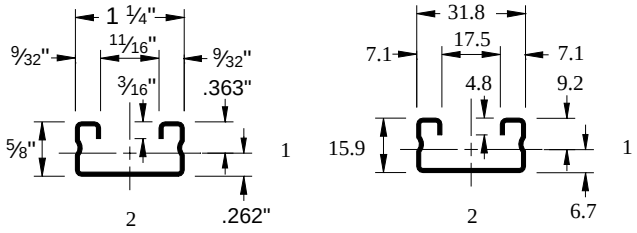
** $^{KL}/_{r} > 200$

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

A4000 – 1¼" x ⅝"

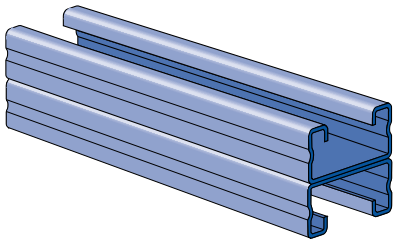
Wt/100 Ft: 45 Lbs (67 kg/100m)
Allowable Moment 480 In-Lbs (50 N•m)
14 Gauge Nominal Thickness .040" (1.0mm)

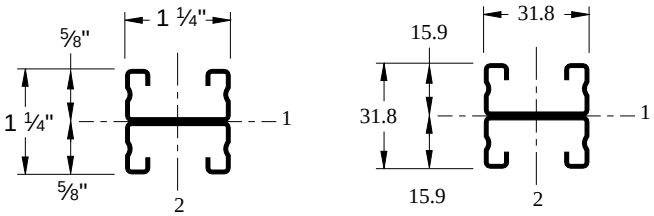




A4001– 1¼" x 1¼"

Wt/100 Ft: 90 Lbs (134 kg/100m)
Allowable Moment 1,230 In-Lbs (140 N•m)
14 Gauge Nominal Thickness .040" (1.0mm)





BEAM LOADING – A4000

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
24	160	0.14	150	110	80
36	110	0.31	70	50	30
48	80	0.56	40	30	20
60	60	0.87	20	20	10
72	50	1.25	20	10	10

BEAM LOADING – A4001

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
24	330 *	0.08	330 *	330 *	330 *
36	270	0.18	270	230	150
48	210	0.32	170	130	80
60	160	0.51	110	80	50
72	140	0.73	80	60	40
84	120	0.99	60	40	30

COLUMN LOADING – A4000

Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Max. Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
24	660	2,040	1,710	1,280	910
36	450	1,330	910	580	400
48	310	770	510	**	**

COLUMN LOADING – A4001

Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Max. Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
24	1,260	4,770	4,340	3,720	3,080
36	1,050	3,800	3,080	2,170	1,510
48	830	2,770	1,910	1,220	850
60	640	1,850	1,220	780	**
72	510	1,280	850	**	**
84	410	940	620	**	**

ELEMENTS OF SECTION A4000/A4001

Parameter	A4000	A4001
Area of Section	0.123 In^2	0.245 In^2
Axis 1-1		
Moment of Inertia (I)	0.007 In^4	0.031 In^4
Section Modulus (S)	0.019 In^3	0.049 In^3
Radius of Gyration (r)	0.239 In	0.354 In
Axis 2-2		
Moment of Inertia (I)	0.028 In^4	0.056 In^4
Section Modulus (S)	0.045 In^3	0.089 In^3
Radius of Gyration (r)	0.477 In	0.477 In

Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

BEAM LOADING – A4000 *(METRIC)*

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kg	Span/240 kg	Span/360 kg
600	73	3	72	54	36
750	59	5	46	34	23
1,000	44	9	26	19	13
1,250	35	15	17	12	8
1,500	29	21	12	9	6

BEAM LOADING – A4001 *(METRIC)*

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kg	Span/240 kg	Span/360 kg
600	150 *	2	150 *	150 *	150 *
750	150 *	3	150 *	150 *	102
1,000	114	6	114	86	57
1,250	91	9	150	55	37
1,500	76	12	51	38	25
1,750	65	17	37	28	19

COLUMN LOADING – A4000 *(METRIC)*

Unbraced Height mm	Maximum Allowable Load at Slot Face kg	Max. Column Load Applied at C.G. K = 0.65 kg	K = 0.80 kg	K =1.0 kg	K = 1.2 kg
600	304	936	790	597	425
75 0	256	778	597	392	272
1,000	184	521	345	221	153

COLUMN LOADING – A4001 *(METRIC)*

Unbraced Height mm	Maximum Allowable Load at Slot Face kg	Max. Column Load Applied at C.G. K = 0.65 kg	K = 0.80 kg	K =1.0 kg	K = 1.2 kg
600	575	2,175	1,987	1,711	1,424
750	531	1,970	1,711	1,354	1,017
1,000	450	1,591	1,238	824	572
1,250	365	1,209	824	527	366
1,500	297	866	572	366	**
1,750	244	637	420	269	**

ELEMENTS OF SECTION A4000/A4001 *(METRIC)*

Parameter	A4000	A4001
Area of Section	0.79 cm^2	1.58 cm^2
Axis 1-1		
Moment of Inertia (I)	0.3 cm^4	1.3 cm^4
Section Modulus (S)	0.31 cm^3	0.80 cm^3
Radius of Gyration (r)	0.6 cm	0.9 cm
Axis 2-2		
Moment of Inertia (I)	1.2 cm^4	2.3 cm^4
Section Modulus (S)	0.74 cm^3	1.46 cm^3
Radius of Gyration (r)	1.2 cm	1.2 cm

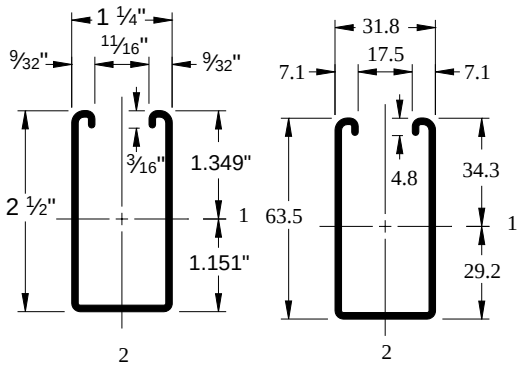
Notes:

* Load limited by spot weld shear.

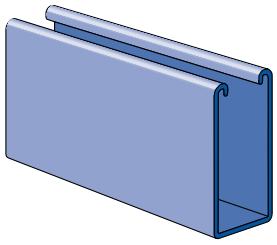
** $^{KL}/_{r} > 200$

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

A5000 – 1¼" x 2½"



Wt/100 Ft: 167 Lbs (249 kg/100m)
Allowable Moment 6,690 In-Lbs (760 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)



BEAM LOADING – A5000

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load Lbs	Uniform Loading at Deflection Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
24	2,230	0.04	2,230	2,230	2,230
36	1,490	0.09	1,490	1,490	1,490
48	1,120	0.15	1,120	1,120	980
60	890	0.24	890	890	630
72	740	0.34	740	650	440
84	640	0.46	640	480	320
96	560	0.61	490	370	250
108	500	0.77	390	290	190
120	450	0.95	310	240	160

BEAM LOADING – A5000 *(METRIC)*

Span mm	Max Allowable Uniform Load kg	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kg	Span/240 kg	Span/360 kg
600	*1028*	*1*	*1028*	*1028*	*1028*
750	*822*	*1*	*822*	*822*	*822*
1,000	*617*	*3*	*617*	*617*	*617*
1,250	*493*	*4*	*493*	*493*	*423*
1,500	*411*	*6*	*411*	*411*	*294*
1,750	*352*	*8*	*352*	*324*	*216*
2,000	*308*	*10*	*308*	*248*	*165*
2,500	*247*	*16*	*212*	*159*	*106*
3,000	*206*	*23*	*147*	*110*	*74*

COLUMN LOADING – A5000

Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Max. Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
24	2,820	7,970	6,700	5,130	3,810
36	2,120	5,310	3,810	2,650	2,020
48	1,590	3,340	2,400	1,740	1,370
60	1,270	2,350	1,740	1,300	1,050
72	1,060	1,800	1,370	1,050	860
84	910	1,460	1,140	890	730
96	800	1,240	980	770	**
108	720	1,080	860	**	**
120	660	960	770	**	**

COLUMN LOADING – A5000 *(METRIC)*

Unbraced Height mm	Maximum Allowable Load at Slot Face kg	Max. Column Load Applied at C.G. K = 0.65 kg	K = 0.80 kg	K =1.0 kg	K = 1.2 kg
600	*1,286*	*3,653*	*3,087*	*2,378*	*1,777*
750	*1,140*	*3,040*	*2,378*	*1,659*	*1,234*
1,000	*883*	*2,113*	*1,491*	*1,049*	*806*
1,250	*705*	*1,453*	*1,049*	*762*	*602*
1,500	*585*	*1,090*	*806*	*602*	*485*
1,750	*501*	*869*	*656*	*501*	*410*
2,000	*439*	*723*	*557*	*432*	*356*
2,500	*357*	*546*	*432*	*341*	**
2,750	*327*	*489*	*390*	**	**

ELEM. OF SECTION A5000

Parameter	A5000	
Area of Section	0.492	In^2
Axis 1-1		
Moment of Inertia (I)	0.359	In^4
Section Modulus (S)	0.266	In^3
Radius of Gyration (r)	0.854	In
Axis 2-2		
Moment of Inertia (I)	0.143	In^4
Section Modulus (S)	0.229	In^3
Radius of Gyration (r)	0.539	In

ELEM. OF SECTION A5000 *(METRIC)*

Parameter	A5000	
Area of Section	3.17	cm^2
Axis 1-1		
Moment of Inertia (I)	14.9	cm^4
Section Modulus (S)	4.36	cm^3
Radius of Gyration (r)	2.2	cm
Axis 2-2		
Moment of Inertia (I)	6.0	cm^4
Section Modulus (S)	3.75	cm^3
Radius of Gyration (r)	1.4	cm

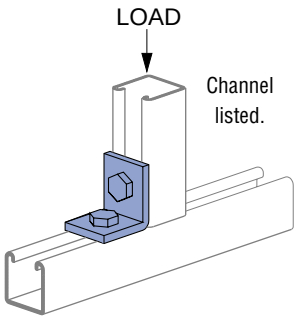
Notes:

* Load limited by spot weld shear.

** $^{KL}/_{r}$ > 200

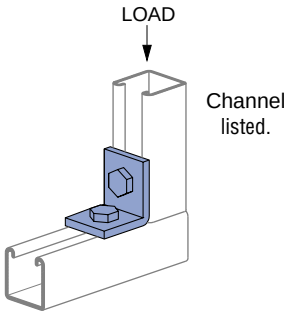
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

LOAD DATA FOR UNISTRUT SECTIONS SUBJECT TO CRUSHING LOADS



Channel	Allowable Load at Center of Member Lbs *(kg)*
A1000	3,000 *1,361*
A3300	3,000 *1,361*
A4000	1,400 *635*
A5000	2,500 *1,134*

Safety Factor of 2½



Channel	Allowable Load at End of member Lbs *(kg)*
A1000	2000 *907*
A3300	2000 *907*
A4000	1000 *454*
A5000	1800 *816*

Safety Factor of 2½

Maximum Allowable Pull-Out And Slip Loads

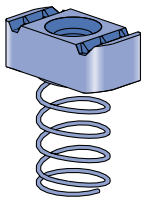
Nut Size/ Thread	Channel	Gauge	Max. Allowable Pull-Out Lbs *(kg)*	Resistance to Slip Lbs *(kg)*	Torque Ft-Lbs *(N•m)*
⅜" -16	A1000	14	900 *408*	500 *227*	19 *26*
5/16" -18	A3300	14	900 *408*	500 *227*	11 *15*
¼" -20	A5000	14	900 *408*	500 *227*	6 *8*
⅜" -16	A4000	19	300 *136*	400 *181*	19 *26*

Nut design loads include a minimum safety factor of 3.

Nut Selections Chart

Channel Nut Part Number	Nut Size – Thread In. - Thread	Use with Channel A1000	A3300	A4000	A5000
A1006-1420	¼" – 20	■	-	-	-
A1007	5/16" – 18	■	-	-	-
A1008	⅜" – 16	■	-	-	-
A3006-1420	¼" – 20	■	■	■	■
A3007	5/16" – 18	■	■	■	■
A3008	⅜" – 16	■	■	■	■
A3016-0832	#8 – 32	■	■	■	■
A3016-1024	#10 – 24	■	■	■	■
A3016-1032	#10 – 32	■	■	■	■
A3016-1420	¼" – 20	■	■	■	■
A4006-1420	¼" – 20	-	■	■	-
A4007	5/16" – 18	-	■	■	-
A4008	⅜" – 16	-	■	■	-
A5006-1420	¼" – 20	-	-	-	■
A5007	5/16" – 18	-	-	-	■
A5008	⅜" – 16	-	-	-	■

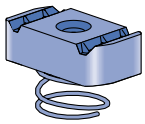
A1006-1420, A1007, A1008 Channel Nuts with Springs



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
A1006-1420	¼"-20	6 *2.7*
A1007	5/16"-18	6 *2.7*
A1008	⅜"-16	6 *2.7*

Note: Use with A1000 channel.

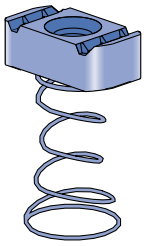
A4006-1420, A4007, A4008 Channel Nuts with Springs



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
A4006-1420	¼"-20	5 *2.3*
A4007	5/16"-18	5 *2.3*
A4008	⅜"-16	5 *2.3*

Note: Use with A3300 & A4000 channels.

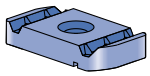
A5006-1420, A5007, A5008 Channel Nuts with Springs



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
A5006-1420	¼"-20	6 *2.7*
A5007	5/16"-18	6 *2.7*
A5008	⅜"-16	6 *2.7*

Note: Use with A5000 channel.

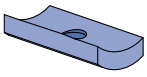
A3006-1420, A3007, A3008 Channel Nuts without Springs



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
A3006-1420	¼"-20	5 *2.3*
A3007	5/16"-18	5 *2.3*
A3008	⅜"-16	5 *2.3*

Note: Use with A1000, A3300, A4000 & A5000 channels.

A3016-0832 thru A3016-1420 Channel Nuts without Springs

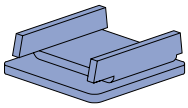


Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
A3016-0832	#8 - 32	1 *0.5*
A3016-1024	#10 - 24	1 *0.5*
A3016-1032	#10 - 32	1 *0.5*
A3016-1420	¼" - 20	1 *0.5*

Note: Use with A1000, A3300, A4000 & A5000 channels.

A1280 End Cap

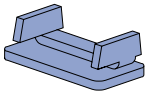
Wt/100 pcs: 7 Lbs (3.2 kg)



Material: .075" (1.9)
Note: Use with A1000 channel

A4280 End Cap

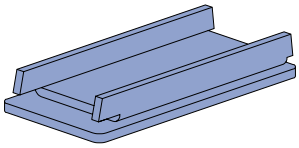
Wt/100 pcs: 3 Lbs (1.4 kg)



Material: .075" (1.9)
Note: Use with A4000 channel.

A5280 End Cap

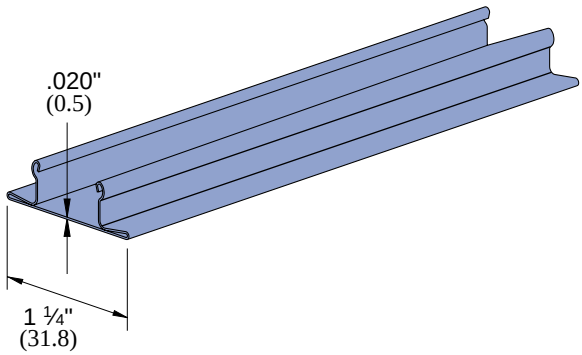
Wt/100 pcs: 14 Lbs (6.4 kg)



Material: .075" (1.9)
Note: Use with A5000 channel.

A1184 Closure Strip

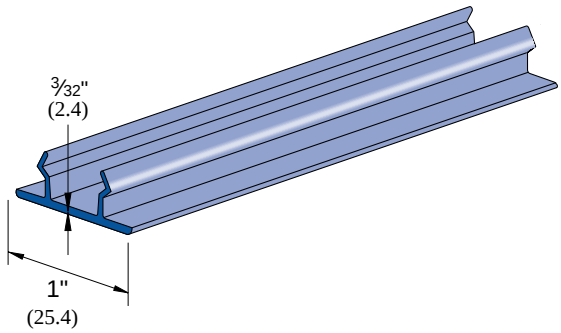
Wt/100 Ft: 21 Lbs (31.3 kg/100M)



Standard Length 10 Feet.
Finish: Perma-Green II (GR), Plain (PL).

A1184P Closure Strip

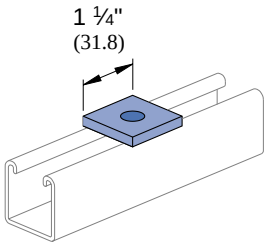
Wt/100 Ft: 21 Lbs (31.3 kg/100M)



Standard length: 10 Ft.
Material: Paintable PVC.
Color: Green, Grey.

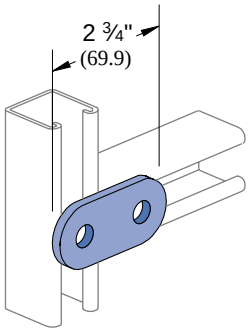
A1063

Wt/100 pcs: 8 Lbs (3.6 kg)



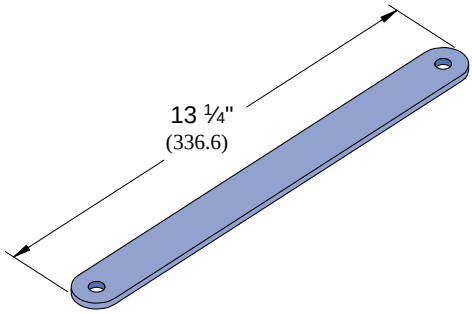
A1065

Wt/100 pcs: 17 Lbs (7.7 kg)



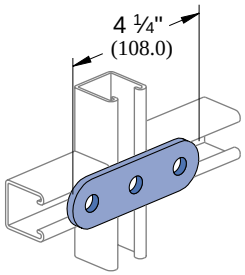
A1191

Wt/100 pcs: 87 Lbs (39.5 kg)



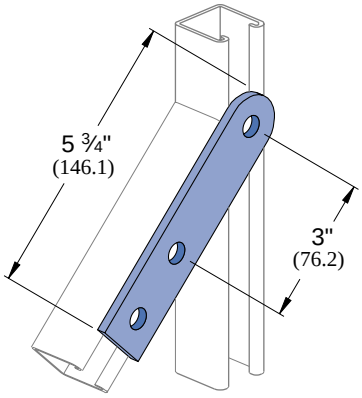
A1066

Wt/100 pcs: 26 Lbs (11.8 kg)



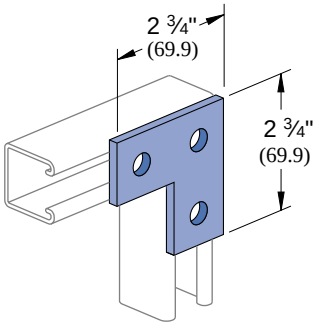
A2324

Wt/100 pcs: 39 Lbs (17.7 kg)



A1036

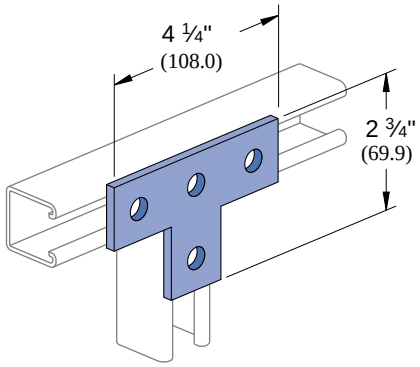
Wt/100 pcs: 27 Lbs (12.2 kg)



Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13⁄32" (10.3mm); **Hole Spacing - From End:** 5⁄8" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3⁄16" (4.8mm)

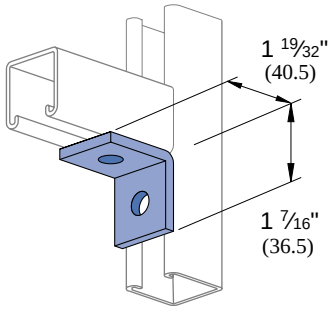
A1031

Wt/100 pcs: 34 Lbs (15.4 kg)



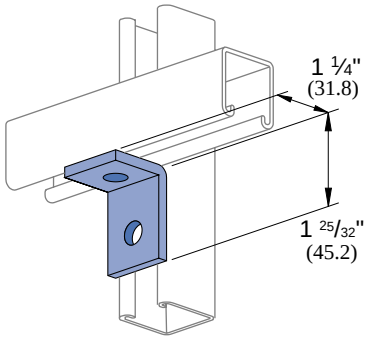
A1026

Wt/100 pcs: 17 Lbs (7.7 kg)



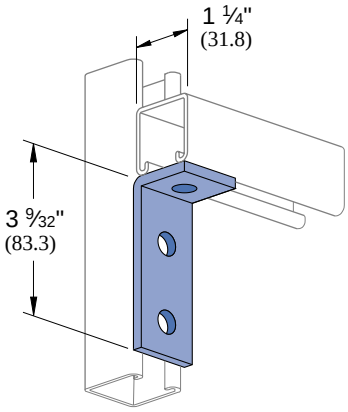
A1068

Wt/100 pcs: 17 Lbs (7.7 kg)



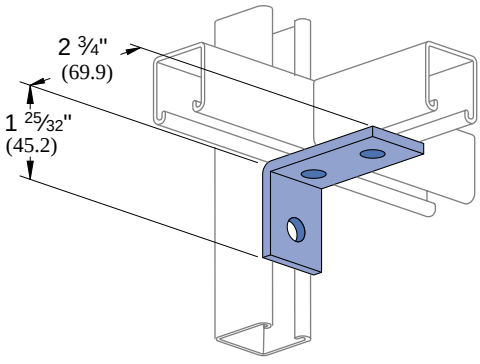
A1326

Wt/100 pcs: 27 Lbs (12.2 kg)



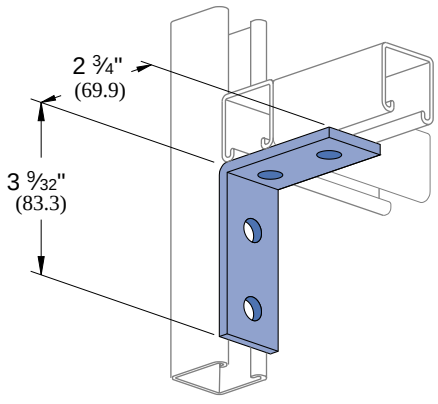
A1458

Wt/100 pcs: 27 Lbs (12.2 kg)



A1325

Wt/100 pcs: 38 Lbs (17.2 kg)



Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
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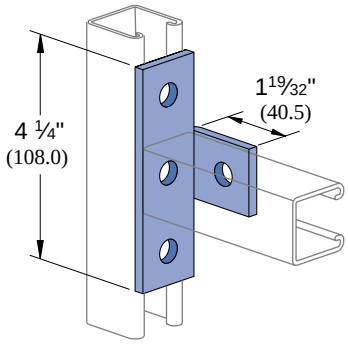
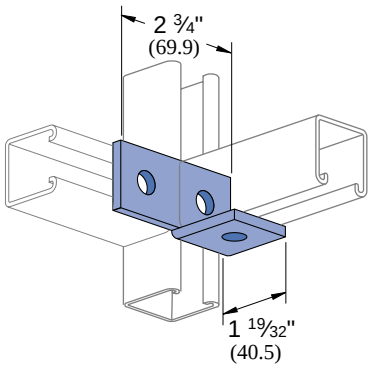
A1033

Wt/100 pcs: 34 Lbs (15.4 kg)



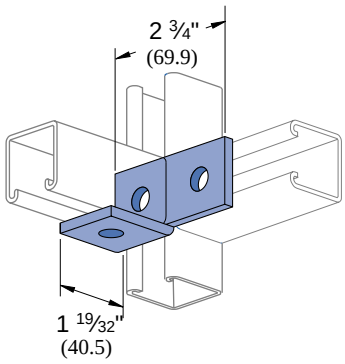
A1037

Wt/100 pcs: 30 Lbs (13.6 kg)



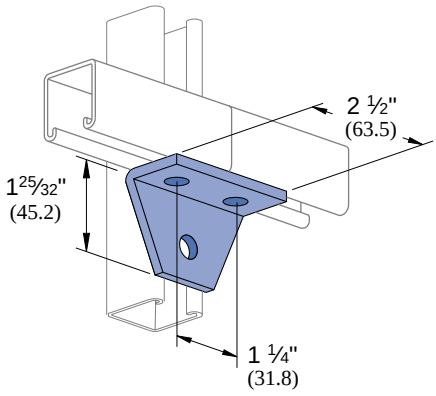
A1038

Wt/100 pcs: 30 Lbs (13.6 kg)



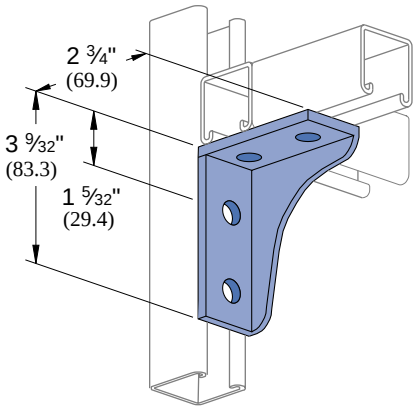
A1357

Wt/100 pcs: 30 Lbs (13.6 kg)



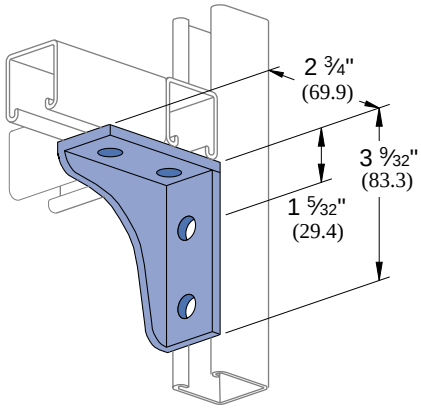
A1331

Wt/100 pcs: 75 Lbs (34.0 kg)



A1332

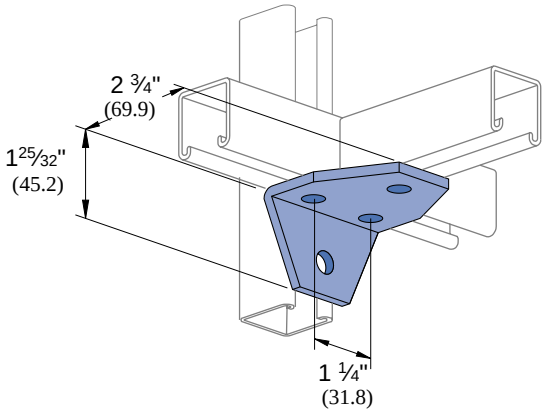
Wt/100 pcs: 75 Lbs (34.0 kg)



Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13/32" (10.3mm); **Hole Spacing - From End:** 5/8" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

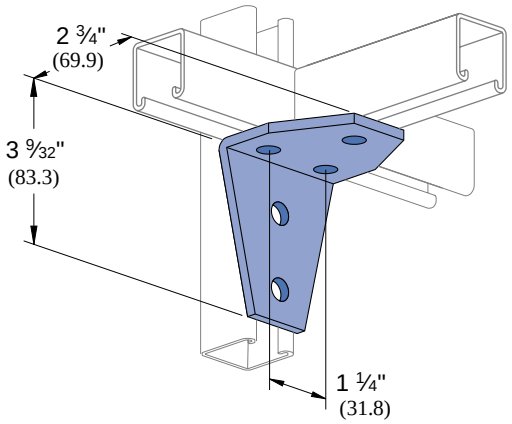
A1579

Wt/100 pcs: 44 Lbs (20.0 kg)



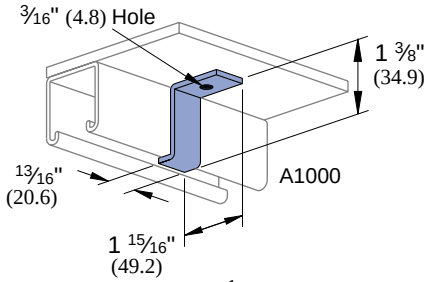
A2235

Wt/100 pcs: 59 Lbs (26.8 kg)



A2120

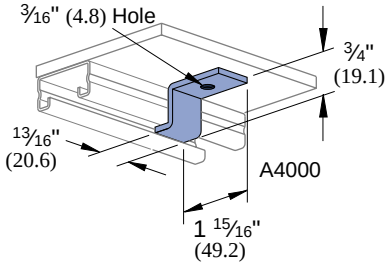
Wt/100 pcs: 9 Lbs (4.1 kg)



⅛" (3.2) Thick

A4120

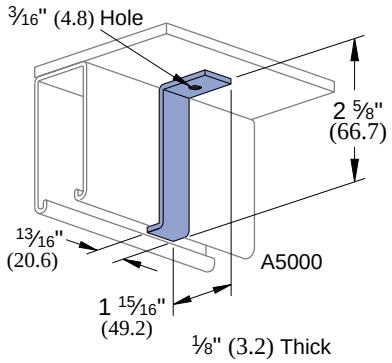
Wt/100 pcs: 7 Lbs (3.2 kg)



⅛" (3.2) Thick

A5120

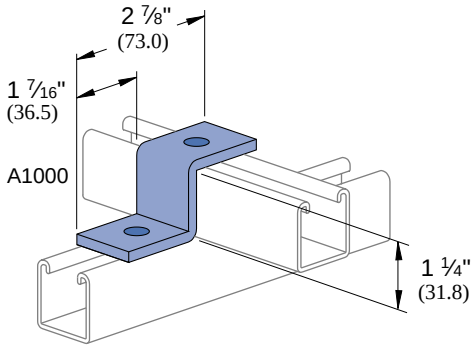
Wt/100 pcs: 13 Lbs (5.9 kg)



⅛" (3.2) Thick

A1045

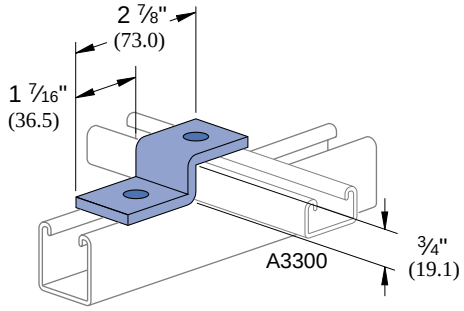
Wt/100 pcs: 25 Lbs (11.3 kg)



Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13/32" (10.3mm); **Hole Spacing - From End:** ⅝" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

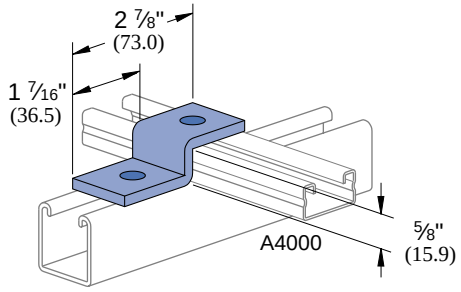
A3345

Wt/100 pcs: 23 Lbs (10.4 kg)



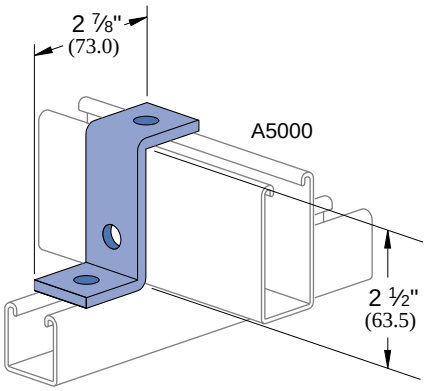
A4045

Wt/100 pcs: 21 Lbs (9.5 kg)



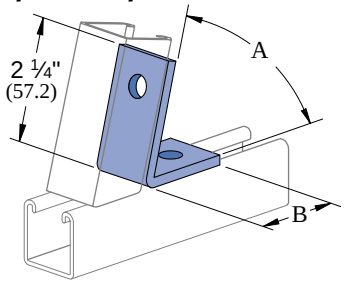
A5045

Wt/100 pcs: 33 Lbs (15.0 kg)



A2109, A2110, A2111

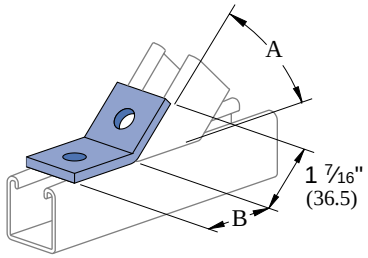
Wt/100 pcs: 23 Lbs (10.4 kg)



Part Number	A Degree *(rad)*	B In *(mm)*
A2109	52½° *0.92*	1 25/32 *45.2*
A2110	45° *0.79*	1¾ *44.5*
A2111	37½° *0.65*	1¾ *44.5*

A2125, A2126, A2127

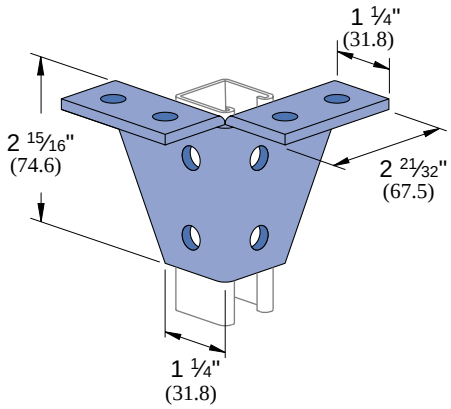
Wt/100 pcs: 17 Lbs (7.7 kg)



Part Number	A Degree *(rad)*	B In *(mm)*
A2125	52½° *0.92*	1¼ *31.8*
A2126	45° *0.79*	1¼ *31.8*
A2127	37½° *0.65*	1 9/32 *32.5*

A2084

Wt/100 pcs: 90 Lbs (40.8 kg)

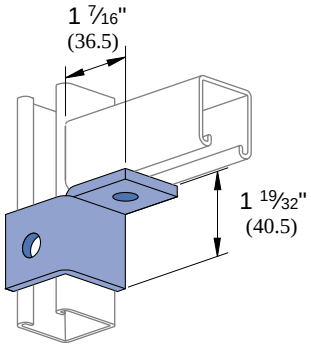


Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 13/32" (10.3mm); **Hole Spacing - From End:** 5/8" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

A2341 R-L

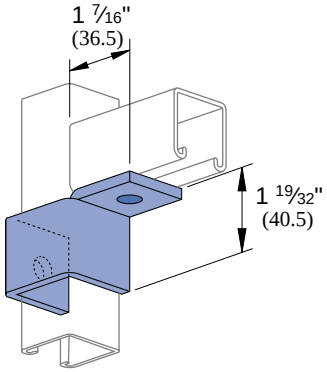
Wt/100 pcs: 26 Lbs (11.8 kg)



R-As shown
L-Opposite hand

A2472 R-L

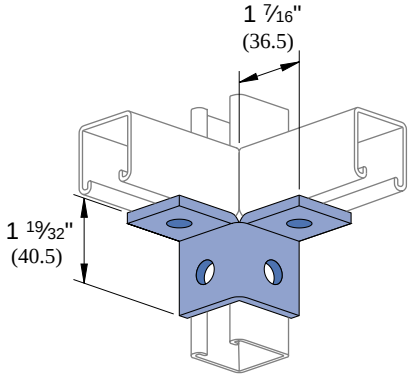
Wt/100 pcs: 33 Lbs (15.0 kg)



R-As shown
L-Opposite hand

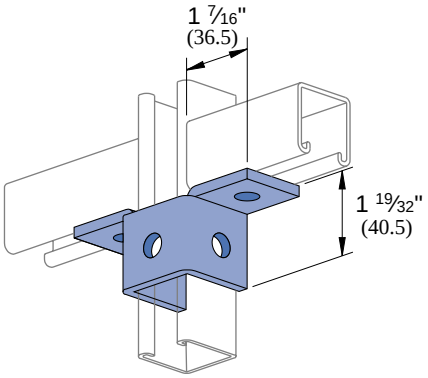
A2223

Wt/100 pcs: 34 Lbs (15.4 kg)



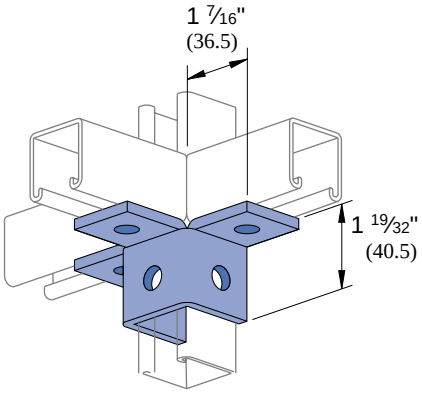
A2345

Wt/100 pcs: 41 Lbs (18.6 kg)



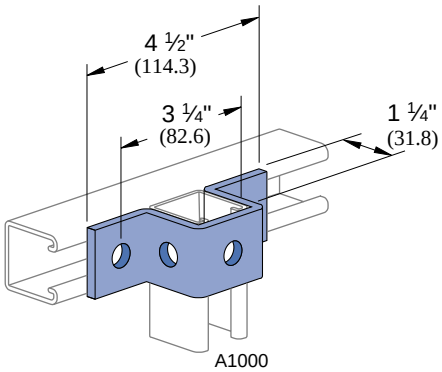
A2227

Wt/100 pcs: 52 Lbs (23.6 kg)



A1047

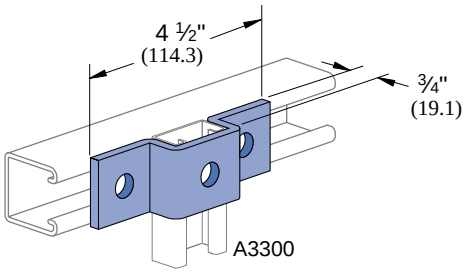
Wt/100 pcs: 43 Lbs (19.5 kg)



Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13/32" (10.3mm); **Hole Spacing - From End:** 5/8" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

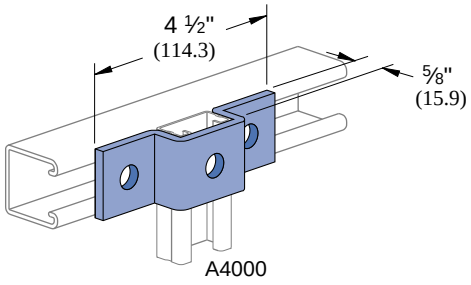
A3347

Wt/100 pcs: 37 Lbs (16.8 kg)



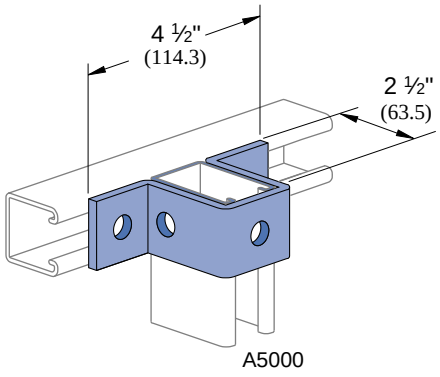
A4047

Wt/100 pcs: 34 Lbs (15.4 kg)



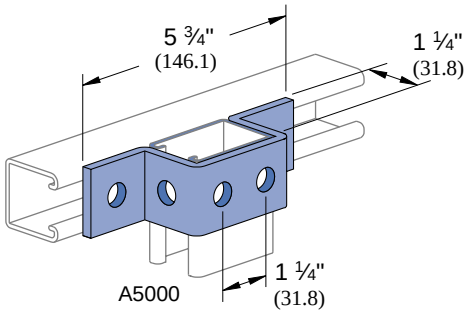
A5047

Wt/100 pcs: 58 Lbs (26.3 kg)



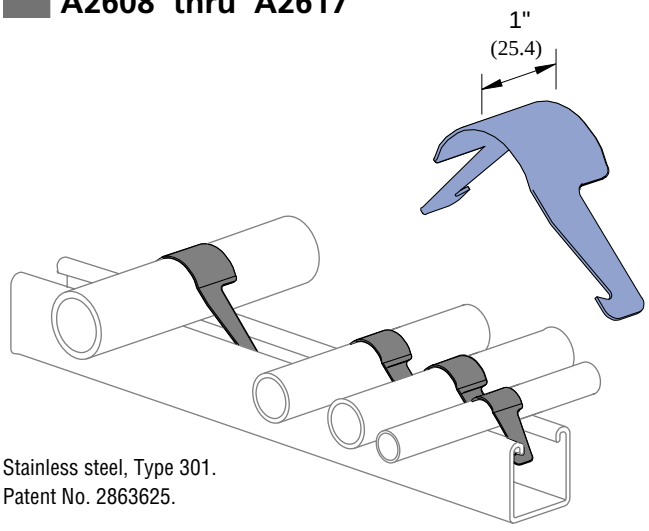
A5043

Wt/100 pcs: 50 Lbs (22.7 kg)



A2608 thru A2617

UNI-CLIP®



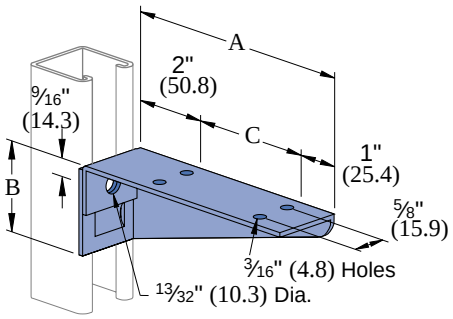
Stainless steel, Type 301.
Patent No. 2863625.

Part Number	Pipe Size In *(mm)*	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*
A2608	¼ *6.4*	0.540 *13.7*	0.6 *0.3*
A2609	⅜ *9.5*	0.675 *17.1*	0.7 *0.3*
A2611	½ *12.7*	0.840 *21.3*	1.0 *0.5*
A2612	¾ *19.1*	1.050 *26.7*	1.4 *0.6*
A2613	1 *25.4*	1.315 *33.4*	2.0 *0.9*
A2614	1¼ *31.8*	1.660 *42.2*	2.4 *1.1*
A2615	1½ *38.1*	1.900 *48.3*	3.2 *1.5*
A2617	2 *50.8*	2.375 *60.3*	4.7 *2.1*

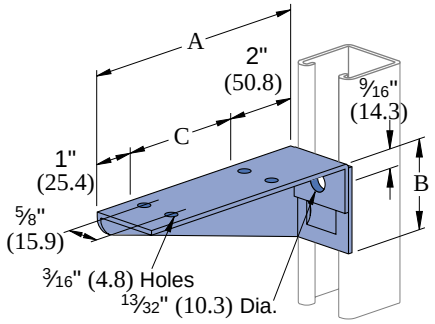
Standard Dimensions for 1¼" (32 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 13⁄32" (10.3mm); **Hole Spacing - From End:** ⅝" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1 mm); **Width:** 1¼"(31.8mm); **Thickness:** 3⁄16" (4.8mm)

A2491 R-L, A2492 R-L, A2493 R-L



Right



Left

Material: 14 Gauge Steel.

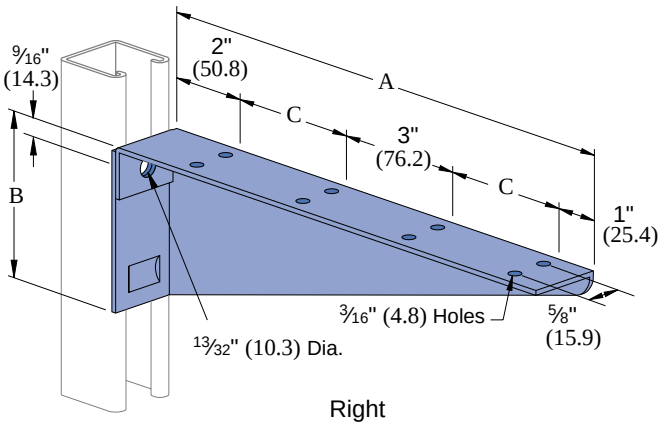
Part Number	A In *(mm)*	B In *(mm)*	C In *(mm)*	Wt/100 pcs Lbs *(kg)*
A2491 R-L	6 *152.4*	2 *50.8*	3 *76.2*	38 *17.2*
A2492 R-L	8 *203.2*	2½ *63.5*	5 *127.0*	56 *25.4*
A2493 R-L	10 *254.0*	3 *76.2*	7 *177.8*	73 *33.1*

Design Uniform Load
(Channel Upright Listed)

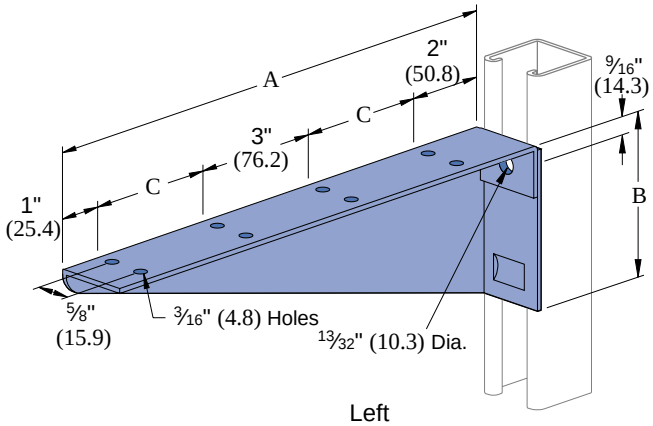
A1000 200 Lbs (.9 kN)
A4000 130 Lbs (.6 kN)

Safety Factor of 2½

A2494 R-L thru A2497 R-L



Right



Left

Material: 14 Gauge Steel.

Part Number	A In *(mm)*	B In *(mm)*	C In *(mm)*	Wt/100 pcs Lbs *(kg)*
A2494 R-L	12 *304.8*	3½ *88.9*	3 *76.2*	94 *42.6*
A2495 R-L	14 *355.6*	4 *101.6*	4 *101.6*	105 *47.6*
A2496 R-L	16 *406.4*	4½ *114.3*	5 *127.0*	145 *65.8*
A2497 R-L	18 *457.2*	5 *127.0*	6 *152.4*	175 *79.4*

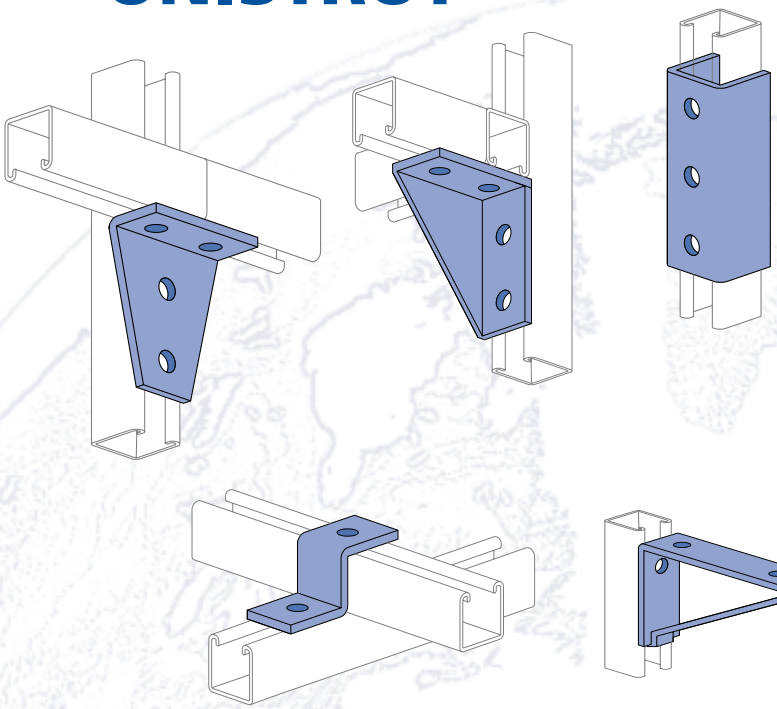
Design Uniform Load
(Channel Upright Listed)

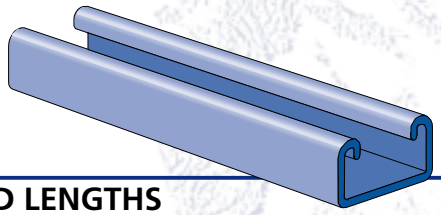
A1000 200 Lbs (.9 kN)
A4000 130 Lbs (.6 kN)

Safety Factor of 2½

13/16" FRAMING SYSTEM

UNISTRUT®





MATERIAL

Channels are accurately and carefully cold formed to size from low-carbon strip steel.

STEEL: PLAIN
19 Gauge (1.0 mm) ASTM A1008

STEEL: PRE-GALVANIZED
19 Gauge (1.0 mm) ASTM A653 GR 33

All nuts are manufactured from mild steel bars conforming to ASTM A570 GR 33.

Fittings are made from hot rolled, pickled and oiled steel plate or strip and conform to ASTM A1011 SS GR 33.

FINISHES

Channels are available in: Perma-Green II (GR), electro-galvanized (EG), Pre-galvanized (PG), conforming to ASTM A653 GR 33 and plain (PL).

Nuts are available in plain or electro-galvanized (EG) finish.

Fittings are available in Perma-Green II, electrogalvanized (EG) with zinc electrolytically to commercial standards ASTM B653-G90 Type III SC1; or plain.

STANDARD LENGTHS

P-6000 – 16 Feet (4.88m)
P-7000 – 10 Feet (3.05m)

Tolerances are +⅛" (3.2 mm) to +½" (12.7 mm) to allow for cutting. Special lengths are available for a small cutting charge with a tolerance of ±⅛" (3.2mm).

APPLICATION

A unique half-size reduction of the 1⅝" channel width series, this smaller channel size can be used to carry light loads economically in applications such as instrumentation, retail displays and light-duty laboratory supports. It also provides the flexibility found in all Unistrut® framing systems.

DESIGN BOLT TORQUE

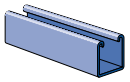
BOLT SIZE	FOOT LBS.	N·m
¼" 20	6	8

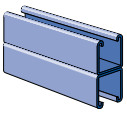
DIMENSIONS

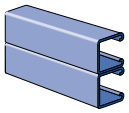
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

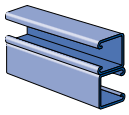
P6000 Series

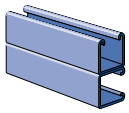
13/16" x 13/16"
19 Ga.


P6000 - Pg 218


P6001 - Pg 218

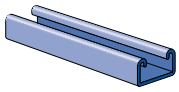

P6001 A - Pg 218

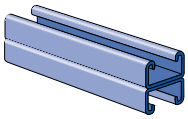

P6001 B - Pg 218


P6001 C - Pg 218

P7000 Series

13/16" x 13/32"
19 Ga.


P7000 - Pg 221


P7001 - Pg 221

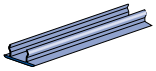
Channel Nuts & Closures


P6000-0832 - Pg 223


P7006-0832 - Pg 223

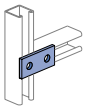

P6280 - Pg 223

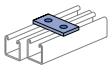

P7280 - Pg 223

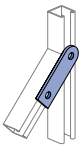

P6184P - Pg 223

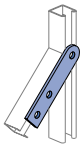
13/16" Series Fittings

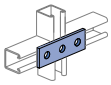

P6062 - Pg 224

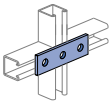

P6065 - Pg 224

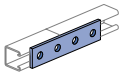

P6924 - Pg 224

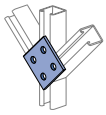

P7325 - Pg 224

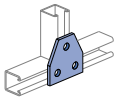

P7324 - Pg 224

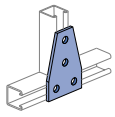

P6925 - Pg 224

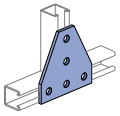

P6066 - Pg 225


P6067 - Pg 225


P6962 - Pg 225


P6356 A - Pg 225


P6358 A - Pg 225

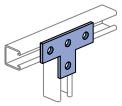

P6726 A - Pg 225

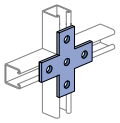

P6334 - Pg 226

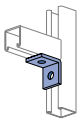

P6380 - Pg 226

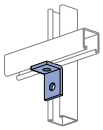

P6036 - Pg 226


P6380 A - Pg 226

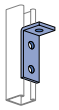

P6031 - Pg 226

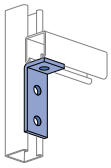

P6028 - Pg 226

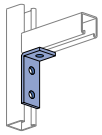

P6026 - Pg 227

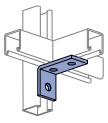

P6068 - Pg 227

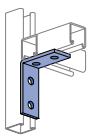

P6281 - Pg 227

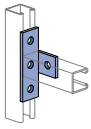

P6069 - Pg 227

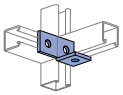

P6326 - Pg 227

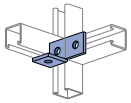

P6346 - Pg 227

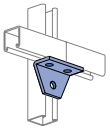

P6458 - Pg 228


P6325 - Pg 228

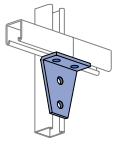

P6033 - Pg 228

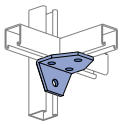

P6037 - Pg 228

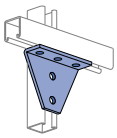

P6038 - Pg 228

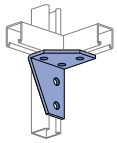

P6357 - Pg 228

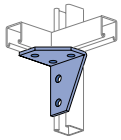
13⁄16" Series Fittings

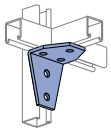

P6359-Pg 229

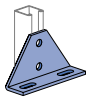

P6579-Pg 229

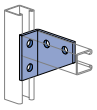

P6728-Pg 229

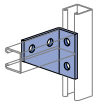

P6917-Pg 229

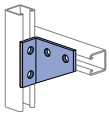

P6918-Pg 229

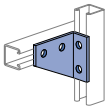

P7235-Pg 229

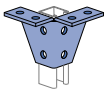

P6130-Pg 230

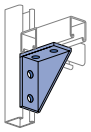

P6290-Pg 230

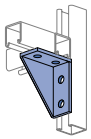

P6291-Pg 230


P6381-Pg 230


P6382-Pg 230

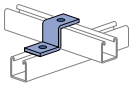

P6887-Pg 230

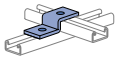

P6331-Pg 231

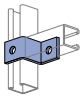

P6332-Pg 231


P6546-Pg 231

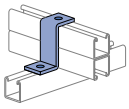

P6186-Pg 231

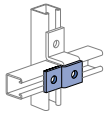

P6045-Pg 232

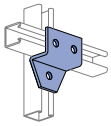

P7045-Pg 232

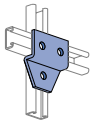

P6347-Pg 232

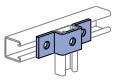

P7347-Pg 232

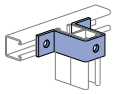

P6453-Pg 232


P6454-Pg 232


P6758-Pg 233

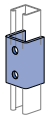

P7758-Pg 233


P6047-Pg 233

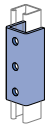

P6737-Pg 233

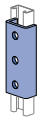

P6048-Pg 233

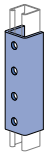

P7048-Pg 233

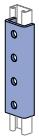

P6376-Pg 234


P7376-Pg 234

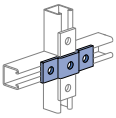

P6376 A-Pg 234


P7376 A-Pg 234


P6377-Pg 234


P7377-Pg 234

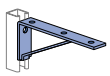

P6044-Pg 235

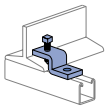

P6455-Pg 235

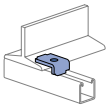

P6973-Pg 235

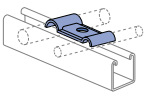

P6349-Pg 235

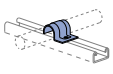

P6353-Pg 235


P6127-Pg 235

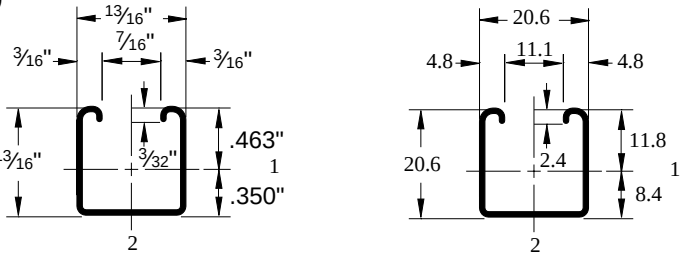

P6379 S-Pg 236


P6386-Pg 236

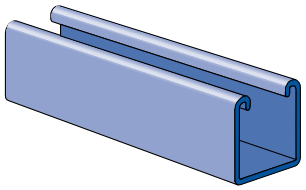

P6805-Pg 236


P7008-Pg 236

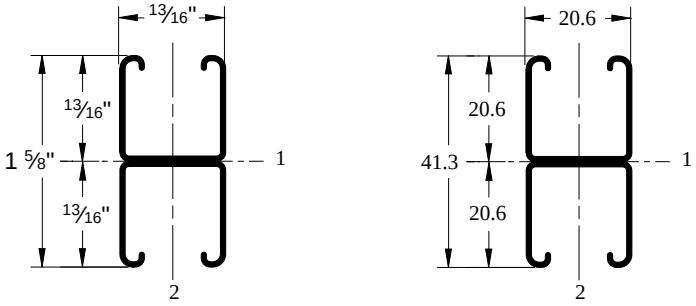
P6000



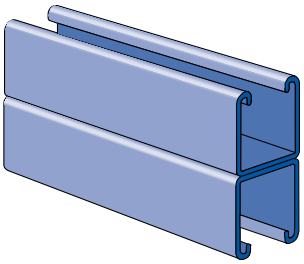
Wt/100 Ft: 37 Lbs (55 kg/100 m)
Allowable Moment 500 In-Lbs (60 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)



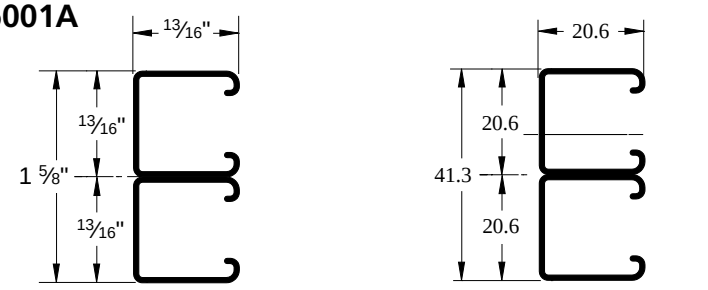
P6001



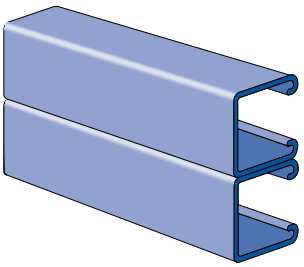
Wt/100 Ft: 73 Lbs (109 kg/100 m)
Allowable Moment 1,360 In-Lbs (150 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)



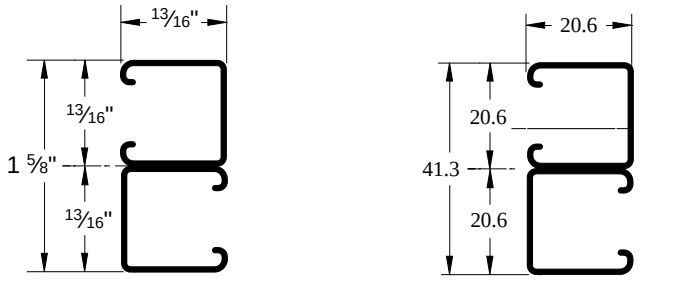
P6001A



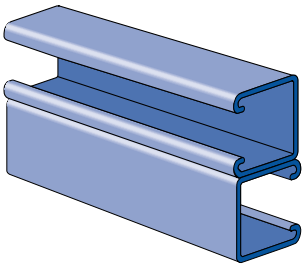
Wt/100 Ft: 73 Lbs (109 kg/100 m)
Allowable Moment 1,360 In-Lbs (150 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)



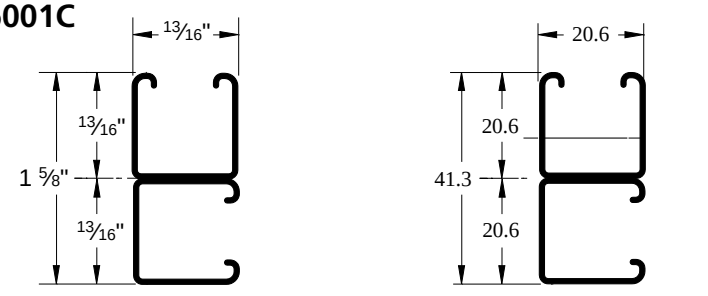
P6001B



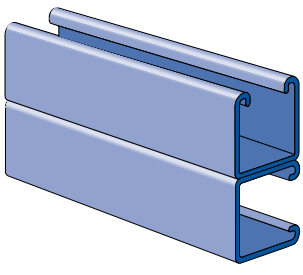
Wt/100 Ft: 73 Lbs (109 kg/100 m)
Allowable Moment 1,360 In-Lbs (150 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)



P6001C



Wt/100 Ft: 73 Lbs (109 kg/100 m)
Allowable Moment 1,360 In-Lbs (150 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)



BEAM LOADING DATA – P6000 CHANNEL

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	220	0.06	220	220	170
24	170	0.11	170	150	100
30	130	0.18	130	90	60
36	110	0.26	90	70	40
42	100	0.35	60	50	30
48	80	0.45	50	40	20
54	70	0.58	40	30	20
60	70	0.71	30	20	20

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
300	*155*	*1*	*155*	*155*	*155*
450	*103*	*2*	*103*	*103*	*82*
600	*77*	*3*	*77*	*69*	*46*
750	*62*	*4*	*59*	*44*	*30*
900	*52*	*6*	*41*	*31*	*21*
1,050	44	9	30	23	15
1,200	*39*	*11*	*23*	*17*	*12*
1,350	*34*	*14*	*18*	*14*	*9*

BEAM LOADING DATA – P6001 CHANNEL

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	410 *	0.04	410 *	410 *	410 *
24	410 *	0.06	410 *	410 *	410 *
30	360	0.10	360	360	310
36	300	0.14	300	300	210
42	260	0.19	260	240	160
48	230	0.25	230	180	120
54	200	0.32	190	140	90
60	180	0.39	150	120	80
66	160	0.47	130	100	60
72	150	0.56	110	80	50

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
300	*186 **	*0*	*186 **	*186 **	*186 **
450	*186 **	*1*	*186 **	*186 **	*186 **
600	*186 **	*2*	*186*	*186*	*186*
750	*167*	*2*	*167*	*167*	*144*
900	*139*	*3*	*139*	*139*	*100*
1,050	*119*	*5*	*119*	*110*	*74*
1,200	*104*	*6*	*104*	*84*	*56*
1,350	*93*	*8*	**190*	*67*	*45*
1,500	*83*	*10*	*72*	*54*	*36*
1,650	*76*	*12*	*60*	*45*	*30*

*Load limited by spot weld shear.

Notes:

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

COLUMN LOADING DATA – P6000 CHANNEL

Unbraced Height In	Maximum 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	570	1,650	1,340	960	670
24	450	1,210	840	540	370
30	340	820	540	350	240
36	270	570	370	240	170
42	210	420	280	180	120
48	170	320	210	130	90
54	140	250	170	110	**
60	120	200	130	**	**

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kg*	Maximum Column Load Applied at C.G. K = 0.65 *kg*	K = 0.80 *kg*	K =1.0 *kg*	K = 1.2 *kg*
300	*304*	*937*	*858*	*742*	*622*
450	*261*	*757*	*622*	*448*	*312*
600	*207*	*562*	*395*	*253*	*176*
750	*158*	*383*	*253*	*162*	*112*
900	*123*	*266*	*176*	*112*	*78*
1,050	*98*	*195*	*129*	*83*	*57*
1,200	*79*	*150*	*99*	*63*	*44*
1,350	*65*	*118*	*78*	*50*	**

COLUMN LOADING DATA – P6001 CHANNEL

Unbraced Height In	Maximum 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	1,120	4,090	3,720	3,170	2,620
24	1,030	3,540	2,990	2,260	1,610
30	910	2,940	2,260	1,480	1,030
36	780	2,340	1,610	1,030	710
42	660	1,790	1,180	760	520
48	560	1,370	900	580	400
54	480	1,080	710	460	320
60	410	880	580	370	**
72	310	610	400	**	**

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kg*	Maximum Column Load Applied at C.G. K = 0.65 *kg*	K = 0.80 *kg*	K =1.0 *kg*	K = 1.2 *kg*
300	*542*	*2,062*	*1,979*	*1,848*	*1,701*
450	*512*	*1,866*	*1,701*	*1,459*	*1,210*
600	*471*	*1,622*	*1,376*	*1,048*	*753*
750	*420*	*1,355*	*1,048*	*694*	*482*
900	*359*	*1,088*	*753*	*482*	*335*
1,050	*304*	*838*	*553*	*354*	*246*
2,000	*123*	*231*	*152*	**	**
2,500	**	*148*	**	**	**
2,750	**	**	**	**	**

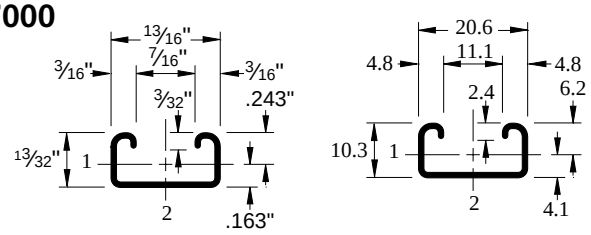
ELEMENTS OF SECTION – P6000

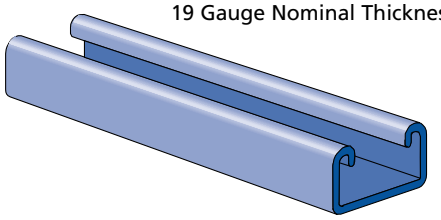
Parameter	P6000	P6001
Area of Section	0.105 In^2	0.211 In^2
Axis 1-1		
Moment of Inertia (I)	0.009 In^4	0.044 In^4
Section Modulus (S)	0.020 In^3	0.054 In^3
Radius of Gyration (r)	0.294 In	0.457 In
Axis 2-2		
Moment of Inertia (I)	0.012 In^4	0.023 In^4
Section Modulus (S)	0.029 In^3	0.057 In^3
Radius of Gyration (r)	0.333 In	0.333 In

ELEMENTS OF SECTION – P6001

Parameter	P6000	P6001
Area of Section	0.68 cm^2	1.36 cm^2
Axis 1-1		
Moment of Inertia (I)	0.4 cm^4	1.8 cm^4
Section Modulus (S)	0.33 cm^3	0.88 cm^3
Radius of Gyration (r)	0.7 cm	1.2 cm
Axis 2-2		
Moment of Inertia (I)	0.5 cm^4	1.0 cm^4
Section Modulus (S)	0.48 cm^3	0.93 cm^3
Radius of Gyration (r)	0.8 cm	0.8 cm

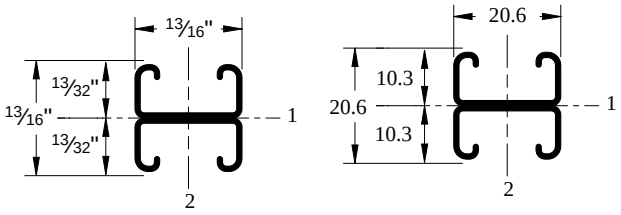
P7000

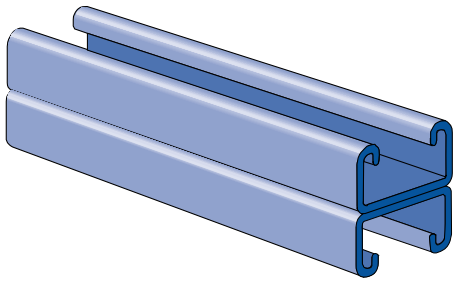




Wt/100 Ft: 26 Lbs (39 kg/100m)
Allowable Moment 180 In-Lbs (20 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)

P7001





Wt/100 Ft: 52 Lbs (77 kg/100m)
Allowable Moment 430 In-Lbs (50 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)

BEAM LOADING DATA – P7000 CHANNEL

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	0.10	80	60	40
24	60	0.18	40	30	20
30	50	0.28	30	20	10
36	40	0.40	20	10	10

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
300	*54*	*1*	*54*	*54*	*41*
450	*36*	*2*	*36*	*27*	*18*
600	*27*	*4*	*21*	*15*	*10*
750	*22*	*7*	*13*	*10*	*7*

BEAM LOADING DATA – P7001 CHANNEL

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
24	140	0.12	140	110	80
30	110	0.19	100	70	50
36	100	0.28	70	50	30
42	80	0.38	50	40	20
48	70	0.50	40	30	20

Span *mm*	Max Allowable Uniform Load *kg*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kg*	Span/240 *kg*	Span/360 *kg*
300	*132*	*1*	*132*	*132*	*132*
450	*88*	*2*	*88*	*88*	*64*
600	*66*	*3*	*66*	*54*	*36*
750	*53*	*5*	*46*	*34*	*23*
900	*44*	*7*	*32*	*24*	*16*

Notes:

1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported in such a manner as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.

COLUMN LOADING DATA – P7000 CHANNEL

Unbraced Height In	Maximum 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	320	970	720	470	330
24	230	620	410	260	180
30	170	400	260	**	**
36	130	280	180	**	**

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kg*	Maximum Column Load Applied at C.G. K = 0.65 *kg*	K = 0.80 *kg*	K =1.0 *kg*	K = 1.2 *kg*
300	*187*	*606*	*535*	*435*	*338*
450	*146*	*447*	*338*	*219*	*152*
600	*106*	*292*	*193*	*123*	*86*
750	*79*	*187*	*123*	*79*	**

COLUMN LOADING DATA – P7001 CHANNEL

Unbraced Height In	Maximum 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	680	2,870	2,630	2,270	1,900
24	600	2,510	2,150	1,660	1,200
30	520	2,120	1,660	1,110	770
36	440	1,720	1,200	770	530
42	370	1,340	880	570	**
48	320	1,030	680	**	**

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kg*	Maximum Column Load Applied at C.G. K = 0.65 *kg*	K = 0.80 *kg*	K =1.0 *kg*	K = 1.2 *kg*
300	*338*	*1,435*	*1,382*	*1,297*	*1,201*
450	*309*	*1,309*	*1,201*	*1,043*	*877*
600	*275*	*1,150*	*988*	*768*	*563*
750	*239*	*974*	*768*	*519*	*361*
900	*203*	*795*	*563*	*361*	*250*
1,050	*171*	*625*	*414*	*265*	**

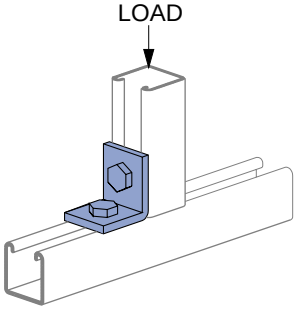
ELEMENTS OF SECTION – P7000

Parameter	P7000	P7001
Area of Section	0.073 In^2	0.146 In^2
Axis 1-1		
Moment of Inertia (I)	0.002 In^4	0.007 In^4
Section Modulus (S)	0.007 In^3	0.017 In^3
Radius of Gyration (r)	0.148 In	0.220 In
Axis 2-2		
Moment of Inertia (I)	0.007 In^4	0.014 In^4
Section Modulus (S)	0.017 In^3	0.034 In^3
Radius of Gyration (r)	0.306 In	0.306 In

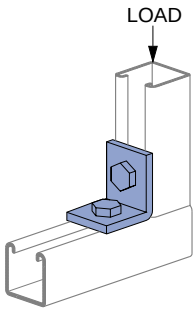
ELEMENTS OF SECTION – P7001

Parameter	P7000	P7001
Area of Section	0.47 cm^2	0.94 cm^2
Axis 1-1		
Moment of Inertia (I)	0.1 cm^4	0.3 cm^4
Section Modulus (S)	0.11 cm^3	0.28 cm^3
Radius of Gyration (r)	0.4 cm	0.6 cm
Axis 2-2		
Moment of Inertia (I)	0.3 cm^4	0.6 cm^4
Section Modulus (S)	0.28 cm^3	0.56 cm^3
Radius of Gyration (r)	0.8 cm	0.8 cm

LOAD DATA FOR UNISTRUT SECTIONS SUBJECT TO CRUSHING LOADS



Channel	Allowable Load at Center of Member Lbs *(kg)*
P6000	1,000 *453*
P7000	1,300 *590*

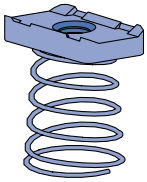


Channel	Allowable Load at End of member Lbs *(kg)*
P6000	700 *318*
P7000	900 *408*

Maximum Allowable Pull-Out And Slip Loads

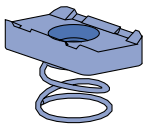
Nut Size/ Thread	Max. AllowableResistance Pull-Out Lbs *(kg)*	to Slip Lbs *(kg)*	Torque Ft-Lbs *(N•m)*
¼"-20	250 *113*	150 *68*	6 *8*

P6006-0832 thru P6006-1420
Channel Nut With Spring



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
P6006-0836	#8 - 36	1 *0.5*
P6006-0832	#8 - 32	1 *0.5*
P6006-1032	#10 - 32	1 *0.5*
P6006-1024	#10 - 24	1 *0.5*
P6006-1420	¼"- 20	1 *0.5*

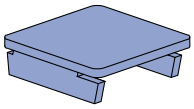
P7006-0832 thru P7006-1420
Channel Nut With Spring



Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
P7006-0836	#8 - 36	1 *0.5*
P7006-0832	#8 - 32	1 *0.5*
P7006-1032	#10 - 32	1 *0.5*
P7006-1024	#10 - 24	1 *0.5*
P7006-1420	¼"- 20	1 *0.5*

P6280 End Cap for P6000

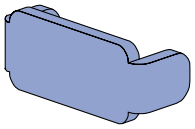
Wt/100 pcs: 3 Lbs (1.4 kg)



Material: .060" (1.5)

P7280 End Cap for P7000

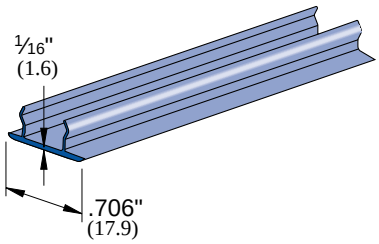
Wt/100 pcs: 1 Lbs (0.5 kg)



Material: .048" (1.2)

P6184 P Closure Strip

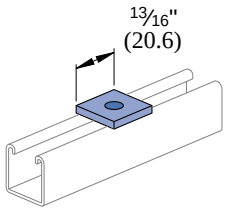
Wt/100 Ft: 4 Lbs (6.0 kg/100m)



Material: PVC, Plastic.
Standard Length: 10 Feet (3.05 m).

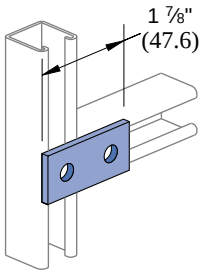
P6062

Wt/100 pcs: 2 Lbs (0.9 kg)



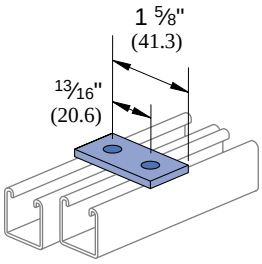
P6065

Wt/100 pcs: 5 Lbs (2.3 kg)



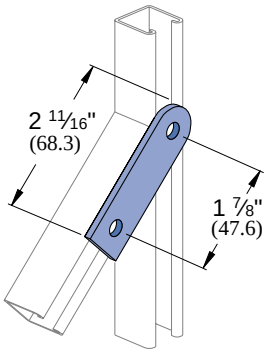
P6924

Wt/100 pcs: 5 Lbs (2.3 kg)



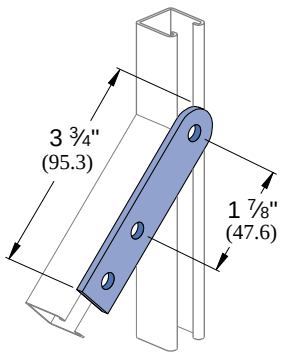
P7325

Wt/100 pcs: 7 Lbs (3.2 kg)



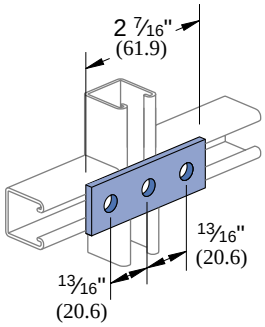
P7324

Wt/100 pcs: 10 Lbs (4.5 kg)



P6925

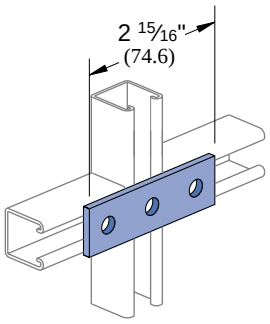
Wt/100 pcs: 7 Lbs (3.2 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

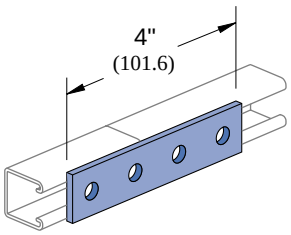
P6066

Wt/100 pcs: 8 Lbs (3.6 kg)



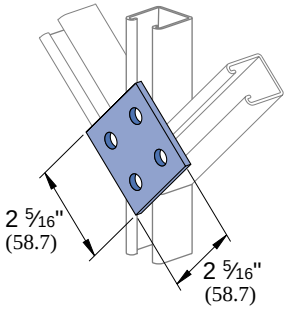
P6067

Wt/100 pcs: 11 Lbs (5.0 kg)



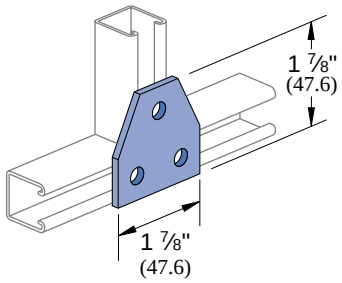
P6962

Wt/100 pcs: 19 Lbs (8.6 kg)



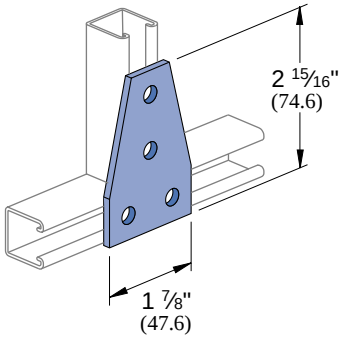
P6356A

Wt/100 pcs: 10 Lbs (4.5 kg)



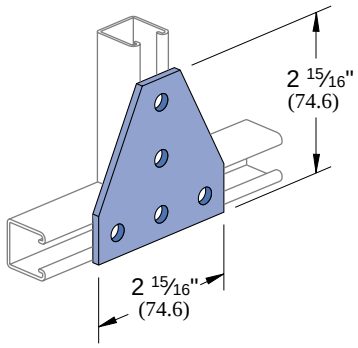
P6358A

Wt/100 pcs: 15 Lbs (6.8 kg)



P6726A

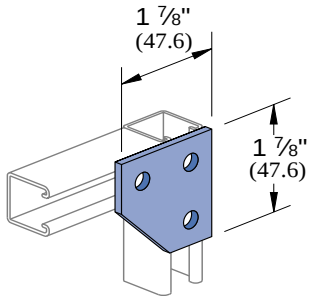
Wt/100 pcs: 22 Lbs (10.0 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

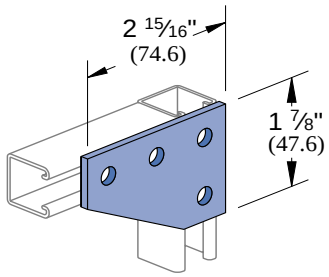
P6334

Wt/100 pcs: 11 Lbs (5.0 kg)



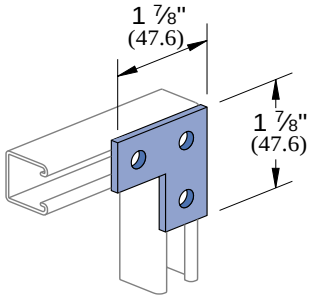
P6380

Wt/100 pcs: 15 Lbs (6.8 kg)



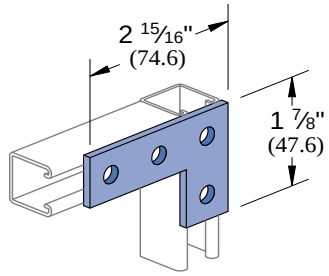
P6036

Wt/100 pcs: 8 Lbs (3.6 kg)



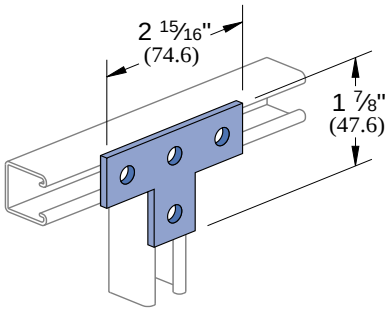
P6380A

Wt/100 pcs: 11 Lbs (5.0 kg)



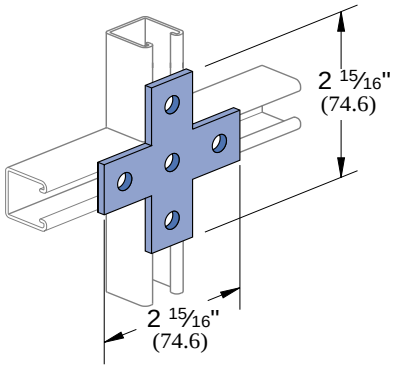
P6031

Wt/100 pcs: 11 Lbs (5.0 kg)



P6028

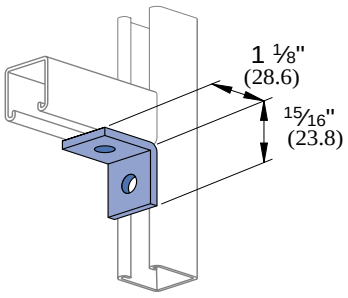
Wt/100 pcs: 14 Lbs (6.4 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

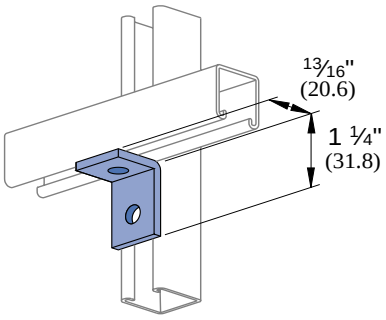
P6026

Wt/100 pcs: 5 Lbs (2.3 kg)

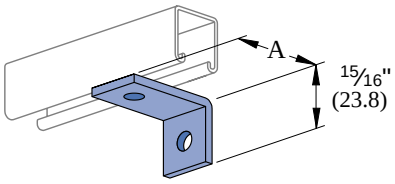


P6068

Wt/100 pcs: 5 Lbs (2.3 kg)



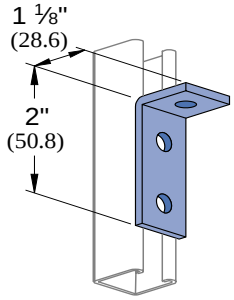
P6281 , P6282, P6283



Part Number	A In *(mm)*	Wt/100 pcs Lbs *(kg)*
P6281	2 *50.8*	8 *3.6*
P6282	2½ *63.5*	9 *4.1*
P6283	3 *76.2*	10 *4.5*

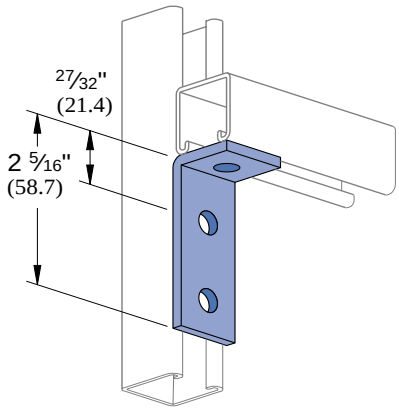
P6069

Wt/100 pcs: 8 Lbs (3.6 kg)



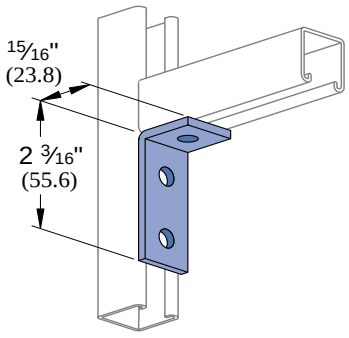
P6326

Wt/100 pcs: 8 Lbs (3.6 kg)



P6346

Wt/100 pcs: 8 Lbs (3.6 kg)

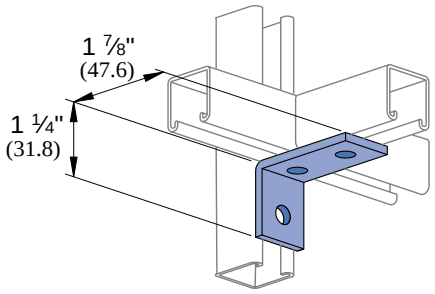


Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

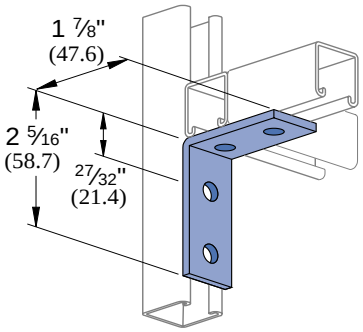
P6458

Wt/100 pcs: 8 Lbs (3.6 kg)



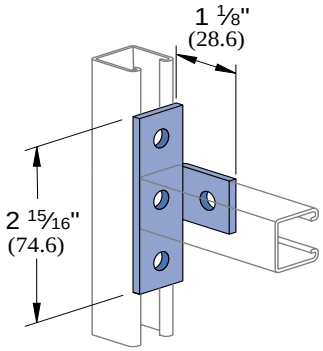
P6325

Wt/100 pcs: 11 Lbs (5.0 kg)



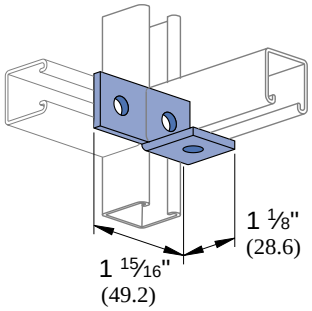
P6033

Wt/100 pcs: 11 Lbs (5.0 kg)



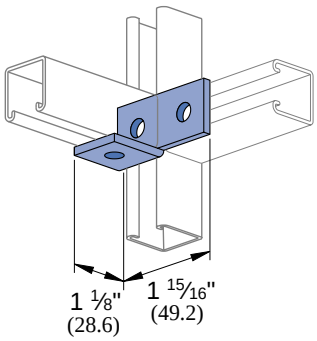
P6037

Wt/100 pcs: 8 Lbs (3.6 kg)



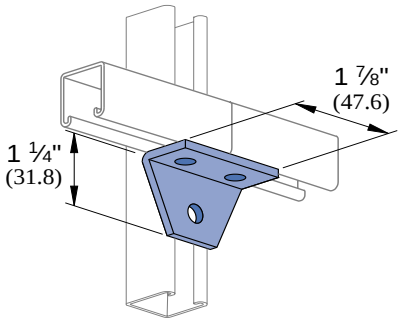
P6038

Wt/100 pcs: 8 Lbs (3.6 kg)



P6357

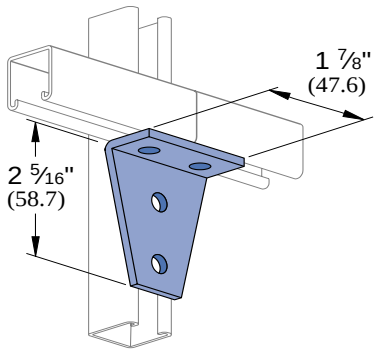
Wt/100 pcs: 10 Lbs (4.5 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

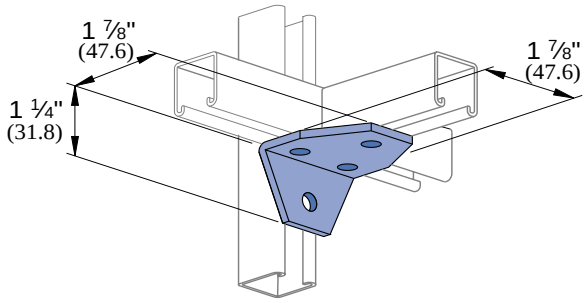
P6359

Wt/100 pcs: 15 Lbs (6.8 kg)



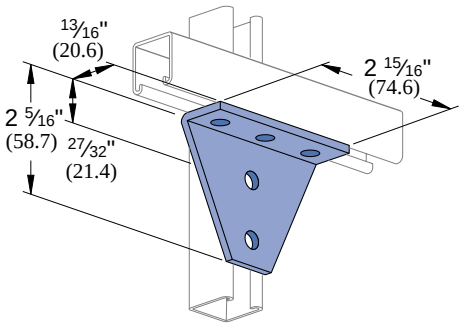
P6579

Wt/100 pcs: 15 Lbs (6.8 kg)



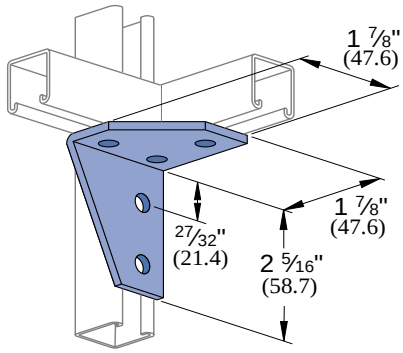
P6728

Wt/100 pcs: 22 Lbs (10.0 kg)



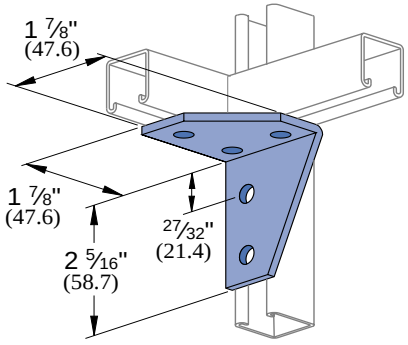
P6917

Wt/100 pcs: 21 Lbs (9.5 kg)



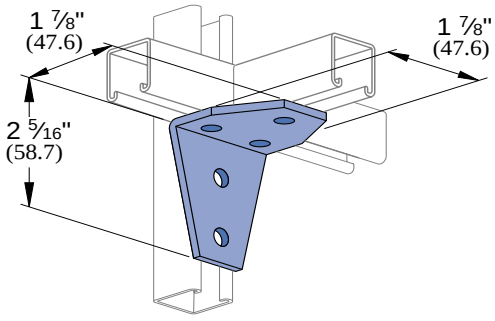
P6918

Wt/100 pcs: 21 Lbs (9.5 kg)



P7235

Wt/100 pcs: 18 Lbs (8.2 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
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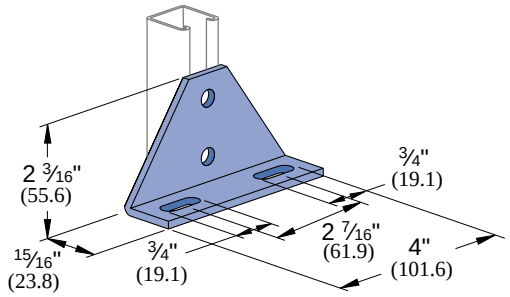
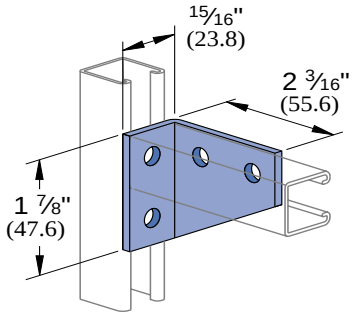
P6130

Wt/100 pcs: 32 Lbs (14.5 kg)



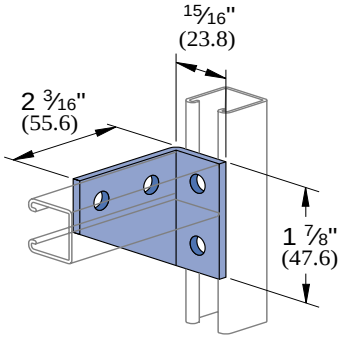
P6290

Wt/100 pcs: 15 Lbs (6.8 kg)



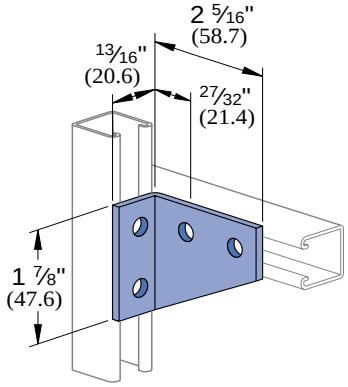
P6291

Wt/100 pcs: 15 Lbs (6.8 kg)



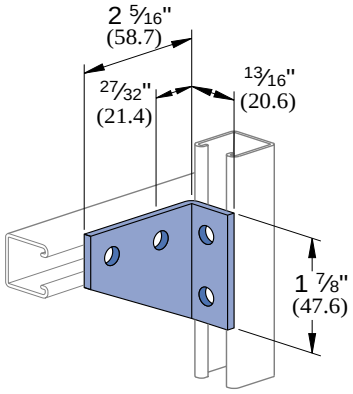
P6381

Wt/100 pcs: 15 Lbs (6.8 kg)



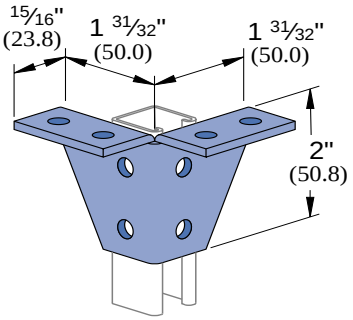
P6382

Wt/100 pcs: 15 Lbs (6.8 kg)



P6887

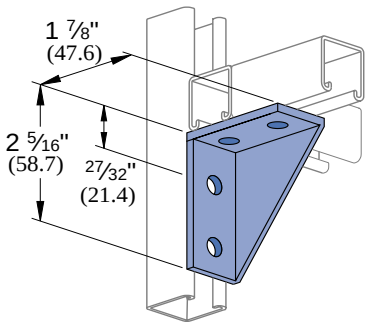
Wt/100 pcs: 28 Lbs (12.7 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

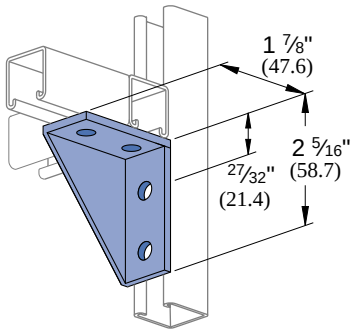
P6331

Wt/100 pcs: 19 Lbs (8.6 kg)



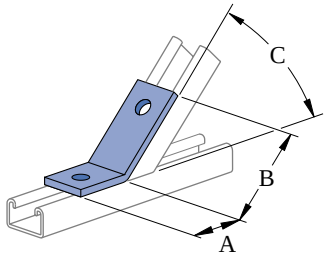
P6332

Wt/100 pcs: 19 Lbs (8.6 kg)



P6546, P7097, P7098, P7100, P7101

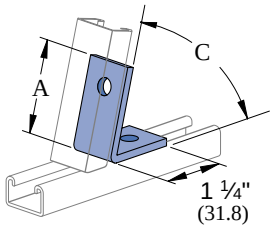
Wt/100 pcs: 8 Lbs (3.6 kg)



Part Number	A In *(mm)*	"B" In *(mm)*	"C" Deg *(rad)*
P7097	15/16 *23.8*	1 13/16 *46.0*	60° *1.1*
P7098	1 1/32 *26.2*	1 7/8 *47.6*	52½° *9.1*
P6546	1 3/16 *30.2*	1 23/32 *43.7*	45° *0.8*
P7100	1 5/16 *33.3*	1 19/32 *40.5*	37½° *6.5*
P7101	1 1/32 *26.2*	1 7/8 *47.6*	30° *0.5*

P6186, P7108, P7109, P7110

Wt/100 pcs: 8 Lbs (3.6 kg)



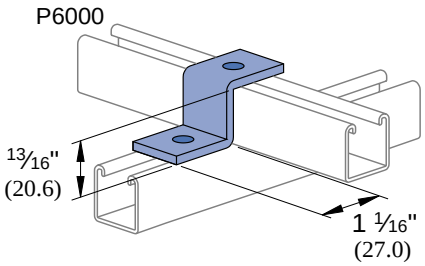
Part Number	A In *(mm)*	"C" Deg *(rad)*
P7108	1 27/32 *46.8*	60° *1.1*
P7109	1 13/16 *46*	52½° *9.1*
P6186	1 13/16 *46.0*	45° *0.8*
P7110	1 13/16 *46*	37½° *6.5*

Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

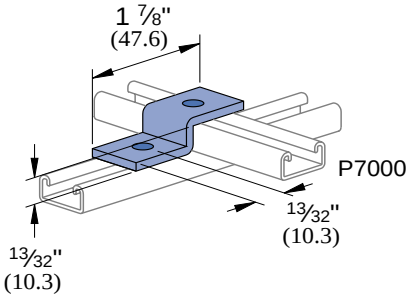
P6045

Wt/100 pcs: 7 Lbs (3.2 kg)



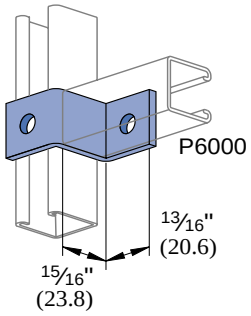
P7045

Wt/100 pcs: 6 Lbs (2.7 kg)



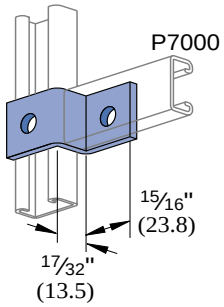
P6347

Wt/100 pcs: 7 Lbs (3.2 kg)



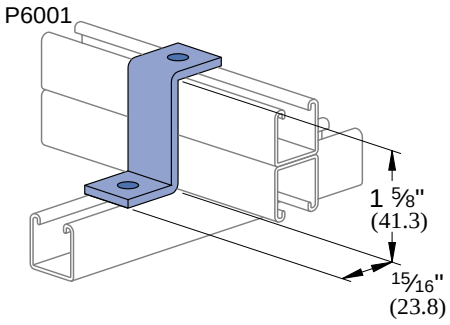
P7347

Wt/100 pcs: 6 Lbs (2.7 kg)



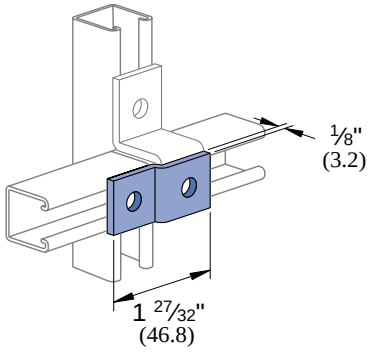
P6453

Wt/100 pcs: 9 Lbs (4.1 kg)



P6454

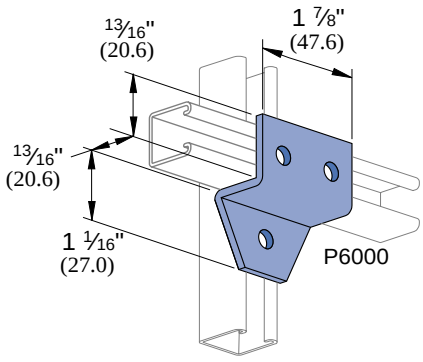
Wt/100 pcs: 5 Lbs (2.3 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

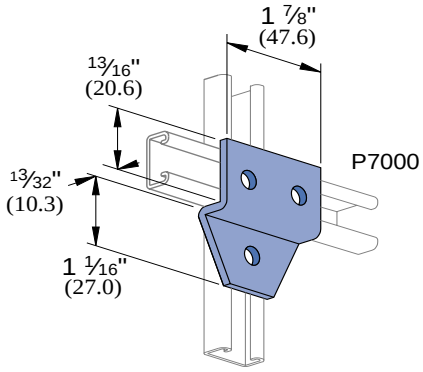
P6758

Wt/100 pcs: 13 Lbs (5.9 kg)

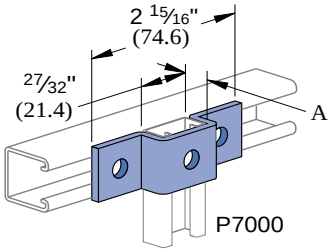


P7758

Wt/100 pcs: 12 Lbs (5.4 kg)



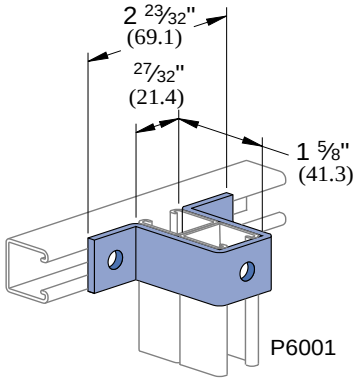
P6047, P7047



Part Number	A In *(mm)*	Wt/100 pcs Lbs *(kg)*	Use with Channel
P6047	13/16 *20.6*	12 *5.4*	P6000
P7047	13/32 *10.3*	10 *4.5*	P7000

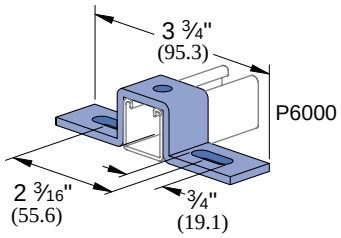
P6737

Wt/100 pcs: 16 Lbs (7.3 kg)



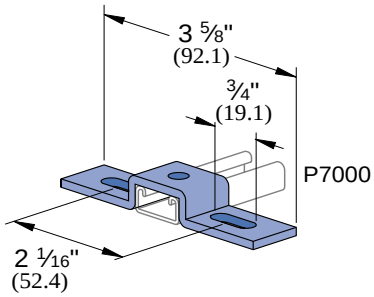
P6048

Wt/100 pcs: 14 Lbs (6.4 kg)



P7048

Wt/100 pcs: 10 Lbs (4.5 kg)



Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

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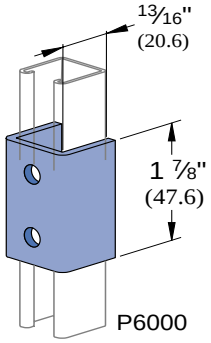
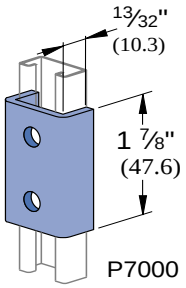
P6376

Wt/100 pcs: 17 Lbs (7.7 kg)



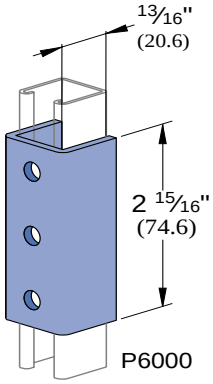
P7376

Wt/100 pcs: 11 Lbs (5.0 kg)



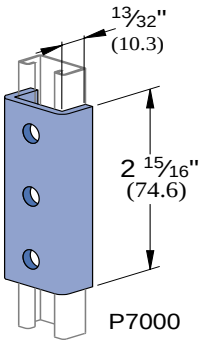
P6376A

Wt/100 pcs: 26 Lbs (11.8 kg)



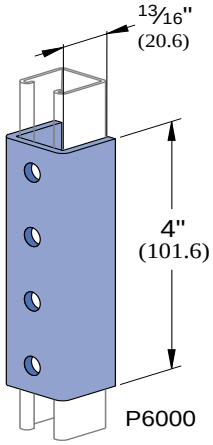
P7376A

Wt/100 pcs: 16 Lbs (7.3 kg)



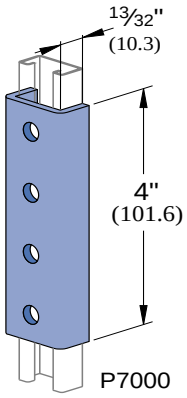
P6377

Wt/100 pcs: 36 Lbs (16.3 kg)



P7377

Wt/100 pcs: 24 Lbs (10.9 kg)



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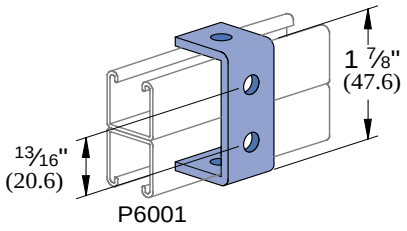
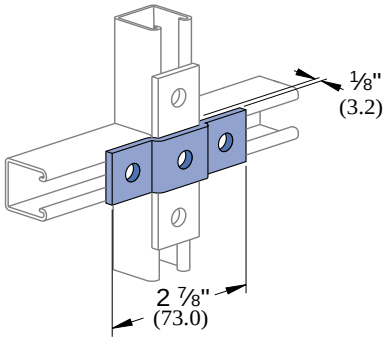
P6044

Wt/100 pcs: 9 Lbs (4.1 kg)



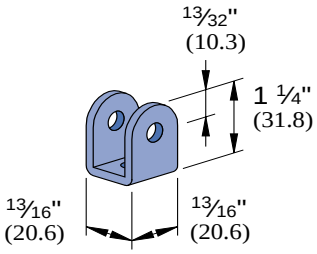
P6455

Wt/100 pcs: 8 Lbs (3.6 kg)



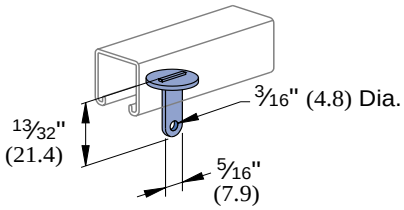
P6973

Wt/100 pcs: 8 Lbs (3.6 kg)



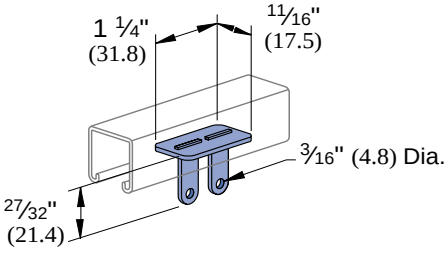
P6349 Acetal Slide

Wt/100 pcs: 1 Lbs (0.5 kg)

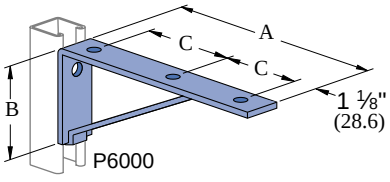


P6353 Acetal Slide

Wt/100 pcs: 1 Lbs (0.5 kg)



P6127 - P6129 Bracket



Part Number	Uniform Design Load Lbs *(kg)*	"A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P6127	150 *68*	6½ *165.1*	2½ *63.5*	2½ *63.5*	30 *13.6*
P6128	150 *68*	8½ *215.9*	3¼ *82.6*	3½ *88.9*	40 *18.1*
P6129	130.0 *59*	10½ *266.7*	4 *101.6*	4½ *114.3*	50 *22.7*

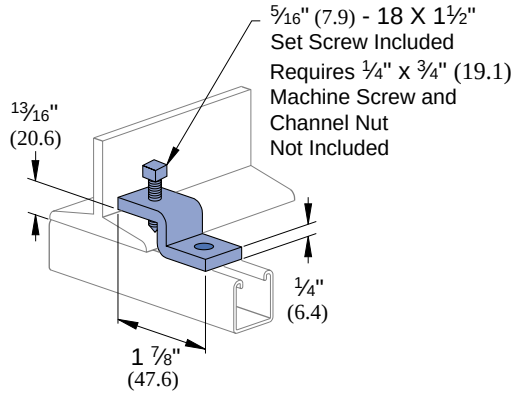
Safety Factor 2½

Standard Dimensions for 13/16" (21 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** 1/8" (3.2mm)

P6379 S

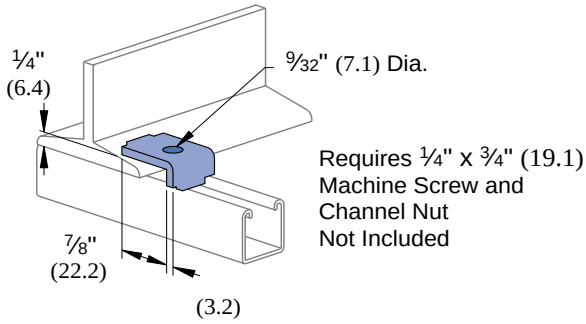
Wt/100 pcs: 13 Lbs (5.9 kg)



Use in pairs.

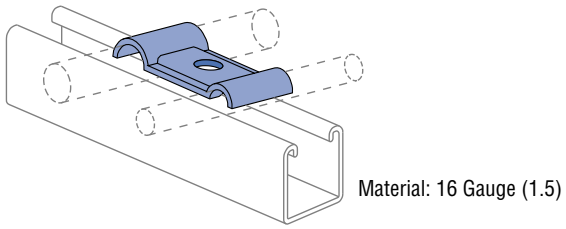
P6386

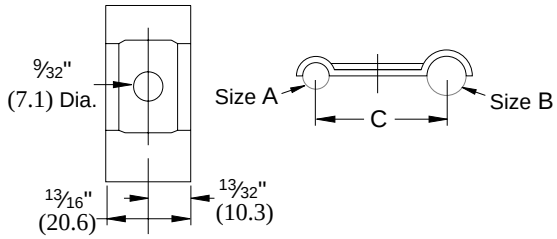
Wt/100 pcs: 4 Lbs (1.8 kg)



Use in pairs.

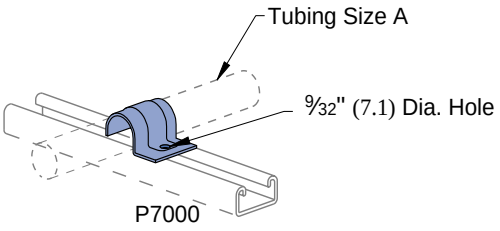
P6805 thru P6810





Part Number	O.D. Tube Size "A" In *(mm)*	O.D. Tube Size "B" In *(mm)*	"C" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P6805	¼ *6.4*	¼ *6.4*	¾ *19.1*	1 *0.5*
P6806	⅜ *9.5*	⅜ *9.5*	1 *25.4*	2 *0.9*
P6807	½ *12.7*	½ *12.7*	1¼ *31.8*	3 *1.4*
P6808	¼ *6.4*	⅜ *9.5*	⅞ *22.2*	2 *0.9*
P6809	¼ *6.4*	½ *12.7*	1 *25.4*	2 *0.9*
P6810	⅜ *9.5*	½ *12.7*	1⅛ *28.6*	3 *1.4*

P7008 thru P7020 Tubing Clips



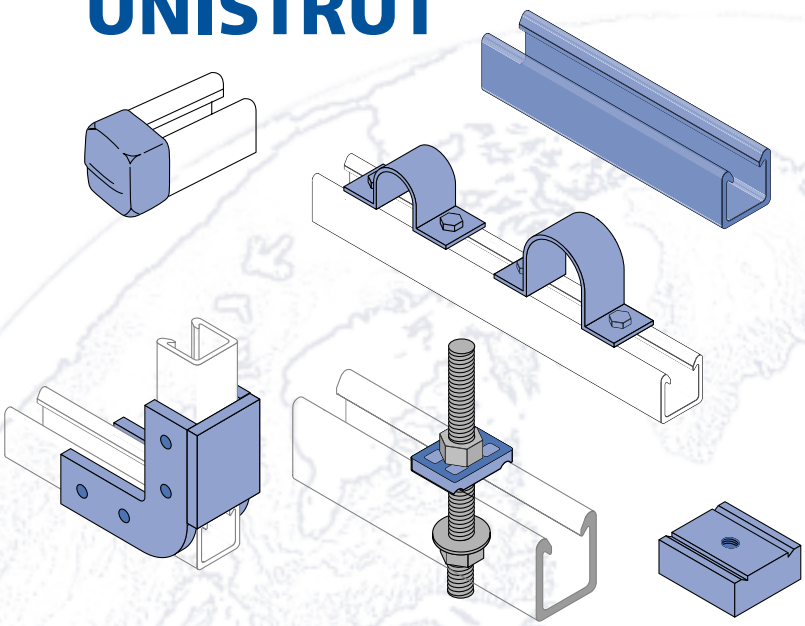
Part Number	O.D. Tube Size "A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P7008	¼ *6.4*	1 *0.45*
P7009	5/16 *7.9*	1 *0.45*
P7010	⅜ *9.5*	2 *0.91*
P7012	½ *12.7*	2 *0.91*
P7014	⅝ *15.9*	3 *1.4*
P7016	¾ *19.1*	4 *1.8*
P7018	⅞ *22.6*	5 *2.3*
P7020	1 *25.4*	5 *2.3*

Standard Dimensions for 13/16" (21 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9/32" (7.1mm); **Hole Spacing - From End:** 13/32" (10.3mm); **Hole Spacing - On Center:** 1 1/16" (27.0 mm); **Width:** 13/16"(20.6mm); **Thickness:** ⅛" (3.2mm)

FIBERGLASS SYSTEMS

UNISTRUT®



POLYESTER AND VINYL ESTER MATERIALS

Polyester and vinyl ester channels are manufactured from the pultrusion process and are color coded gray and beige respectively. Components are 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 reinforced part which can be cut to length. The hardened fiberglass pultrusion is reinforced with an internal arrangement of permanently bonded continuous glass fibers to increase its strength.

INSTALLATION

Fabrication requires just three simple operations: cutting, drilling and sealing as described below.

Cutting – Hand held saws, such as hack saws (24 to 32 teeth per inch) are suitable when a few cuts are required. For frequent cutting, a circular power saw with a carbide-tipped masonry blade yields the best results. 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 with clear urethane sealer.

OPERATING ENVIRONMENT

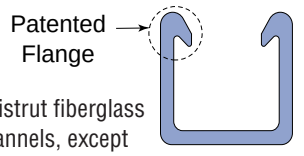
Temperature Ranges – Fiberglass parts are supplied in five different materials covering distinct temperature ranges. The temperature ranges indicated are meant to be used only as a general guideline. Continual exposure to elevated temperatures reduces the strength properties of plastics and glass-reinforced fiberglass. Actual resin test data confirms that a 50% reduction in strength occurs at the extreme high temperature levels.

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

Chemical Resistance – See the chart on page 259 for corrosion resistance. The results 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.

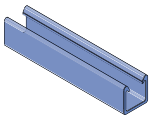
Loading – Channel loading is defined with description of each type of channel. Additional loading and design limitations for fittings and accessories are described in the appropriate section for that part.

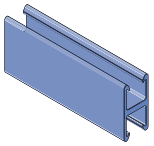
Channel - Patented Flange Profile

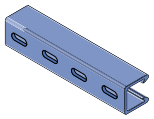


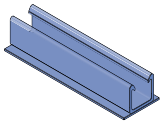
Unistrut fiberglass channels, except the SST series, incorporate a patented flange design which provides reliable fastening and interlocking of components and accessories.
It is important to note that standard metal framing components such as pipe clamps and strut nuts will not work with the flange design.

Heavy Duty Patented Flange Profile 1⅝" x 1⅝"

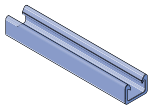

F20P/V-2000-Pg 240

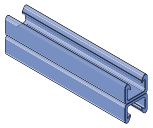

F20P/V-2100-Pg 240

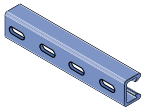

F20P/V-2200-Pg 240

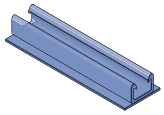

F20P/V-2300-Pg 240

Light Duty Patented Flange Profile 1½" x 1⅛"

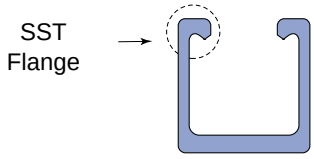

F20P/V-1000-Pg 242


F20P/V-1100-Pg 242

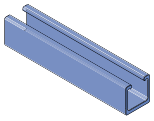

F20P/V-1200-Pg 242

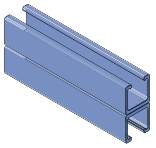

F20P/V-1300-Pg 242

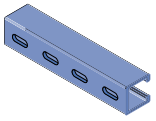
Channel - SST Profile

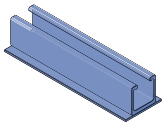


Heavy Duty SST Profile 1⅝" x 1⅝"


F20P/V-2000 SST-Pg 244


F20P/V-2100 SST-Pg 244


F20P/V-2200 SST-Pg 244


F20P/V-23000 SST-Pg 244

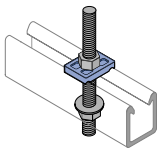
The Unistrut SST profile is similar to the profile of standard metal channel. The Unistrut SST profile will accommodate standard 1⅝" metal channel fittings and components. This profile is available in polyester or vinyl ester resin.

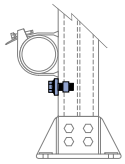
The Unistrut SST profile is not compatible with the fiberglass pipe clamps and channel nuts shown in this section. Typically, stainless steel clamps and strut nuts (listed elsewhere in this catalog) are used with this profile.

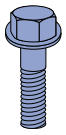
Hardware & Accessories

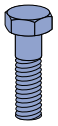

Heavy Duty-Pg 246


Standard Duty-Pg 246


Saddle Clip-Pg 246


Stop Lock-Pg 246


Hex Flange Bolt-Pg 247

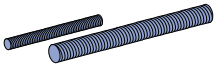

Hex Bolt-Pg 247

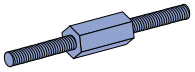

Hex Flange Nut-Pg 247


Hex Nut -Pg 247

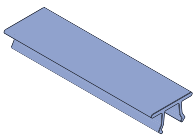

Flat Washer-Pg 248

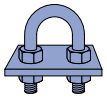

Spacer -Pg 248


Threaded Rod-Pg 248

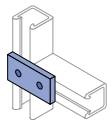

Rod Coupler-Pg 248

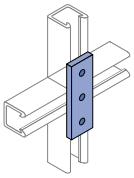

End Cap-Pg 249

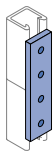

Capping Strip-Pg 249

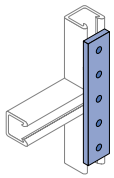

U-Bolt-Pg 249

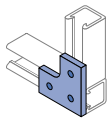
Fittings

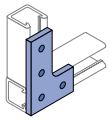

F20P/V-2500-Pg 250

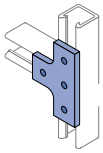

F20P/V-2502-Pg 250

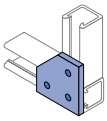

F20P/V-2504-Pg 250

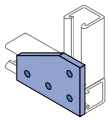

F20P/V-2506-Pg 250


F20P/V-2508-Pg 251


F20P/V-2510-Pg 251


F20P/V-2512-Pg 251


F20P/V-2514-Pg 251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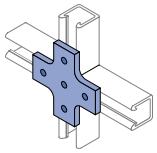
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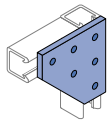
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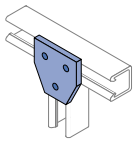
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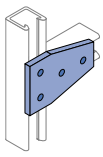
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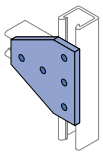
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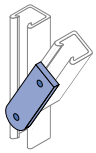
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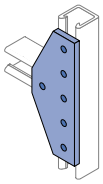
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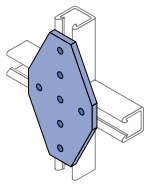
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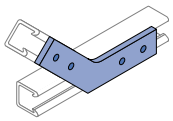
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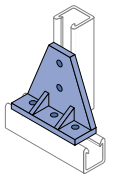
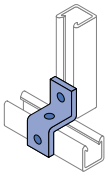
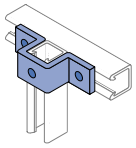
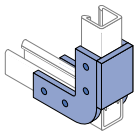
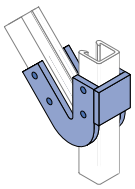
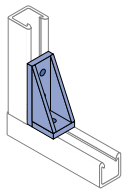

F20P/V-2538-Pg 253

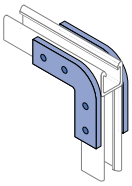

F20P/V-2611-Pg 253

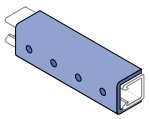

F20P/V-2613-Pg 253

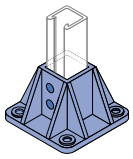

F50PU-1508-Pg 253

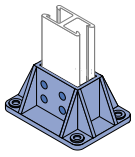

F50PU-2045-Pg 254


F50PU-2636-Pg 254

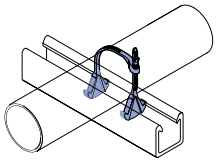

F50PU-2090-Pg 254

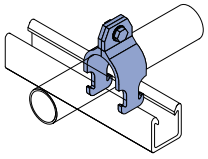

F50PU-2616-Pg 254

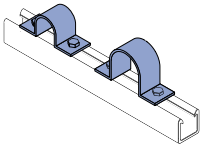

F20PU-5853-Pg 254

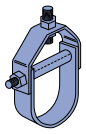

F20PU-5903-Pg 254

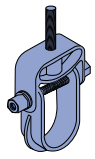
Pipe Clamps, Beam Clamps and Stanchions

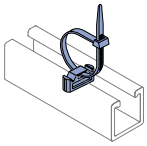

Adj. Pipe Clamp-Pg 255

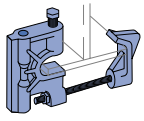

Rigid Pipe Clamp-Pg 256

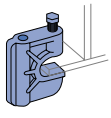

Pipe Strap-Pg 256

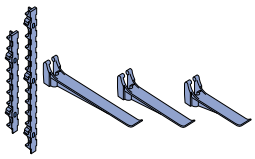

Clevis Hanger-Pg 257


Clevis Hanger-Pg 257


Channel Insert-Pg 257

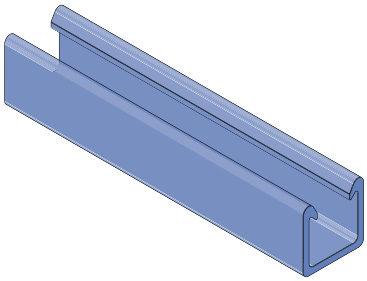

Beam Clamp-Pg 258

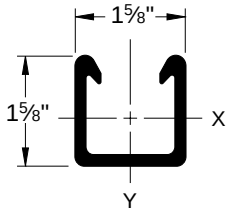

Beam Clamp-Pg 258

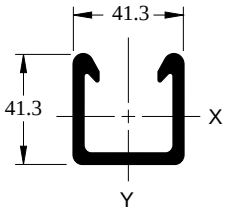

Rack Stanchion-Pg 258

F20P/V-2000 Heavy Duty Single Channel - Patented Flange Profile

Wt/100 Ft: 82 Lbs(122 kg/100 m)

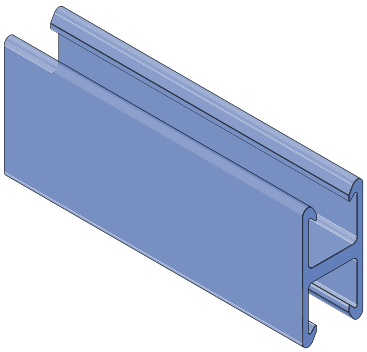


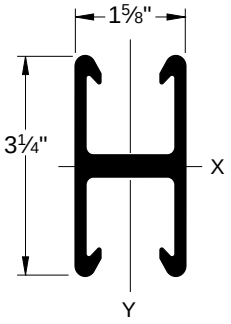


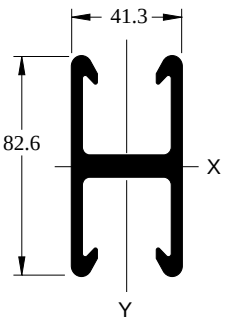


F20P/V-2100 Heavy Duty Back-to-Back Channel - Patented Flange Profile

Wt/100 Ft: 164 Lbs (244 kg/100 m)

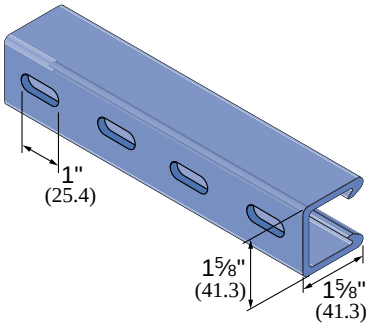






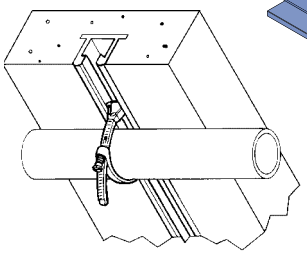
F20P/V-2200 Slotted Channel

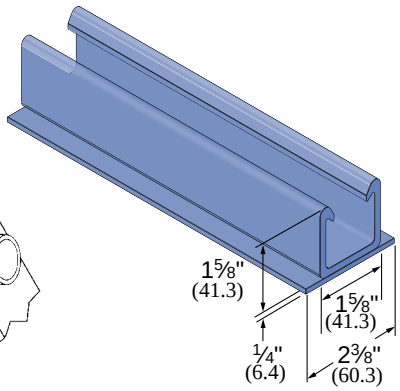
Wt/100 Ft: 82 Lbs (122 kg/100 m)



F20P/V-2300 w/Concrete Insert

Wt/100 Ft: 88 Lbs (131 kg/100 m)





F20P/V-2000, F20P/V-2100 Section Properties

Part Number	Weight lbs./ft. *(kg/m)*	Area in² *(mm²)*	X - X Axis I in⁴ *(mm⁴)*	X - X Axis R In *(mm)*	X - X Axis C1 In *(mm)*	X - X Axis C2 In *(mm)*	Y - Y Axis I in⁴ *(mm⁴)*	Y - Y Axis R In *(mm)*	Y - Y Axis C In *(mm)*
F20P/V-2000	0.82	1.06	0.31	0.54	0.7	0.93	0.42	0.63	0.82
	1.2	*6.8*	*12.9*	*13.7*	*17.8*	*23.622*	*17.5*	*16.0*	*20.8*
F20P/V-2100	1.64	2.12	1.77	0.91	1.63	1.63	0.85	0.63	0.82
	2.4	*13.7*	*73.7*	*23.1*	*41.4*	*41.402*	*35.4*	*16.0*	*20.8*

F20P/V-2000 Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kg)*	Max. Uniform Beam Load (Safety Factor - 3:1) Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kg)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kg)*
12 *305*	3,561 *1,615*	0.102 *2.6*	1,159 *526*	0.033 *0.8*	5,160 *2,341*
18 *457*	2,374 *1,077*	0.230 *5.8*	515 *234*	0.050 *1.3*	4,704 *2,134*
24 *610*	1,781 *808*	0.410 *10.4*	290 *132*	0.067 *1.7*	4,168 *1,891*
30 *762*	1,424 *646*	0.640 *16.3*	185 *84*	0.083 *2.1*	3,553 *1,612*
36 *914*	1,187 *538*	0.922 *23.4*	129 *59*	0.100 *2.5*	2,859 *1,297*
48 *1,219*	890 *404*	1.638 *41.6*	72 *33*	0.133 *3.4*	1,636 *742*
60 *1,524*	712 *323*	2.560 *65.0*	46 *21*	0.167 *4.2*	1,047 *475*
72 *1,829*	594 *269*	3.686 *93.6*	32 *15*	0.200 *5.1*	727 *330*

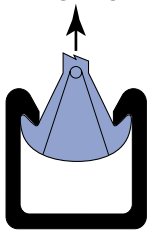
F20P/V-2100 Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kg)*	Max. Uniform Beam Load (Safety Factor - 3:1) Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kg)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kg)*
12 *305*	5,559 *2,522*	0.028 *0.7*	5,559 *2,522*	0.033 *0.8*	9,454 *4,288*
18 *457*	3,706 *1,681*	0.064 *1.6*	2,914 *1,322*	0.050 *1.3*	8,866 *4,022*
24 *610*	2,780 *1,261*	0.113 *2.9*	1,639 *743*	0.067 *1.7*	8,181 *3,711*
30 *762*	2,224 *1,009*	0.177 *4.5*	1,049 *476*	0.083 *2.1*	7,405 *3,359*
36 *914*	1,853 *841*	0.254 *6.5*	730 *331*	0.100 *2.5*	6,451 *2,926*
48 *1,219*	1,390 *630*	0.452 *11.5*	410 *186*	0.133 *3.4*	4,534 *2,057*
60 *1,524*	1,112 *504*	0.707 *18.0*	262 *119*	0.167 *4.2*	2,902 *1,316*
72 *1,829*	927 *420*	1.018 *25.9*	182 *83*	0.200 *5.1*	2,015 *914*

F20P/V-2000, F20P/V-2100 Flange Loading

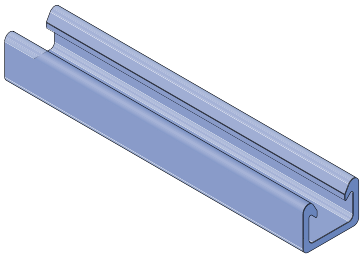
*Values shown represent a 3:1 safety factor

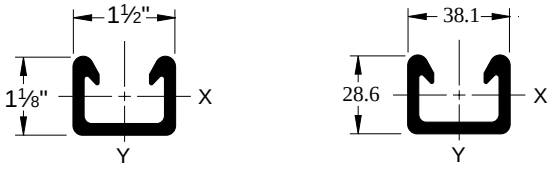
Part Number	Pull-Out Strength* Lbs *(kg)*
F20V-2000/2100	449 *204*
F20P-2000/2100	360 *163*



F20P/V-1000 Light Duty Single Channel - Patented Flange Profile

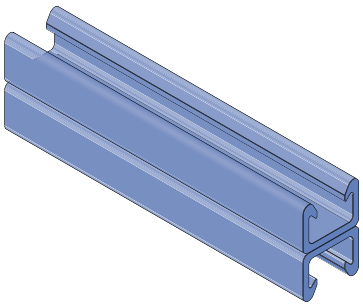
Wt/100 Ft: 47 Lbs (70 kg/100 m)

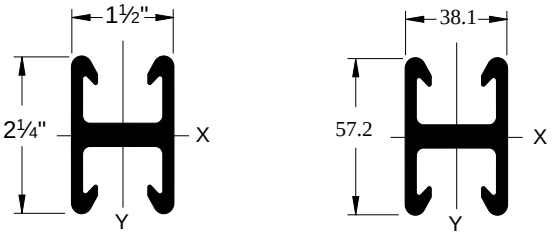




F20P/V-1100 Light Duty Back-to-Back Channel - Patented Flange Profile

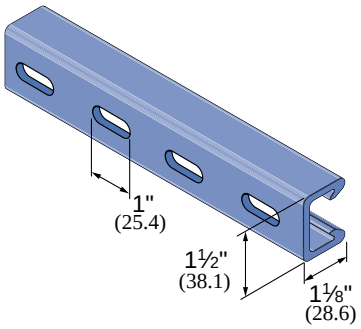
Wt/100 Ft: 94 Lbs (140 kg/100 m)





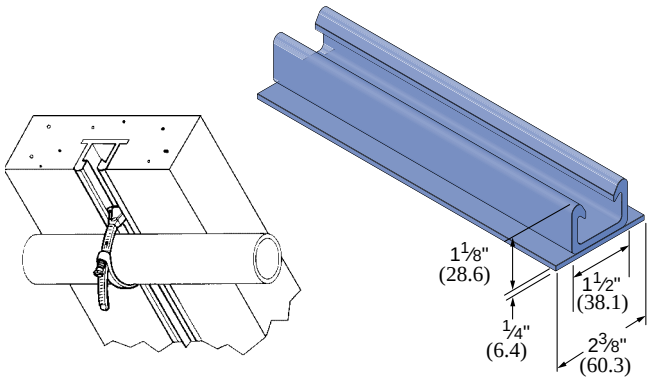
F20P/V-1200 Slotted Channel

Wt/100 Ft: 47 Lbs (70 kg/100 m)



F20P/V-1300 w/Concrete Insert

Wt/100 Ft: 53 Lbs (79 kg/100 m)



F20P/V-1000, F20P/V-1100 Section Properties

Part Number	Weight lbs./ft. *(kg/m)*	Area in² *(mm²)*	X - X Axis I in⁴ *(mm⁴)*	X - X Axis R In *(mm)*	X - X Axis C1 In *(mm)*	X - X Axis C2 In *(mm)*	Y - Y Axis I in⁴ *(mm⁴)*	Y - Y Axis R In *(mm)*	Y - Y Axis C In *(mm)*
F20P/V-1000	0.47	0.61	0.1	0.4	0.51	0.62	0.22	0.6	0.75
	0.7	*3.9*	*4.2*	*10.2*	*13.0*	*15.748*	*9.2*	*15.2*	*19.1*
F20P/V-1100	0.94	1.22	0.42	0.59	1.13	1.13	0.44	0.6	0.75
	1.4	*7.9*	*17.5*	*15.0*	*28.7*	*28.702*	*18.3*	*15.2*	*19.1*

F20P/V-1000 — Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kg)*	Max. Uniform Beam Load (Safety Factor - 3:1) Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kg)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kg)*
12 *305*	1,629 *739*	0.151 *3.8*	359 *163*	0.033 *0.8*	2,759 *1,251*
18 *457*	1,086 *493*	0.340 *8.6*	160 *73*	0.050 *1.3*	2,351 *1,066*
24 *610*	815 *370*	0.605 *15.4*	90 *41*	0.067 *1.7*	1,862 *845*
30 *762*	652 *296*	0.945 *24.0*	57 *26*	0.083 *2.1*	1,298 *589*
36 *914*	543 *246*	1.360 *34.5*	40 *18*	0.100 *2.5*	901 *409*
48 *1,219*	407 *185*	2.418 *61.4*	22 *10*	0.133 *3.4*	507 *230*
60 *1,524*	326 *148*	3.779 *96.0*	14 *6*	0.167 *4.2*	324 *147*
72 *1,829*	272 *123*	5.441 *138.2*	10 *5*	0.200 *5.1*	225 *102*

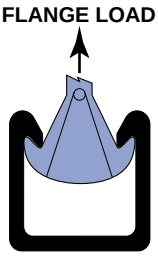
F20P/V-1100 — Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kg)*	Max. Uniform Beam Load (Safety Factor - 3:1) Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kg)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kg)*
12 *305*	3,804 *1,725*	0.082 *2.1*	1,556 *706*	0.033 *0.8*	5,961 *2,704*
18 *457*	2,536 *1,150*	0.183 *4.6*	691 *313*	0.050 *1.3*	5,509 *2,499*
24 *610*	1,902 *863*	0.326 *8.3*	389 *176*	0.067 *1.7*	4,979 *2,258*
30 *762*	1,522 *690*	0.509 *12.9*	249 *113*	0.083 *2.1*	4,375 *1,984*
36 *914*	1,268 *575*	0.734 *18.6*	173 *78*	0.100 *2.5*	3,698 *1,677*
48 *1,219*	951 *431*	1.304 *33.1*	97 *44*	0.133 *3.4*	2,254 *1,022*
60 *1,524*	761 *345*	2.038 *51.8*	62 *28*	0.167 *4.2*	1,442 *654*
72 *1,829*	634 *288*	2.935 *74.5*	43 *20*	0.200 *5.1*	1,001 *454*

F20P/V-1000, F20P/V-1100 — Flange Loading

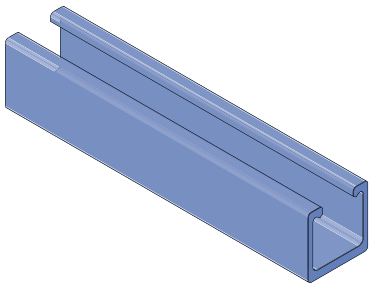
*Values shown represent a 3:1 safety factor

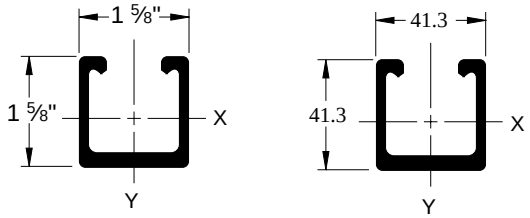
Part Number	Pull-Out Strength* Lbs *(kg)*
F20V-1000/1100	213 *97*
F20P-1000/1100	213 *97*



F20P/V-2000 SST — Heavy Duty Single Channel - SST Profile

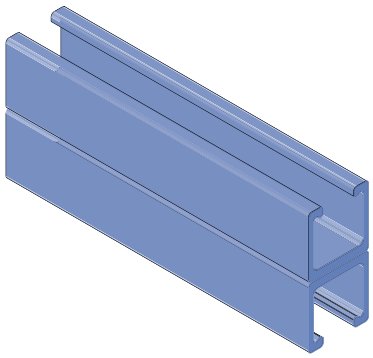
Wt/100 Ft: 82 Lbs (122 kg/100 m)

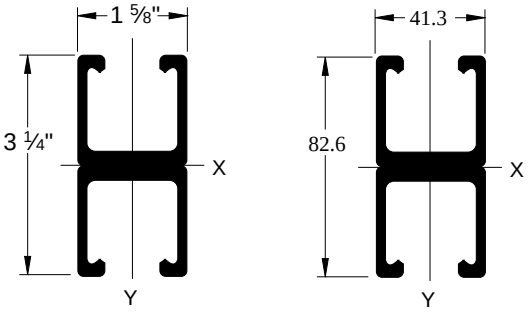




F20P/V-2100 SST — Heavy Duty Back-to-Back Channel - SST Profile

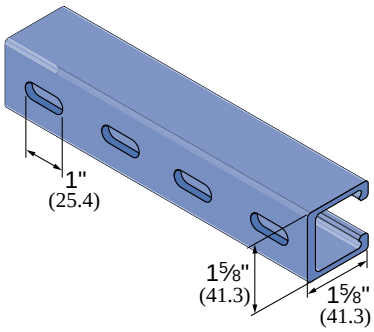
Wt/100 Ft: 164 Lbs (244 kg/100 m)





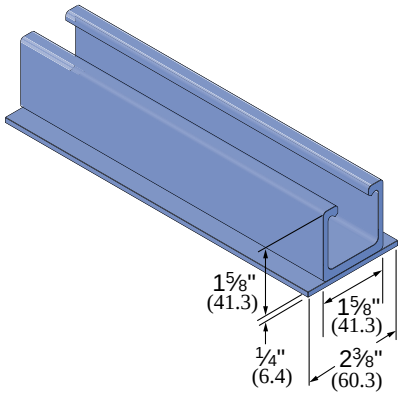
F20P/V-2200 SST — Slotted Channel

Wt/100 Ft: 82 Lbs (122 kg/100 m)



F20P/V-2300 SST — w/Concrete Insert

Wt/100 Ft: 88 Lbs (131 kg/100 m)



NOTE: Unistrut SST Channel is not compatible with the Unistrut fiberglass pipe clamps and channel nuts shown in this catalog. Metal clamps and channel nuts are compatible with this profile and are shown elsewhere in this catalog.

F20P/V-2000 Channel Beam/Column Loading

Span In (mm)	Maximum Uniform Beam Load (Safety Factor - 3:1) Poly Lbs (kg)	Maximum Uniform Beam Load (Safety Factor - 3:1) Vinyl Lbs(kg)	Deflection @ Max. Allowable Beam Load Poly In (mm)	Deflection @ Max. Allowable Beam Load Vinyl In (mm)	Deflection @ Max. Deflection = 0.25 In (Lbs) Poly Lbs(kg)	Deflection @ Max. Deflection = 0.25 In (Lbs) Vinyl Lbs (kg)	Uniform Load @ Max. Deflection = 0.50 In (Lbs) Poly Lbs (kg)	Uniform Load @ Max. Deflection = 0.50 In (Lbs) Vinyl Lbs (kg)	Maximum Column Load Lbs (kg)
12	1,720	2,150	0.07	0.07	—	—	—	—	3,650
305	780	975	1.8	1.8	—	—	—	—	1,655.6
18	1,150	1,440	0.15	0.17	—	—	—	—	3,370
457	522	653	3.8	4.3	—	—	—	—	1,528.6
24	860	1,080	0.27	0.30	810	910	—	—	2,960
610	390	490	6.9	7.6	367.4	412.8	—	—	1,342.6
30	690	870	0.42	0.48	410	460	—	—	2,450
762	313	395	10.7	12.2	186.0	208.7	—	—	1,111.3
36	580	730	0.61	0.69	240	270	480	540	1,800
914	263	331	15.5	17.5	108.9	122.5	217.7	244.9	816.5
48	430	540	1.07	1.20	100	115	200	230	1,010
1,219	195	245	27.2	30.5	45.4	52.2	90.7	104.3	458.1
60	350	440	1.70	1.91	60	70	120	135	260
1,524	159	200	43.2	48.5	27.2	31.8	54.4	61.2	117.9
72	290	370	2.44	2.78	30	34	60	70	NR
1,829	132	168	62.0	70.6	13.6	15.4	27.2	31.8	NR

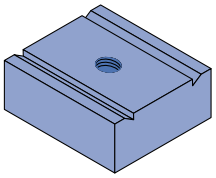
F20P/V-2100 Channel Beam/Column Loading

Span In (mm)	Maximum Uniform Beam Load (Safety Factor - 3:1) Poly Lbs (kg)	Maximum Uniform Beam Load (Safety Factor - 3:1) Vinyl Lbs(kg)	Deflection @ Max. Allowable Beam Load Poly In (mm)	Deflection @ Max. Allowable Beam Load Vinyl In (mm)	Deflection @ Max. Deflection = 0.25 In (Lbs) Poly Lbs(kg)	Deflection @ Max. Deflection = 0.25 In (Lbs) Vinyl Lbs (kg)	Uniform Load @ Max. Deflection = 0.50 In (Lbs) Poly Lbs (kg)	Uniform Load @ Max. Deflection = 0.50 In (Lbs) Vinyl Lbs (kg)	Maximum Column Load Lbs (kg)
12	5,080	6,350	0.04	0.04	—	—	—	—	7,300
305	2,304	2,880	1.0	1.0	—	—	—	—	3,311.2
18	3,390	4,240	0.09	0.10	—	—	—	—	6,740
457	1,538	1,923	2.3	2.5	—	—	—	—	3,057.2
24	2,540	3,180	0.16	0.17	—	—	—	—	5,920
610	1,152	1,442	4.1	4.3	—	—	—	—	2,685.3
30	2,040	2,550	0.24	0.27	—	2,350	—	—	4,900
762	925	1,157	6.1	6.9	—	1,065.9	—	—	2,222.6
36	1,700	2,130	0.35	0.39	1,220	1,370	—	—	3,600
914	771	966	8.9	9.9	553.4	621.4	—	—	1,632.9
48	1,270	1,590	0.62	0.69	520	590	1,040	1,170	2,020
1,219	576	721	15.7	17.5	235.9	267.6	471.7	530.7	916.3
60	1,020	1,280	0.97	1.09	270	310	540	610	520
1,524	463	581	24.6	27.7	122.5	140.6	244.9	276.7	235.9
72	850	1,070	1.40	1.57	160	180	320	360	NR
1,829	386	485	35.6	39.9	72.6	81.6	145.1	163.3	NR

Heavy Duty Channel Nuts

Heavy duty channel nuts are designed to be used where high thread shear values or spring nuts are required. They can not be used with light duty 1000 series channel or SST profile channel.

Material: glass-reinforced polyurethane.



Part Number	Size	Thread Shear Lbs *(kg)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-CNHD	⅜"-16	1,400 *635*	8 *11*	5.7 *2.6*
F500PU-CNHD	½"-13	1,400 *635*	8 *11*	5.3 *2.4*
F625PU-CNHD	⅝"-11	1,400 *635*	10 *14*	5.1 *2.3*
F750PU-CNHD	¾"-10	1,400 *635*	10 *14*	4.4 *2.0*
F10PU-CNMHD	10 mm	1,400 *635*	8 *11*	5.8 *2.6*
F12PU-CNMHD	12 mm	1,400 *635*	8 *11*	5.5 *2.5*
F16PU-CNMHD	16 mm	1,400 *635*	10 *14*	5.3 *2.4*
F20PU-CNMHD	20 mm	1,400 *635*	10 *14*	4.4 *2.0*

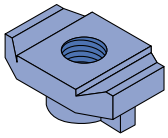
*Thread shear values shown represent a 3:1 safety factor.

Standard Duty Channel Nuts

Standard Duty channel nuts are designed for light duty applications that do not require high thread shear values. They can be used with both light duty series 1000 and heavy duty series 2000 fiberglass channel.

Not for use with SST profile channel.

Material: glass-reinforced polyurethane.



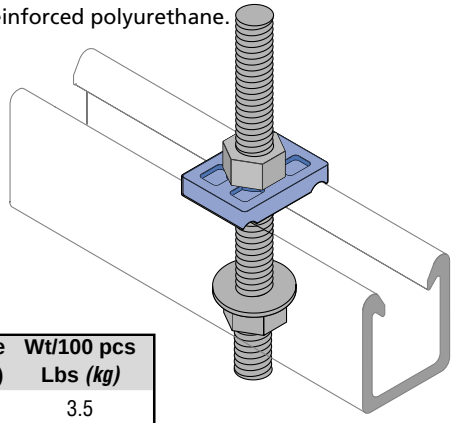
Part Number	Size	Thread Shear Lbs *(kg)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-CN	¼"-20	460 *209*	2 *3*	1.8 *0.8*
F312PU-CN	5/16"-18	460 *209*	2 *3*	1.7 *0.8*
F375PU-CN	⅜"-16	460 *209*	3 *4*	1.8 *0.8*
F500PU-CN	½"-13	460 *209*	3 *4*	1.4 *0.6*
F10PU-CN	10 mm	460 *209*	3 *4*	1.7 *0.8*
F12PU-CN	12 mm	460 *209*	3 *4*	1.4 *0.6*
F10PU-CNS	#10 Screw	460 *209*	N/A	1.9 *0.9*

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

Saddle Clips

Saddle clips mate with the exterior of the channel flanges and are secured with threaded rods and nuts.

Material: glass-reinforced polyurethane.

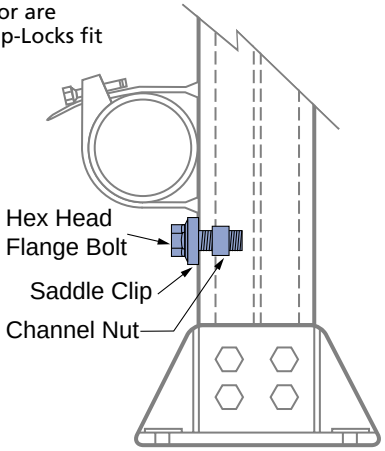


Part Number	Size (In.)	Wt/100 pcs Lbs *(kg)*
F200-4226	⅜	3.5 *1.6*
F200-4217	½	2.5 *1.1*
F200-4341	⅝	3.0 *1.4*
F200-4342	¾	2.5 *1.1*

Stop-Lock Assemblies

Stop-Lock Assemblies reduce the chance of pipe slippage when running supports vertically and are recommended for applications that are subject to vibration, have regular contact with fluids or are vertically mounted. The Stop-Locks fit both sizes of channel.

Material: glass-reinforced polyurethane.



Part Number	Size (in.)	Force Resistance Lbs *(kg)**	Torque Ft/Lbs (N•m)	Wt/100 pcs Lbs *(kg)*
F200-4227	⅜"	200 *91*	7 *9*	6.3 *2.9*
F200-4219	½"	220 *100*	12 *16*	6.4 *2.9*
F200-4343	⅝"**	250 *113*	15 *20*	11.0 *5.0*

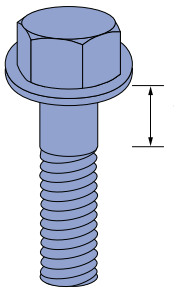
* Force resistance values shown represents a 3:1 safety factor.

** Supplied with a heavy duty channel nut for use only with the heavy duty series 2000 channel.

Hex Flange Bolts

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.

Material: glass-reinforced polyurethane.



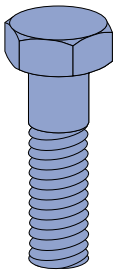
Part Number	Size (in.)	Thread Shear Lbs *(kg)**	Shank Shear Lbs *(kg)**	Shoulder Length In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-075	¼ x¾	110 *50*	210 *95*	Full Thread	0.8 *1*	.4 *0.2*
F250PU-100	¼ x 1	110 *50*	210 *95*	Full Thread	0.8 *1*	.5 *.02*
F250PU-150	¼ x 1½	110 *50*	210 *95*	½ *13*	0.8 *1*	.6 *0.3*
F500PU-125	½ x 1¼	450 *204*	870 *395*	Full Thread	8 *11*	1.0 *0.5*
F500PU-150	½ x 1½	450 *204*	870 *395*	Full Thread	8 *11*	1.1 *.05*
F500PU-200	½ x 2	450 *204*	870 *395*	¾ *19*	8 *11*	1.3 *0.6*
F500PU-250	½ x 2½	450 *204*	870 *395*	Full Thread	8 *11*	1.6 *0.7*
F500PU-300	½ x 3	450 *204*	870 *395*	1 *25*	8 *11*	1.8 *0.8*
F500PU-350	½ x 3½	450 *204*	870 *395*	2 3/16 *56*	8 *11*	2.0 *0.9*

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

Hex Bolts

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.

Material: glass-reinforced polyurethane.



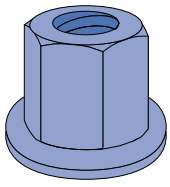
Part Number	Size (in.)	Thread Shear Lbs *(kg)**	Shank Shear Lbs *(kg)**	Shoulder Length In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-125	⅜ x 1¼	250 *113*	470 *213*	Full Thread	3 *4*	1.0 *0.5*
F375PU-150	⅜ x 1½	250 *113*	470 *213*	¼ *6*	3 *4*	1.1 *0.5*
F375PU-200	⅜ x 2	250 *113*	470 *213*	½ *13*	3 *4*	1.3 *0.6*
F375PU-250	⅜ x 2½	250 *113*	470 *213*	¾ *19*	3 *4*	1.6 *0.7*
F375PU-300	⅜ x 3	250 *113*	470 *213*	1 *25*	3 *4*	1.8 *0.8*
F625PU-125	⅝ x 1¼	700 *318*	1,360 *617*	¼ *6*	12 *16*	2.5 *1.1*
F625PU-150	⅝ x 1½	700 *318*	1,360 *617*	¼ *6*	12 *16*	2.8 *1.3*
F625PU-200	⅝ x 2	700 *318*	1,360 *617*	¼ *6*	12 *16*	3.2 *1.5*
F625PU-250	⅝ x 2½	700 *318*	1,360 *617*	¼ *6*	12 *16*	3.4 *1.5*
F625PU-300	⅝ x 3	700 *318*	1,360 *617*	¼ *6*	12 *16*	3.9 *1.8*
F625PU-350	⅝ x 3½	700 *318*	1,360 *617*	1¼ *6*	12 *16*	5.5 *2.5*

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

Hex Flange Nuts

The hex flange nut is preferred for applications that require additional thread engagement (such as with all-thread rod) or maximum thread shear strength.

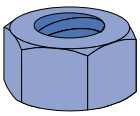
Material: glass-reinforced polyurethane.



Part Number	Size (in.)	Thread Shear Lbs *(kg)**	Height In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-FN-000	⅜-16	500 *227*	0.750 *19.1*	3 *4*	0.8 *0.4*
F500PU-FN-000	½-13	1,200 *544*	0.855 *21.7*	8 *11*	1.6 *0.7*
F625PU-FN-000	⅝-11	2,200 *998*	1.220 *31.0*	12 *16*	3.5 *1.6*
F750PU-FN-000	¾-10	2,900 *1,315*	1.590 *40.4*	15 *20*	5.5 *2.5*

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

Hex Nuts



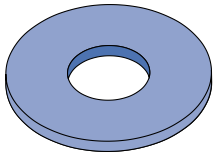
Part Number	Size (in.)	Thread Shear Lbs *(kg)**	Height In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-000	¼-20	150 *68*	0.218 *5.5*	0.8 *1*	0.1 *0.05*
F375PU-000	⅜-16	460 *209*	0.328 *8.3*	3 *4*	0.3 *0.1*
F500PU-000	½-13	800 *363*	0.437 *11.1*	8 *11*	0.5 *0.2*
F625PU-000	⅝-11	1,000 *454*	0.546 *13.9*	12 *16*	1.5 *0.7*

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

Flat Washers

Material: PVC

Note: PVC washers are recommended for connections that utilize hex nuts and bolts.



Part Number	Size (in.)	Outside Diameter In *(mm)*	Wt/100 pcs Lbs *(kg)*
F250E-999	¼	0.49 *12.4*	0.1 *0.05*
F375E-999	⅜	1.00 *25.4*	0.1 *0.05*
F500E-999	½	1.25 *31.8*	0.5 *0.2*
F625E-999	⅝	1.50 *38.1*	0.5 *0.2*
F750E-999	¾	1.50 *38.1*	1.0 *0.5*
F1000E-999	1	2.25 *57.2*	1.5 *0.7*

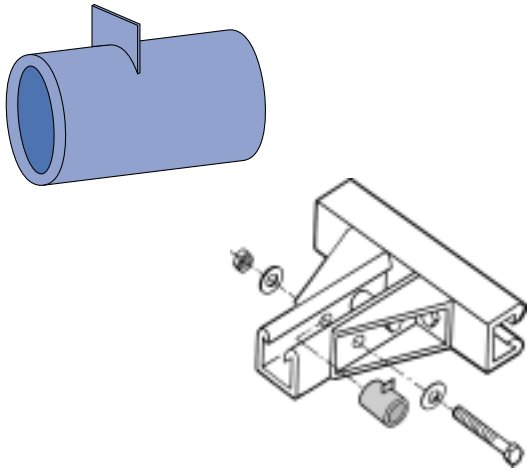
F50PU-500SP Channel Spacers

Wt/100 pcs: 2.0 Lbs (.91 kg)

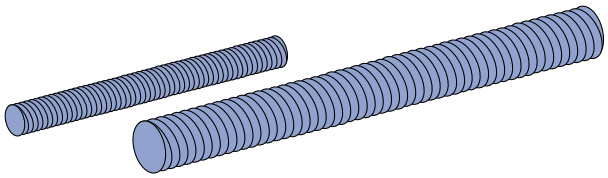
Channel spacers are designed to prevent wall compression under heavy loading conditions. Such loading occurs during the torquing of hardware for channel fittings.

The spacers are designed to be used only with 1⅝" channels and will accommodate ⅜" and ½" bolts.

Material: molded from polyurethane



Threaded Rod



Material: pultruded vinyl ester resin and is gray in color.

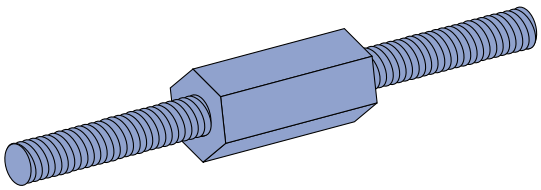
Part Number	Size (in.)	Weight Lbs *(kg)*	Thread Shear Lbs *(kg)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs 4' in Len. Lbs *(kg)*
F200-3827	⅜-16	0.07 *0.03*	470 *213*	5 *7*	35 *15.9*
F200-3828	½-13	0.12 *0.05*	570 *259*	10 *14*	57 *25.9*
F200-3829	⅝-11	0.18 *0.08*	1,600 *726*	40 *54*	91 *41.3*
F200-3830	¾-10	0.28 *0.13*	1,700 *771*	50 *68*	133 *60.3*
F200-3831	1-8	0.50 *0.23*	3,000 *1,361*	60 *81*	200 *90.7*

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

** Standard lengths are 4' and 8'.
The part number shown is for 4' lengths.
To order eight foot lengths, add suffix "-96" to part number (Example: F200-3827-96)

A-Konnector Rod Couplers

A-Konnectors provide an excellent means for extending 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 50 pieces.

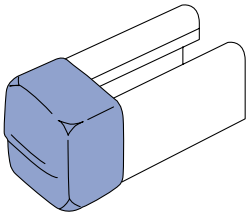


Part Number	Size (in.)	Length In (mm)	Thread Shear Lbs (kg)*	Wt/100 pcs Lbs (kg)
F200-3840	⅜-16	2¼ *57.2*	800 *363*	6.5 *2.9*
F200-3841	½-13	2¼ *57.2*	870 *395*	6.0 *2.7*
F200-3842	⅝-11	2¼ *57.2*	1,500 *680*	13.0 *5.9*
F200-3843	¾-10	2¼ *57.2*	1,500 *680*	11.0 *5.0*

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

FAIC-EC Channel End Cap

Wt/100 pcs: 3.4 Lbs (1.5 kg)

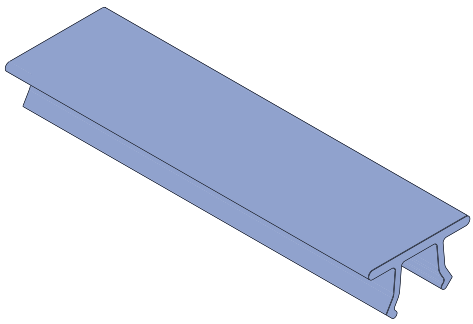


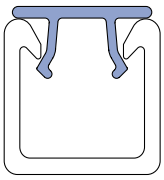
Material: red PVC and designed for 1⅝" channel.

End caps are desired when the ends of the channel need to be enclosed. The cap easily installs by pressing it onto the end of the channel opening.

F20E-5000 Channel Capping Strip

Wt/100 Ft: 5 Lbs (7.4 kg/100 m)





Supplied in 10 foot lengths.

Material: PVC

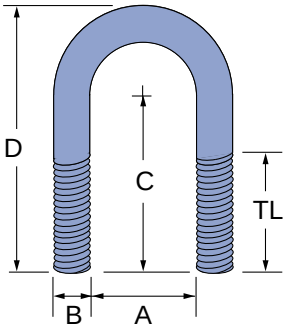
Installs simply by pressing it onto the channel opening. It is designed to be used when a cover is desired for the channel opening (such as concrete embedment channel).

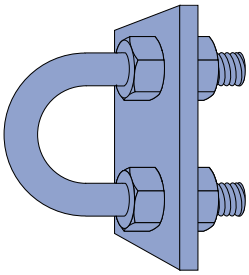
Nonmetallic U-Bolts

Unistrut Nonmetallic U-Bolts provide a corrosion resistant alternative to traditional metallic U-Bolts. They have oversized diameters which allow them to hold steel conduit and plastic pipe. These bolts will outlast stainless steel in most corrosive applications.

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

Material: glass-reinforced polyurethane





Part Number	Size In	"A" Dim. In *(mm)*	"B" Dim. In *(mm)*	"C" Dim. In *(mm)*	"D" Dim. In *(mm)*	"TL" Dim. In *(mm)*	Load Lbs *(kg)**	Torque In/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
FUB-050	½	0.937 *23.8*	0.375 *9.5*	1.568 *39.8*	2.412 *61.3*	1.25 *31.8*	135 *61*	40 *5*	3 *1.4*
FUB-075	¾	1.125 *28.6*	0.375 *9.5*	1.662 *42.2*	2.600 *66.0*	1.25 *31.8*	135 *61*	40 *5*	3 *1.4*
FUB-100	1	1.375 *34.9*	0.375 *9.5*	1.787 *45.4*	2.850 *72.4*	1.25 *31.8*	135 *61*	40 *5*	4 *1.8*
FUB-125	1¼	1.687 *42.8*	0.375 *9.5*	1.943 *49.4*	3.162 *80.3*	1.25 *31.8*	135 *61*	40 *5*	4 *1.8*
FUB-150	1½	2.000 *50.8*	0.375 *9.5*	2.100 *53.3*	3.475 *88.3*	1.25 *31.8*	135 *61*	40 *5*	5 *2.3*
FUB-200	2	2.437 *61.9*	0.500 *12.7*	2.468 *62.7*	4.187 *106.3*	1.50 *38.1*	135 *61*	80 *9*	10 *4.5*
FUB-250	2½	2.937 *74.6*	0.500 *12.7*	2.718 *69.0*	4.687 *119.0*	1.50 *38.1*	135 *61*	80 *9*	11 *5.0*
FUB-300	3	3.562 *90.5*	0.500 *12.7*	3.031 *77.0*	5.312 *134.9*	1.50 *38.1*	135 *61*	80 *9*	14 *6.4*
FUB-350	3½	4.062 *103.2*	0.500 *12.7*	3.281 *83.3*	5.812 *147.6*	1.50 *38.1*	135 *61*	80 *9*	15 *6.8*
FUB-400	4	4.562 *115.9*	0.500 *12.7*	3.531 *89.7*	6.312 *160.3*	1.50 *38.1*	135 *61*	80 *9*	16 *7.3*
FUB-600	6	6.750 *171.5*	0.625 *15.9*	5.750 *146.1*	9.875 *250.8*	3.25 *82.6*	135 *61*	120 *14*	17 *7.7*

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

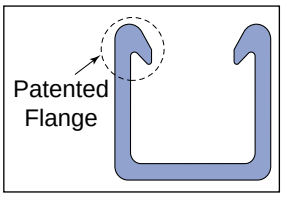
Channel Fittings

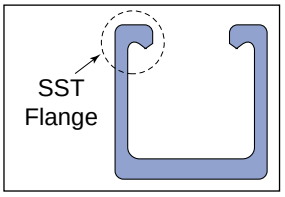
Channel Fittings are required to fabricate structures and are easily attached to Channels with channel nuts and polyurethane fasteners. The fittings are offered in two types; fabricated (cut from flat stock) or molded.

Material (Fabricated Fittings): Either polyester (P Series) or vinyl ester (V Series) material.

Material (Molded Fittings): All molded fittings with the exception of the post bases are molded in polyurethane.

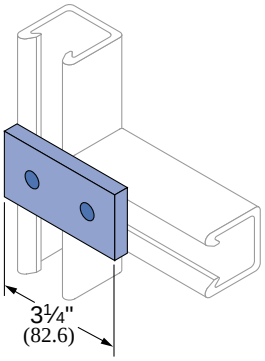
Note: The drawings for all fittings are shown with the patented flange profile, however they can be used with either channel profile.





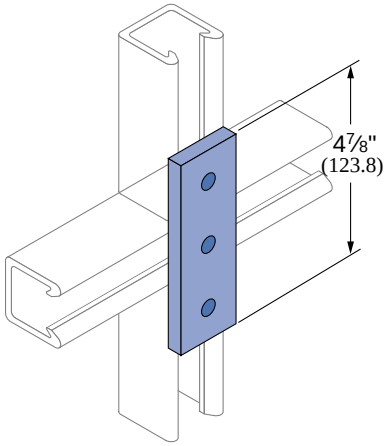
F20P-2500, F20V-2500

Wt/100 pcs: 12 Lbs (5.4 kg)



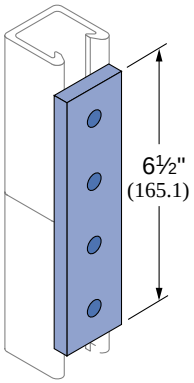
F20P-2502, F20V-2502

Wt/100 pcs: 17 Lbs (7.7 kg)



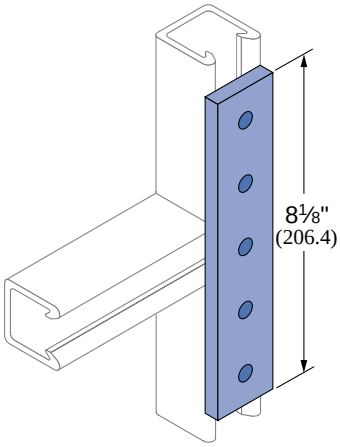
F20P-2504, F20V-2504

Wt/100 pcs: 24 Lbs (10.9 kg)



F20P-2506, F20V-2506

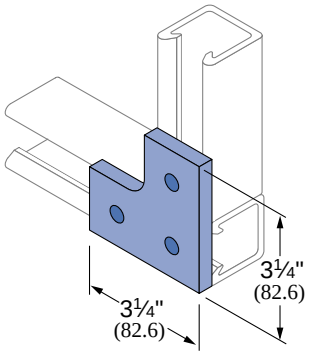
Wt/100 pcs: 32 Lbs (14.5 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 13/32" (10.3 mm) , Accommodates ⅜" hardware; Hole Spacing - On Center: 1⅝" (41 mm); Width: 1⅝"(41mm); Thickness: ⅜" (9.5mm)

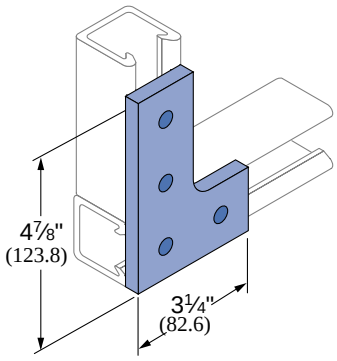
F20P-2508, F20V-2508

Wt/100 pcs: 17 Lbs (7.7 kg)



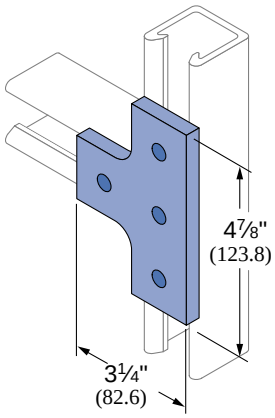
F20P-2510, F20V-2510

Wt/100 pcs: 25 Lbs (11.3 kg)



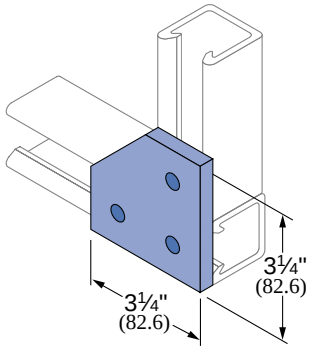
F20P-2512, F20V-2512

Wt/100 pcs: 26 Lbs (11.8 kg)



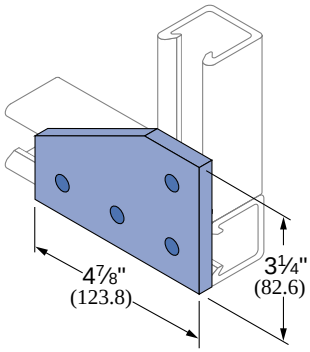
F20P-2514, F20V-2514

Wt/100 pcs: 20 Lbs (9.1 kg)



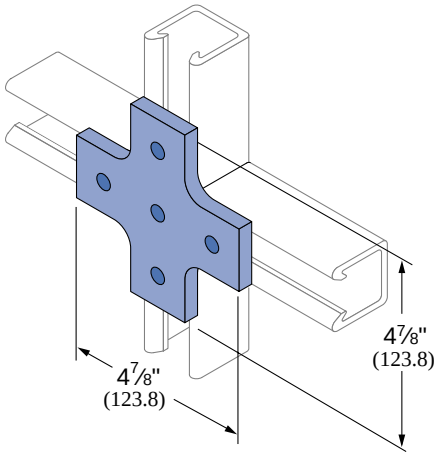
F20P-2516, F20V-2516

Wt/100 pcs: 32 Lbs (14.5 kg)



F20P-2518, F20V-2518

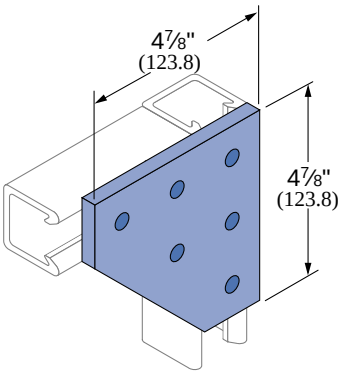
Wt/100 pcs: 33 Lbs (15.0 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13/32" (10.3 mm) , Accommodates ⅜" hardware; Hole Spacing - On Center: 1⅝" (41 mm); Width: 1⅝"(41mm); Thickness: ⅜" (9.5mm)

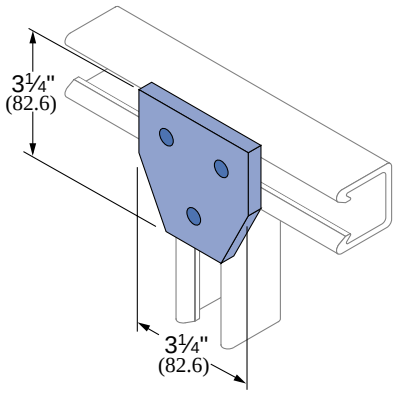
F20P-2520, F20V-2520

Wt/100 pcs: 45 Lbs (20.4 kg)



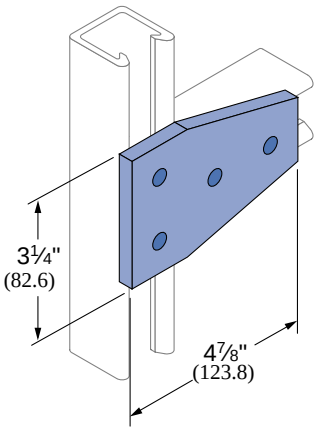
F20P-2522, F20V-2522

Wt/100 pcs: 21 Lbs (9.5 kg)



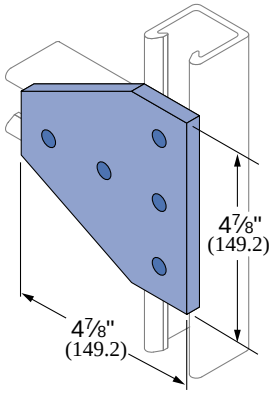
F20P-2524, F20V-2524

Wt/100 pcs: 32 Lbs (14.5 kg)



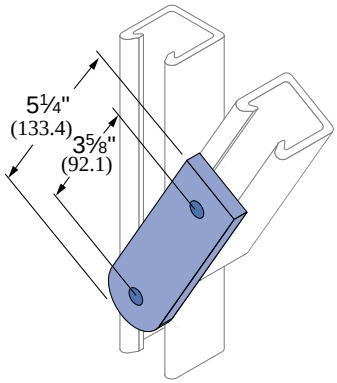
F20P-2526, F20V-2526

Wt/100 pcs: 45 Lbs (20.4 kg)



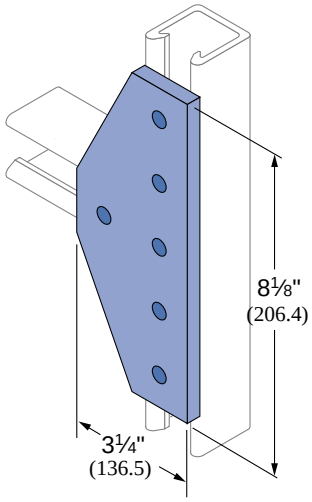
F20P-2528, F20V-2528

Wt/100 pcs: 20 Lbs (9.1 kg)



F20P-2530, F20V-2530

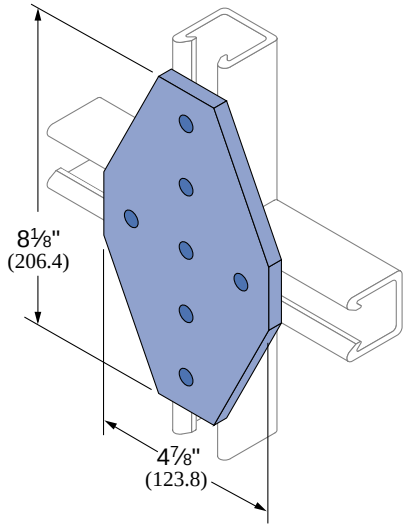
Wt/100 pcs: 50 Lbs (22.7 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)
Hole Diameter: 13/32" (10.3 mm) , Accommodates ⅜" hardware; Hole Spacing - On Center: 1⅝" (41 mm); Width: 1⅝"(41mm); Thickness: ⅜" (9.5mm)

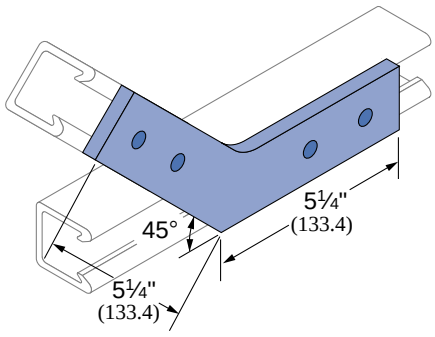
F20P-2534, F20V-2534

Wt/100 pcs: 77 Lbs (34.9 kg)



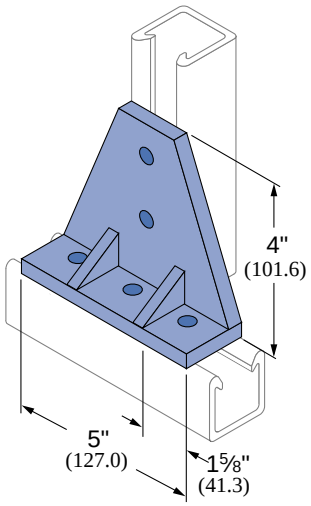
F20P-2540, F20V-2540

Wt/100 pcs: 41 Lbs (18.6 kg)



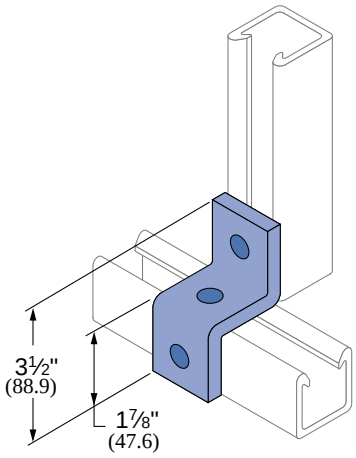
F50PU-2538

Wt/100 pcs: 57 Lbs (26.0 kg)



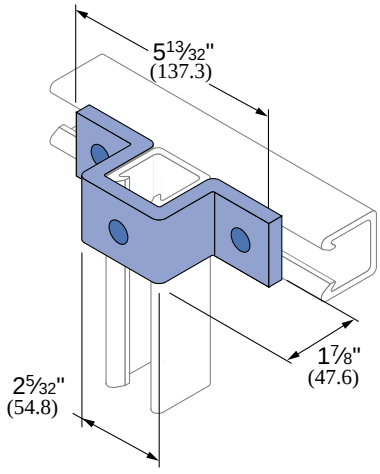
F50PU-2611

Wt/100 pcs: 9 Lbs (4.1 kg)



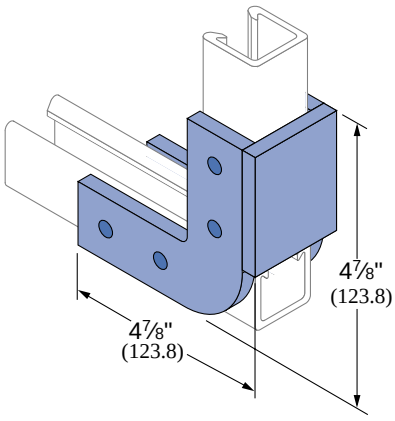
F50PU-2613

Wt/100 pcs: 16 Lbs (7.3 kg)



F50PU-1508 (1½"), F50PU-2008 (1⅝")

Wt/100 pcs: 27 Lbs (12.2 kg)

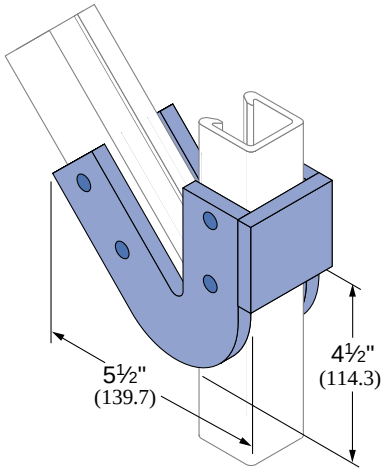


Standard Dimensions for 1⅝" (41 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 13/32" (10.3 mm) , Accommodates ⅜" hardware; Hole Spacing - On Center: 1⅝" (41 mm); Width: 1⅝"(41mm); Thickness: ⅜" (9.5mm)

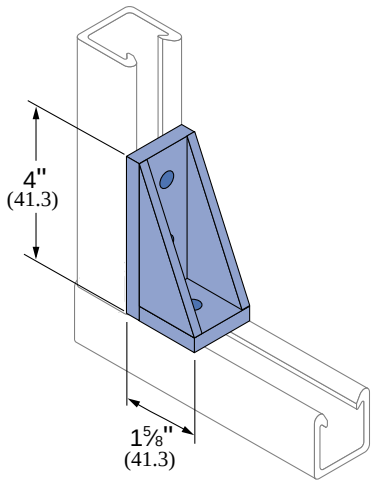
F50PU-2045 (1⅝")

Wt/100 pcs: 35 Lbs (15.9 kg)



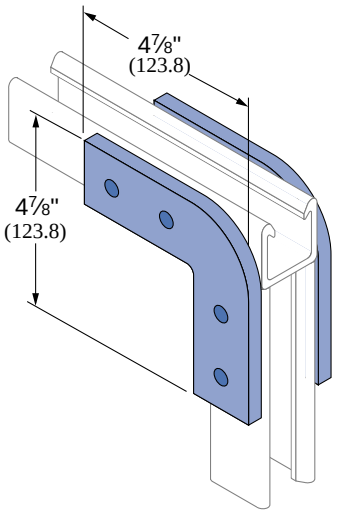
F50PU-2636

Wt/100 pcs: 14 Lbs (6.4 kg)



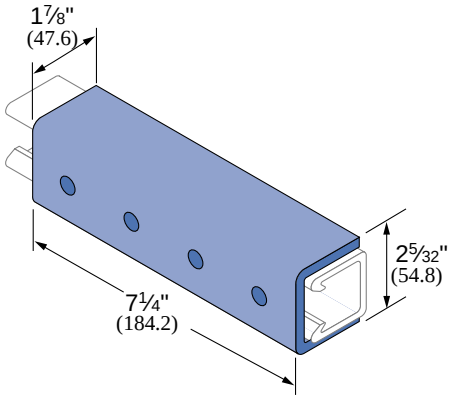
F50PU-2090 (1⅝")

Wt/100 pcs: 35 Lbs (15.9 kg)



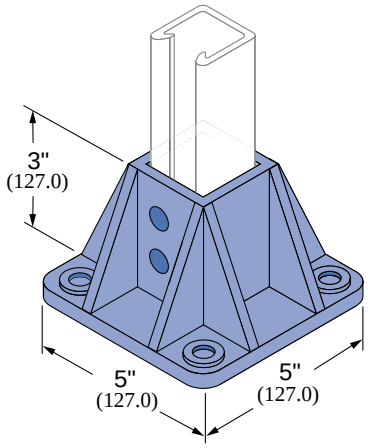
F50PU-2616

Wt/100 pcs: 51 Lbs (23.1 kg)



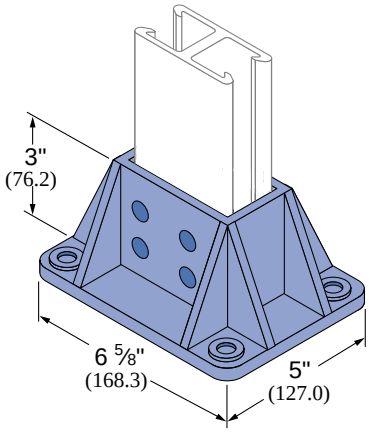
F20PU-5853 (1⅝"), F20PU-5855 (1⅛")

Wt/100 pcs: 71 Lbs (32.2 kg)



F20PU-5903 (1⅝"), F20PU-5905 (1⅛")

Wt/100 pcs: 86 Lbs (39.0 kg)



Standard Dimensions for 1⅝" (41 mm) width series channel fittings (Unless Otherwise Shown on Drawing)

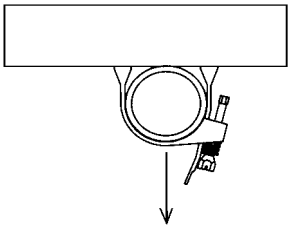
Hole Diameter: 13/32" (10.3 mm) , Accommodates ⅜" hardware; Hole Spacing - On Center: 1⅝" (41 mm); Width: 1⅝"(41mm); Thickness: ⅜" (9.5mm)

Fiberglass Clamps Design Load Information

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

Type 1 Overhead Design Load

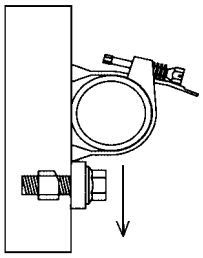
The design load shown represents pipes supported below the strut. The design loads shown are based on a minimum ultimate failure safety factor of 3:1.



Type 2 Vertical Design Load

The design loading shown can be achieved with the addition of a vertical stop lock assembly (Part #F200-4219) 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.

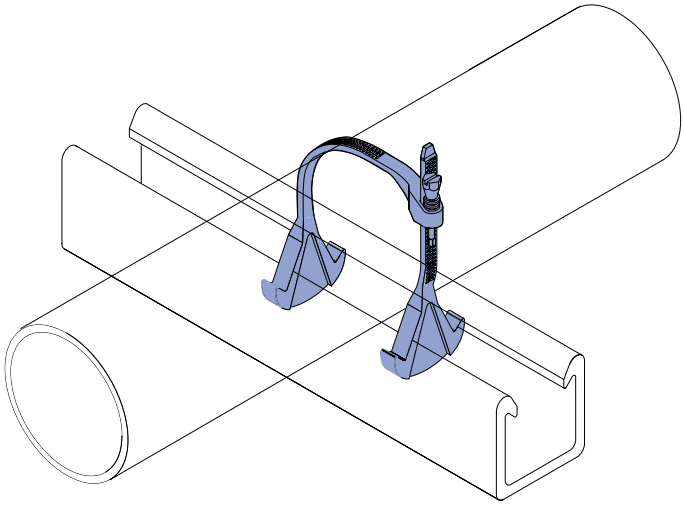
Design loads are based on a minimum clamp slip safety factor or 3:1. It is recommended that stop lock assemblies be used for all vertical pipe support applications.



Adjustable Pipe Clamps

Unistrut 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.

Care should be taken not to exceed 3 ft./lbs. of torque on the adjustable pipe straps.



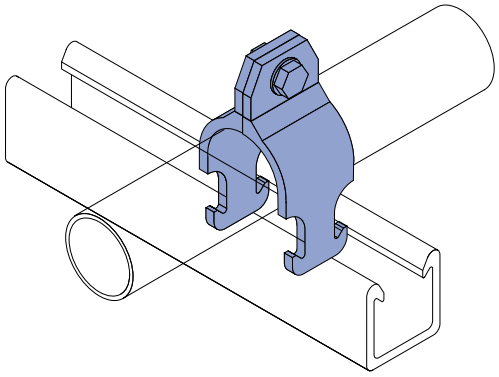
Part Number	O.D. Pipe Size (in.)	Design Load Type 1 Lbs *(kg)*	Design Load Type 2 Lbs *(kg)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
200-3100	½–1½	135 *61*	65 *29*	0.8 *1*	3 *1.4*
200-3110	1½–2¼	135 *61*	65 *29*	3 *4*	5 *2.3*
200-3120	2¼–3¼	145 *66*	70 *32*	3 *4*	5 *2.3*
200-3130	3–4	215 *98*	70 *32*	3 *4*	8 *3.6*
200-3140	4–6½	215 *98*	70 *32*	3 *4*	10 *4.5*

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

Rigid Pipe Clamps

Part Number	Nominal Size (in.)	PVC, Sch. 80 & Rigid Metal In (mm)	Design Loads* Type 1 Lbs (kg)	Design Loads* Type 2 Lbs (kg)	FRP Bolt FRP Bolt Size (in.)	FRP Bolt Torque Ft/Lbs (N•m)	Wt/100 pcs Lbs (kg)
FPCR-050	½	0.840 *21.336*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	3 *1.4*
FPCR-075	¾	1.050 *26.67*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	3 *1.4*
FPCR-100	1	1.315 *33.401*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	4 *1.8*
FPCR-125	1¼	1.660 *42.164*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	5 *2.3*
FPCR-150	1½	1.900 *48.26*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	5 *2.3*
FPCR-200	2	2.375 *60.325*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	5 *2.3*
FPCR-250	2½	2.875 *73.025*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	7 *3.2*
FPCR-300	3	3.500 *88.9*	225 *102*	90 *41*	⅜ x 1¼	3 *4*	10 *4.5*
FPCR-400	4	4.500 *114.3*	300 *136*	125 *57*	⅜ x 1¼	3 *4*	12 *5.4*
FPCR-600	6	6.625 *168.275*	300 *136*	125 *57*	⅜ x 1¼	3 *4*	15 *6.8*
FPCR-800	8	8.625 *219.075*	300 *136*	125 *57*	⅜ x 1¼	3 *4*	18 *8.2*

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



Rigid Pipe Clamps resemble the more traditional style of pipe clamps 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).

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

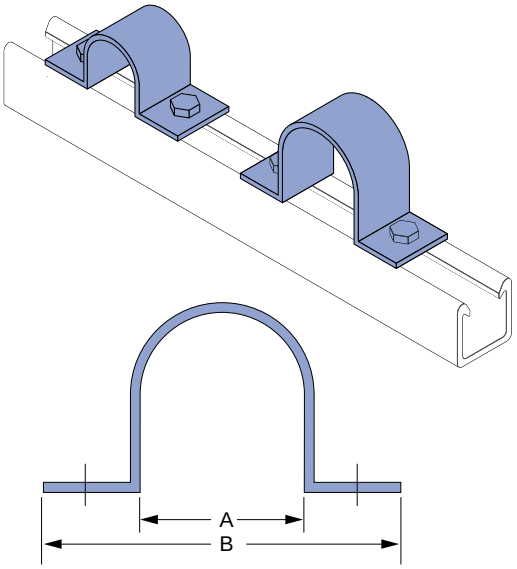
Material: glass-reinforced polyurethane.

Two Hole Pipe Straps

Part No.	Dim. A In (mm)	Dim. B In (mm)	Bolt Size (in.)	Material Thick. In (mm)	Design Load Type 1 Lbs (kg)	Design Load Type2 Lbs (kg)	Torque Ft/Lbs (N•m)	Wt/100 pcs Lbs (kg)
FPS200	2.375 *60.33*	6.375 *161.93*	½	¼ *6.4*	135 *61*	50 *23*	4 *5*	14 *6.4*
FPS250	2.875 *73.03*	6.875 *174.63*	½	¼ *6.4*	135 *61*	50 *23*	4 *5*	17 *7.7*
FPS300	3.500 *88.90*	7.500 *190.50*	½	¼ *6.4*	135 *61*	50 *23*	4 *5*	20 *9.1*
FPS350	4.000 *101.60*	8.000 *203.20*	½	¼ *6.4*	135 *61*	50 *23*	4 *5*	33 *15.0*
FPS400	4.500 *114.30*	8.500 *215.90*	½	¼ *6.4*	175 *79*	60 *27*	4 *5*	23 *10.4*
FPS500	5.563 *141.30*	9.563 *242.90*	½	¼ *6.4*	175 *79*	60 *27*	4 *5*	39 *17.7*
FPS600	6.625 *168.28*	10.625 *269.88*	½	¼ *6.4*	175 *79*	60 *27*	4 *5*	39 *17.7*
FPS800	8.625 *219.08*	12.625 *320.68*	½	¼ *6.4*	225 *102*	125 *57*	4 *5*	51 *23.1*
FPS1000	10.750 *273.05*	15.750 *400.05*	⅝	¼ *6.4*	225 *102*	125 *57*	10 *14*	77 *34.9*
FPS1200	12.750 *323.85*	16.250 *412.75*	⅝	¼ *6.4*	225 *102*	125 *57*	10 *14*	83 *37.6*
FPS1400	14.000 *355.60*	18.000 *457.20*	⅝	⅜ *9.5*	250 *113*	150 *68*	10 *14*	125 *56.7*
FPS1600	16.000 *406.40*	20.000 *508.00*	⅝	⅜ *9.5*	250 *113*	150 *68*	10 *14*	143 *64.9*
FPS1800	18.000 *457.20*	23.000 *584.20*	⅝	⅜ *9.5*	250 *113*	150 *68*	10 *14*	160 *72.6*

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

Notes:
(1) Bolts and channel nuts are sold separately.
(2) When bolting onto 1⅝" channel a 1¼" long bolt is req'd.

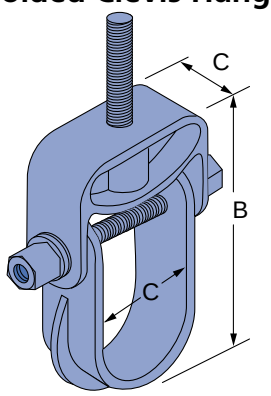


Two Hole Pipe Straps are designed for use in securing pipe, conduit and ducts to Channel. Two hole fiberglass straps can also be used independently from the channel for surface mounting. All sizes of the straps are suitable for load bearing applications.

Material: 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.

Molded Clevis Hangers

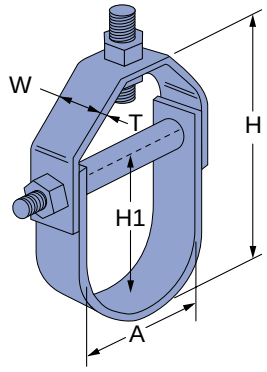


Part Number	Nominal Diameter In *(mm)*	Max. Pipe O.D. In *(mm)*	"A" Dim. In *(mm)*	"B" Dim. In *(mm)*	"C" Dim. In *(mm)*	Hanger Rod In *(mm)*	Load* Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
FCVHPU-100	½ *12.7*	1 *25.4*	1.500 *38.1*	4.25 *108.0*	1.25 *31.8*	½ *12.7*	670 *304*	29 *13.2*
FCVHPU-150	1¼ *31.8*	1½ *38.1*	2.000 *50.8*	5.14 *130.6*	1.25 *31.8*	½ *12.7*	670 *304*	40 *18.1*
FCVHPU-200	1½ *38.1*	2 *50.8*	2.500 *63.5*	6.52 *165.6*	1.25 *31.8*	½ *12.7*	730 *331*	43 *19.5*
FCVHPU-400	2½ *63.5*	4 *101.6*	5.125 *130.2*	10.00 *254.0*	1.50 *38.1*	½ *12.7*	1,150 *522*	129 *58.5*
FCVHPU-600	4½ *114.3*	6 *152.4*	6.750 *171.5*	12.33 *313.2*	1.50 *38.1*	½ *12.7*	1,170 *531*	168 *76.2*

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

Material: glass-reinforced polyurethane.

Fabricated Clevis Hangers



Material: glass-reinforced polyester resin.

Part Number	Size Range In *(mm)* A	..... Dimensions - In *(mm)* ..... T	H	H1	W	Hanger Rod In *(mm)*	Trans Rod In *(mm)*	Spreader Rod O.D. In *(mm)*	Loads* Lbs *(kg)*	Wt/100 pcs Lbs *(kg)*
F100-1500	1–1½ *25–38*	⅛ *3*	2¾ *70*	1⅞ *48*	1 ½ *38*	½ *13*	⅜ *10*	½ *13*	60 *27*	21 *9.5*
F100-1501	1½–2 *38–51*	⅛ *3*	3½ *89*	2⅜ *60*	1 ½ *38*	½ *13*	⅜ *10*	½ *13*	60 *27*	25 *11.3*
F100-1502	2–2⅝ *51–67*	⅛ *3*	4¾ *121*	3 *76*	2 *51*	½ *13*	⅜ *10*	½ *13*	90 *41*	55 *24.9*
F100-1503	2½–3¼ *64–83*	⅛ *3*	5½ *140*	3⅝ *92*	2 *51*	½ *13*	⅜ *10*	½ *13*	120 *54*	57 *25.9*
F100-1504	3–3⅞ *76–98*	⅛ *3*	7 *178*	4¼ *108*	2 *51*	⅝ *16*	⅜ *10*	½ *13*	160 *73*	61 *27.7*
F100-1505	4–5⅛ *102–130*	13⁄16 *21*	8½ *216*	5⅝ *143*	2 *51*	⅝ *16*	⅜ *10*	½ *13*	250 *113*	82 *37.2*
F100-1506	6–7⅛ *152–181*	13⁄16 *21*	10⅞ *276*	7½ *191*	3 *76*	⅝ *16*	⅜ *10*	½ *13*	300 *136*	136 *61.7*
F100-1507	8–9¼ *203–235*	¼ *6*	14 *356*	9¾ *248*	3 *76*	⅝ *16*	⅜ *10*	½ *13*	350 *159*	189 *85.7*
F100-1508	10–11⅜ *254–289*	¼ *6*	18 *457*	12 *305*	4 *102*	⅝ *16*	½ *13*	¾ *19*	450 *204*	333 *151.0*
F100-1509	12–13½ *305–343*	¼ *6*	21½ *546*	14⅛ *359*	5 *127*	⅝ *16*	½ *13*	¾ *19*	600 *272*	350 *158.8*
F100-1510	14–15¾ *356–400*	¼ *6*	24½ *622*	16½ *419*	5 *127*	¾ *19*	½ *13*	¾ *19*	700 *318*	872 *395.5*
F100-1511	16–18 *406–457*	⅜ *10*	27⅜ *695*	19½ *495*	6 *152*	¾ *19*	¾ *19*	1 *25*	750 *340*	1,023 *464.0*
F100-1512	19–21 *483–533*	⅜ *10*	34½ *876*	22½ *572*	6 *152*	¾ *19*	¾ *19*	1 *25*	800 *363*	1,673 *758.9*

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

F200-4101

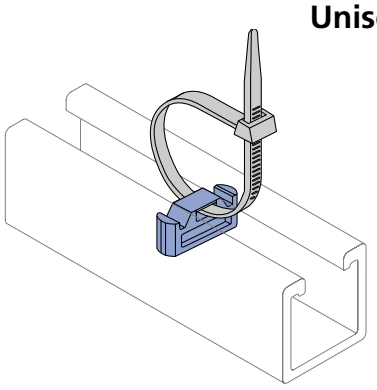
Unisert Channel Insert

Wt/100 pcs: 1.0 Lbs (.5 kg)

Unisert is a polyurethane nonmetallic insert which can be used with standard cable ties for securing tubing, conduit and cables to standard metal channels.

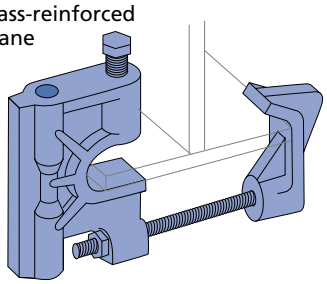
The Unisert works with all 1⅝" channels that are 13⁄16" deep or more. One size fits 12, 14 and 16 metal gauge channels.

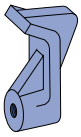
Note: For use only with metallic channel.



Molded Beam Clamp Assembly

Material: glass-reinforced polyurethane





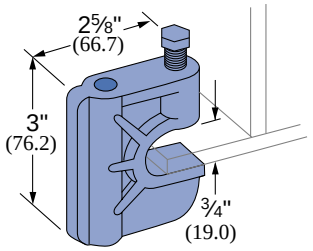
F375PU-BCCLP (⅜") Beam Clip Only

Assembly Part Number	Size In	Thread Shear Lbs *(kg)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-BC	⅜	400 *181*	10 *14*	3 *1.4*
F500PU-BC	½	400 *181*	10 *14*	3 *1.4*

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

FRGBC Molded Beam Clamps

Material: glass-reinforced polyurethane.



Part Number	Size In	Thread Shear Lbs *(kg)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
FRGBC-1	⅜	500 *227*	10 *14*	43 *19.5*
FRGBC-2	½	500 *227*	10 *14*	43 *19.5*
FRGBC-3	⅝	500 *227*	10 *14*	43 *19.5*

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

Power-Rack Stanchions

The Power-Rack Stanchion is made entirely from glass-reinforced nylon, these stanchions offer greater corrosion resistance than classical metal stanchions. The 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 Unistrut for pricing and availability.

Dimensions – The stanchion back has 9/16" x 15/16" holes to accept fasteners for mounting. There are two mounting holes in the 21⅜" long stanchion and three in the 33⅝" 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 Stanchions can be anchored into existing concrete structures using any industrial anchoring system. For new concrete structures, the Stanchions can be mounted to fiberglass 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.

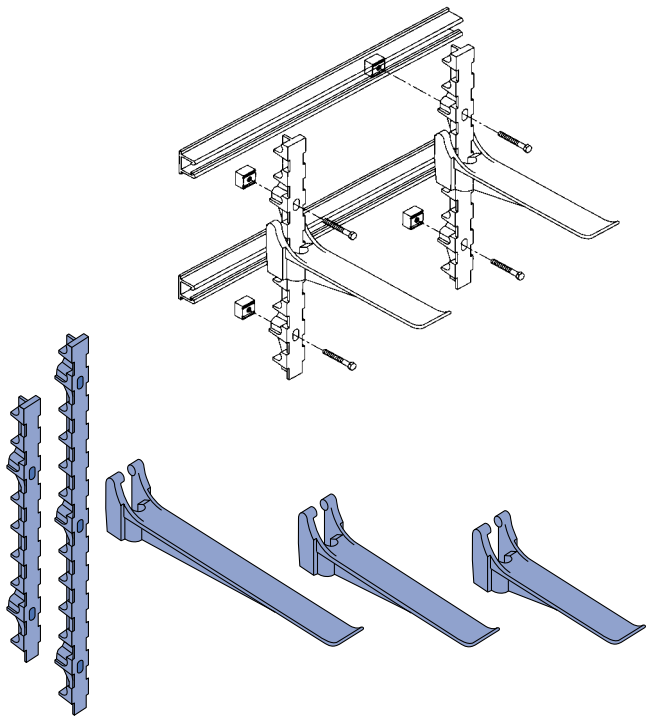
Loading – The recommended allowable loads on Power-Rack Stanchions vary depending upon the position of the arm. Use these guidelines for a safe, reliable installation:

- Total load on any one arm should not exceed 800 lbs.
- The sum of the loads on an 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	Size In *(mm)*	Wt/100 pcs Lbs *(kg)*	Load (lbs.)* Lbs *(kg)*
F20N-ARM08	Arm	8 *203*	100 *45.4*	800 *363*
F20N-ARM14	Arm	14¼ *362*	116 *52.6*	800 *363*
F20N-ARM17	Arm	17½ *445*	145 *65.8*	800 *363*
F20N-ARM23	Arm	23 7/8 *606*	186 *84.4*	800 *363*
F20N-STA21	Stanchion	21⅜ *543*	149 *67.6*	N/A
F20N-STA33	Stanchion	33 5/16 *846*	231 *104.8*	N/A

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

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

Chemical	Series E Rigid PVC 70°-160°F		Series P Poly /Glass 70°-160°F		Series V Vinyl /Glass 70°-160°F		Series PU Poly 70°-160°F		Series N Nylon 70°-160°F	
Hydrofluoric Acid, Up to 10%	R	R	nr	nr	R	150°	–	–	–	–
Up to 20%	R	nr	nr	nr	R	100°	–	–	–	–
Hydrogen Chloride Wet Gas	nr	nr	R	nr	R	R	nr	–	–	–
Hydrogen Sulfide Wet Gas	R	R	R	nr	R	R	R	–	–	–
Lactic Acid	R	R	R	nr	R	R	R	–	–	–
Lead Nitrate	R	R	–	–	R	R	R	–	–	–
Magnesium Hydroxide	R	R	nr	nr	R	R	R	–	R	R
Nickel Sulfate, Low pH	R	R	nr	nr	R	R	R	–	–	–
Nickel Sulfate, High pH	R	R	nr	nr	R	R	R	–	–	–
Nitric Acid, Up to 5%	R	R	nr	nr	R	150°	R	–	–	–
Up to 35%	R	R	nr	nr	R	150°	R	–	–	–
Nitric Acid, Vapor	R	R	nr	nr	R	R	R	–	–	–
Perchloric Acid, Up to 10%	nr	nr	nr	nr	R	150°	R	–	nr	nr
Pickling Liquids, 3-5% H2S04	R	R	R	R	R	R	R	–	–	–
Phosphoric Acid	R	R	nr	nr	R	R	R	–	nr	nr
Super or Poly (115%, P20%)	R	R	nr	nr	R	R	R	–	–	–
Vapor or Condensate	R	R	nr	nr	R	R	R	–	–	–
Potassium Chloride	R	R	R	R	R	R	R	–	–	–
Potassium Nitrate	R	R	R	R	R	R	R	–	–	–
Potassium Persulfate	R	R	nr	nr	R	R	R	–	–	–
Silver Cyanide, Up to 5%	R	R	nr	nr	R	R	R	–	–	–
Sodium Hydroxide, Up to 25%	R	R	nr	nr	R	150°	R	–	–	–
Sodium Hydroxide, Up to 50%	R	R	nr	nr	R	180°	R	–	R	R
Sodium Hypochlorite, Up to 15%	R	R	nr	nr	R	150°	R	–	nr	nr
Sodium Nitrate	R	R	R	R	R	R	R	–	–	–
Sodium Sulfate	R	R	R	nr	R	R	R	–	–	–
Sodium Sulfide	R	R	nr	nr	R	R	R	–	–	–
Sulfuric Acid Up to 25%	R	R	R	R	R	R	R	–	nr	nr
Up to 50%	R	R	nr	nr	R	R	R	–	–	–
Up to 70%	R	R	nr	nr	R	R	R	–	nr	nr
Up to 75%	nr	nr	nr	nr	R	120°	R	–	nr	nr
Up to 80%	nr	nr	nr	nr	nr	nr	nr	–	nr	nr
Vapor	R	R	R	nr	R	R	R	–	–	–
Trichlorethylene, Fumes	nr	nr	nr	nr	R	120°	R	–	–	–
Trisodium Phosphate	R	R	R	nr	R	R	R	–	–	–
Urea	R	R	R	nr	R	150°	R	–	R	R
Vegetable Oils	R	R	R	R	R	R	R	–	R	R
Vinegar	R	R	R	R	R	R	R	R	R	R
White Liquor, Pulp Mill	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 Unistrut as to effects of such use or results to be obtained nor does Unistrut 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**" - "Not Recommended" for use

"**R**" - "Recommended"

"**–**" - no information available

Fiberglass Specifications

1.0 SCOPE

1.1 This specification covers the requirements for the Unistrut 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 Some accessories shall be of injection molded, 40% long glass fiber reinforced polyurethane, 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.

4.0 STRUCTURAL DESIGN

4.1 Channel shall incorporate Unistrut'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:

1⅝" x 1⅝" x ¼" or
1½" x 1⅛" x ⅛".

4.3 All 1⅝" x 1⅝" channel profiles shall have a minimum pull out resistance of 1,000 pounds when load is applied over a ⅜" long section of the inside flanges.

4.4 Channel section lengths shall be supplied in 10' or 20' lengths (±⅛").

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 ¾" variance in piping or conduit O.D. sizes.

5.0 STANDARDS

5.1 Glass-reinforced 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 Unistrut nonmetallic Channel Framing shall be furnished as a system which includes all the necessary fasteners, channel splice plates, brackets, sealants, hangers, pipe clamps, etc.

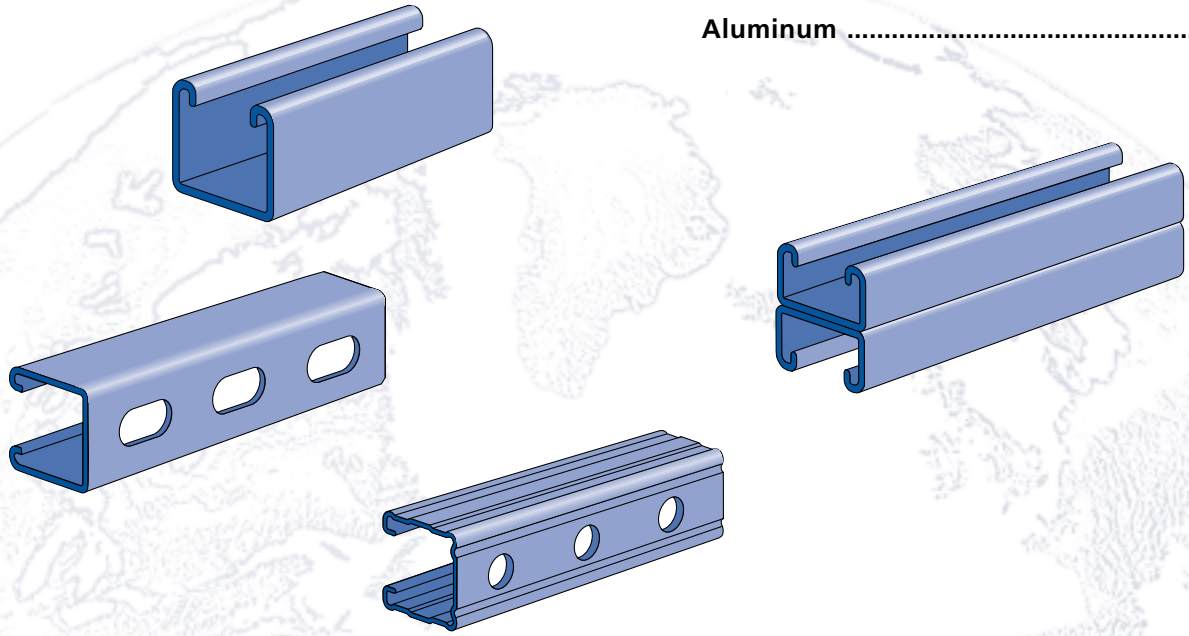
6.2 Nonmetallic fasteners shall be manufactured from long glass fiber reinforced polyurethane to ensure maximum strength and corrosion resistance.

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

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

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

SPECIAL METALS



MATERIAL

Stainless Steel

Channels:ASTM A 240 (Type 304)

Sintered nuts: ASTM B783 (Type 316N2-33)

Fittings:
ASTM A240 (Type 304) or ASTM A276 (Type 304)

Type 316 stainless also available for most products. Contact factory for specific material availability.

Aluminum

Channels (Extruded): ASTM B221 (Type 6063-T6)

Fittings: ASTM B209 (Type 1100F or Type 5052-H32)

Nuts: ASTM B221 (Type 6063-T5)

LOAD DATA (BEAM & COLUMN)

To determine maximum allowable beam and column loading for channels in this section, multiply the load data in the appropriate mild steel channel sections of this catalog by the following factors:

CHANNEL MATERIAL	BEAM LOAD % FACTOR	COLUMN LOAD % FACTOR
EXTRUDED ALUMINUM	33.0%	33.0%
STAINLESS STEEL	100.0%	100.0%

LOAD DATA (SLIP & PULL OUT)

Extruded Aluminum

To determine nut slip resistance, multiply load data for appropriate nut by 75%. To determine nut pull-out load, multiply load data for appropriate nut by 50%.

Stainless Steel

For design assistance, consult Unistrut customer engineering.

PRODUCT AVAILABILITY

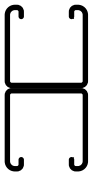
Most fittings and channels shown in this catalog, are available in aluminum or stainless steel. Consult factory for ordering information.

DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

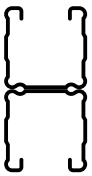
P1000 Series (12 gauge)


P1000 SS
Pg 263


P1001 SS
Pg 263

P1100 Series (14 gauge)


P1100 SS
Pg 263


P1101 SS
Pg 263

P3000 Series (12 gauge)


P3000 SS
Pg 263

P3300 Series (12 gauge)


P3300 SS
Pg 263


P3301 SS
Pg 263

P4000 Series (16 gauge)


P4000 SS
Pg 264

P6000 Series (19 gauge)


P6000 SS
Pg 264

P7000 Series (19 gauge)


P7000 SS
Pg 264

Closure Strips and End Caps


P1184 SS
Pg 264

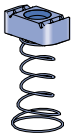

P3184 EA
Pg 268


P1280 EA, P4280 EA,
P5580 EA Pg 268

Stainless Steel Channel Nuts


P1006 U - P1010U
Pg 265


P4006 U - P4010U
Pg 265


P5506 U - P5510U
Pg 265


P4010 UT
Pg 265

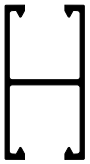

A1006 SS, A1008 SS
Pg 265


A4006 SS, A4008 SS
Pg 265


A5506 SS, A5508 SS
Pg 265

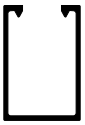
Extruded Aluminum Channels


P1000 EA
Pg 266


P1001 EA
Pg 266


P4000 EA
Pg 266


P4001 EA
Pg 266

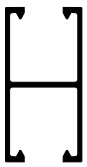

P5500 EA
Pg 266


A1000 EA
Pg 267


A4000 EA
Pg 267


A4001 EA
Pg 267

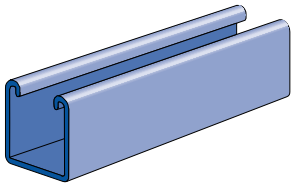

P6000 EA
Pg 267


P6001 EA
Pg 267

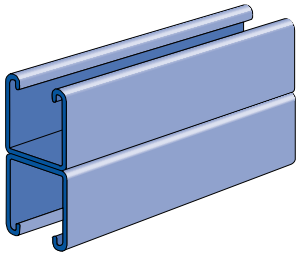

P7000 EA
Pg 268


P7001 EA
Pg 268

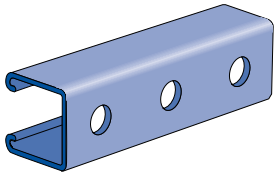
P1000 Series



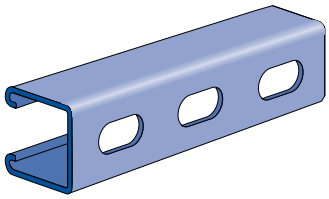
P1000 SS
Wt/100 Ft: 190 Lbs
(283 kg/100m)



P1001 SS
Wt/100 Ft: 380 Lbs
(566 kg/100m)

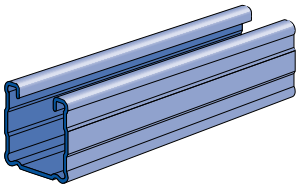


P1000HS SS
Wt/100 Ft: 185 Lbs
(275 kg/100m)

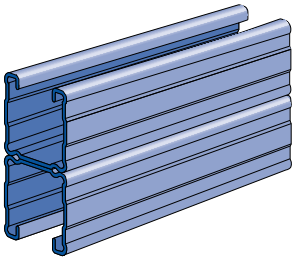


P1000T SS
Wt/100 Ft: 185 Lbs
(275 kg/100m)

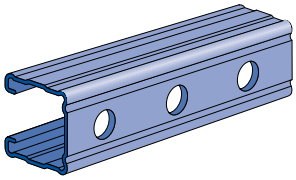
P1100 Series



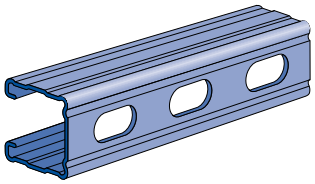
P1100 SS
Wt/100 Ft :142 Lbs
(211 kg/100m)



P1101 SS
Wt/100 Ft : 284 Lbs
(422 kg/100m)

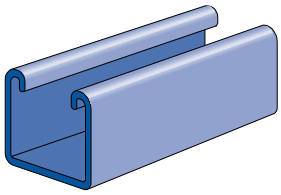


P1100HS SS
Wt/100 Ft : 136 Lbs
(202 kg/100m)

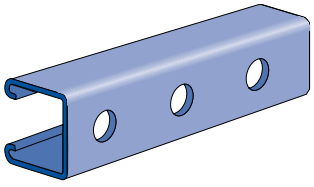


P1100T SS
Wt/100 Ft: 136 Lbs
(202 kg/100m)

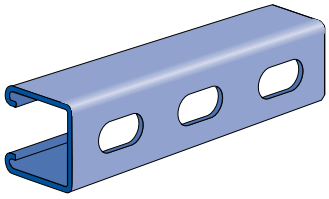
P3000 Series



P3000 SS
Wt/100 Ft: 170 Lbs
(253 kg/100m)

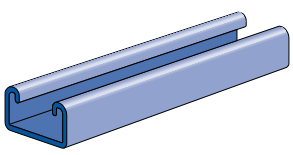


P3000HS SS
Wt/100 Ft: 165 Lbs
(112 kg/100m)

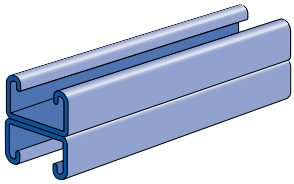


P3000T SS
Wt/100 Ft: 165 Lbs
(112 kg/100m)

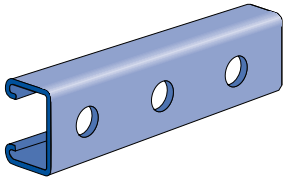
P3300 Series



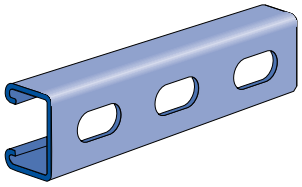
P3300 SS
Wt/100 Ft: 135 Lbs
(201 kg/100m)



P3301 SS
Wt/100 Ft: 270 Lbs
(402 kg/100m)

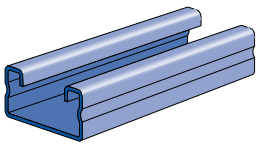


P3300HS SS
Wt/100 Ft: 130 Lbs
(193 kg/100m)

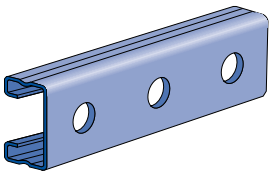


P3300T SS
Wt/100 Ft: 130 Lbs
(193 kg/100m)

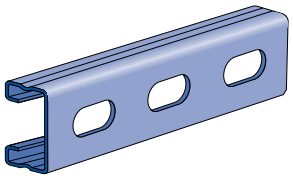
P4000 Series



P4000 SS
Wt/100 Ft: 82 Lbs (122 kg/100m)



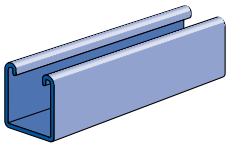
P4000HS SS
Wt/100 Ft: 79 Lbs
(110 kg/100m)



P4000T SS
Wt/100 Ft: 79 Lbs
(110 kg/100m)

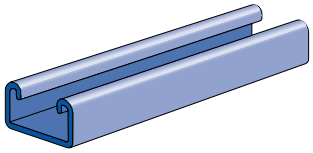
P6000 SS

Wt/100 Ft: 37 Lbs (55 kg/100m)

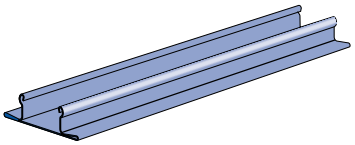


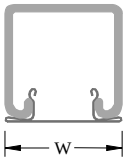
P7000 SS

Wt/100 Ft: 36 Lbs (54 kg/100m)



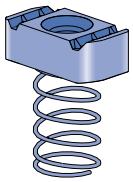
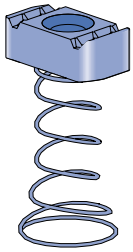
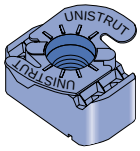
P1184 SS, P6184 SS — Closure Strip

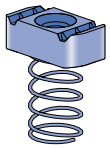
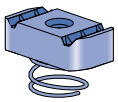
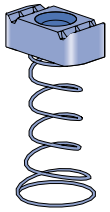




Part Number	Use With Channel	"W" In *(mm)*	Wt/100 Ft Lbs *(kg/m)*
P1184 SS	P1000 P1100 P3300 P4000	1⅝ *41.3*	27 *40.2*
P6184 SS	P6000 P7000	13/16 *20.6*	10 *14.9*

Standard length 10 Ft.
Material: Stainless steel type 304.

	Channel nut Part number	Nut Size	-Thread	Wt/100 pcs Lbs *(kg)*	For Use With 1⅝" Channel P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5500
	P1006U-1420	¼"	-20	7 *3.2*	■	–	–
	P1008U	⅜"	-16	10 *4.5*	■	–	–
	P1010U	½"	-13	12 *5.4*	■	–	–
	Material: Sintered type 316 stainless steel with pre-galvanized spring.						
	P4006U-1420	¼"	-20	7 *3.2*	–	■	–
	P4008U	⅜"	-16	9 *4.1*	–	■	–
	P4010U	½"	-13	9 *4.1*	–	■	–
	Material: Sintered type 316 stainless steel with pre-galvanized spring.						
	P5506U-1420	¼"	-20	7 *3.2*	–	–	■
	P5508U	⅜"	-16	10 *4.5*	–	–	■
	P5510U	½"	-13	10 *4.5*	–	–	■
	Material: Sintered type 316 stainless steel with pre-galvanized spring.						
	P4006-1420T SS	¼"	-20	7 3.2	■	–	■
	P4008UT	½"	-13	12 *5.4*	■	–	■
	P4010UT	½"	-13	8 *3.6*	–	■	–

	Channel nut Part number	Nut Size	-Thread	Wt/100 pcs Lbs *(kg)*	For Use With Channel A1000	P3300, P4000 A4100	A5000
	A1006-1420 SS	¼"	-20	6 *2.7*	■	–	–
	A1008 SS	⅜"	-16	6 *2.7*	■	–	–
	Material: Sintered type 304 stainless steel with pre-galvanized spring.						
	A4006-1420 SS	¼"	-20	5 *2.3*	–	■	–
	A4008 SS	⅜"	-16	5 *2.3*	–	■	–
	Material: Sintered type 304 stainless steel with pre-galvanized spring.						
	A5506-1420 SS	¼"	-20	6 *2.7*	–	–	■
	A5508 SS	⅜"	-16	6 *2.7*	–	–	■
	Material: Wrought type 304 stainless steel with pre-galvanized spring.						

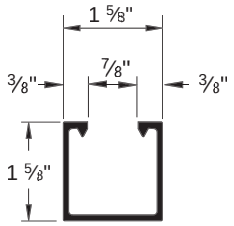
Note

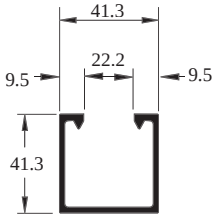
Most fittings, as shown in this catalog are available in stainless steel or aluminum. It is recommended that stainless steel channel nuts be used with aluminum channels.

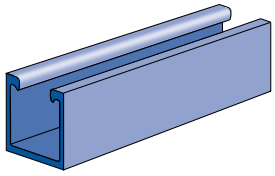
P1000 EA

Wt/100 Ft: 76 Lbs (113 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .109" (2.8mm)

When used with P3184 EA.

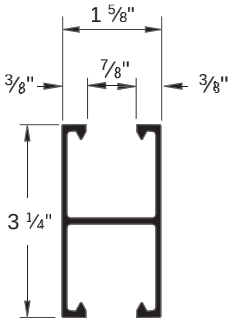


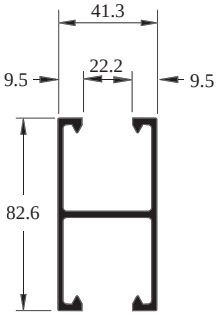


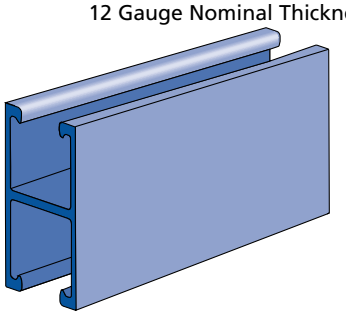


P1001 EA

Wt/100 Ft: 134 Lbs (199 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .109" (2.8mm)

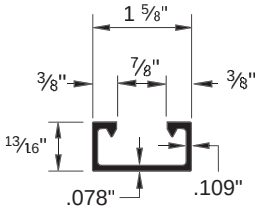


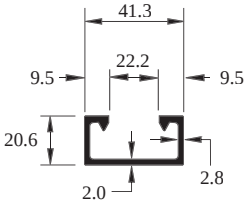


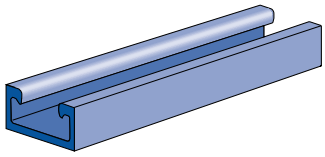


P4000 EA

Wt/100 Ft: 45 Lbs (67 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)

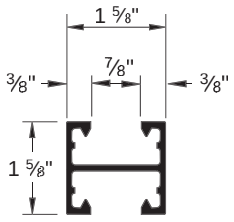


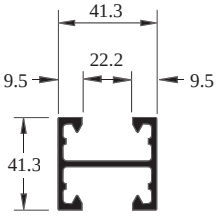


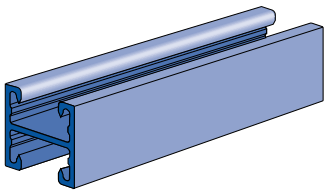


P4001 EA

Wt/100 Ft: 66 Lbs (98 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)

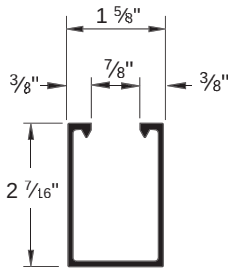


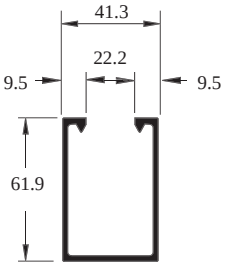


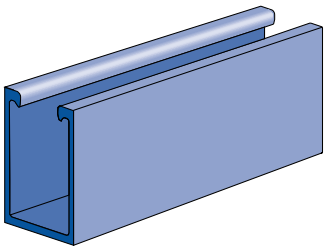


P5500 EA

Wt/100 Ft: 97 Lbs (144 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .109" (2.8mm)

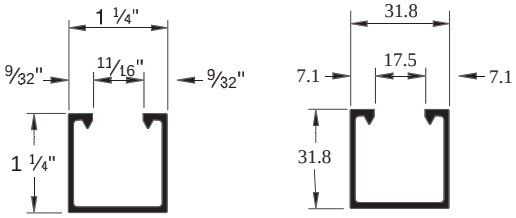


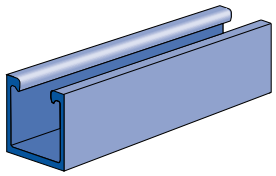




A1000 EA

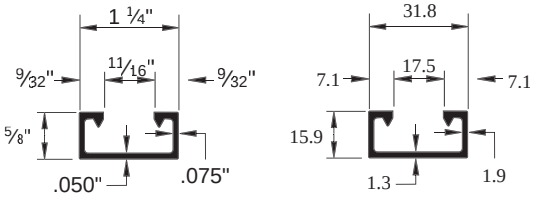
Wt/100 Ft: 40 Lbs (60 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .075" (1.9mm)

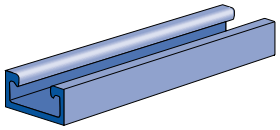




A4000 EA

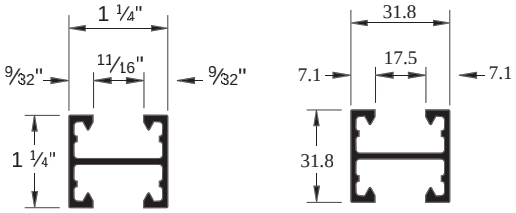
Wt/100 Ft: 25 Lbs (37 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .050" (1.3mm)
Standard Length 16 Ft.

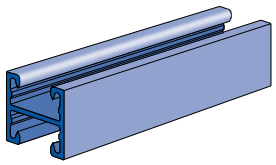




A4001 EA

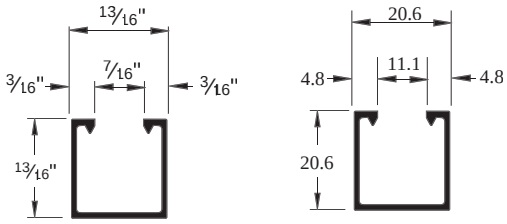
Wt/100 Ft: 40 Lbs (60 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)
Standard Length 16 Ft.

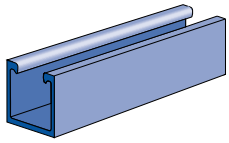




P6000 EA

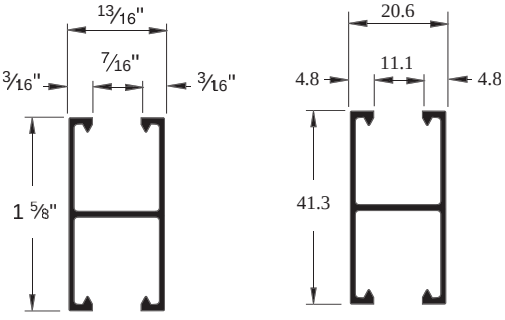
Wt/100 Ft: 12 Lbs (18 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 16 Ft.

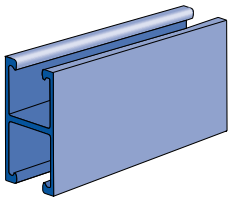




P6001 EA

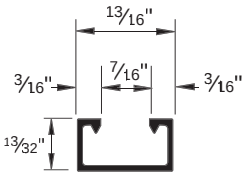
Wt/100 Ft: 20 Lbs (30 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 16 Ft.

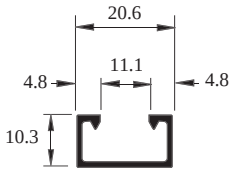


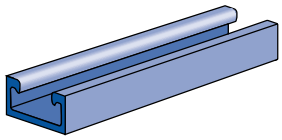


P7000 EA

Wt/100 Ft: 9 Lbs (13 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 10 Ft.

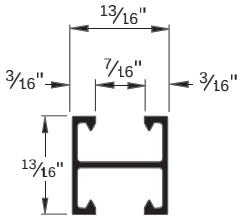


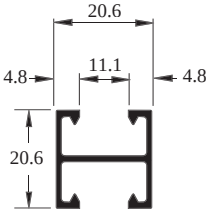


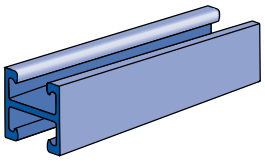


P7001 EA

Wt/100 Ft: 17 Lbs (25 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .040" (1.0mm)
Standard Length 10 Ft

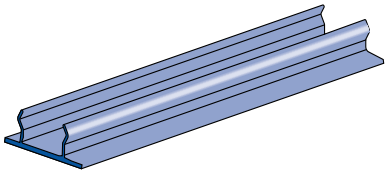


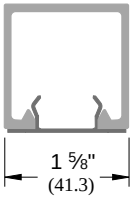




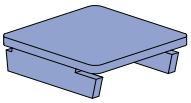
P3184 EA — Closure Strip

Wt/100 Ft: 21 Lbs (31 kg/100 m)
Aluminum Type 6063-T6
Standard Length 10 Ft



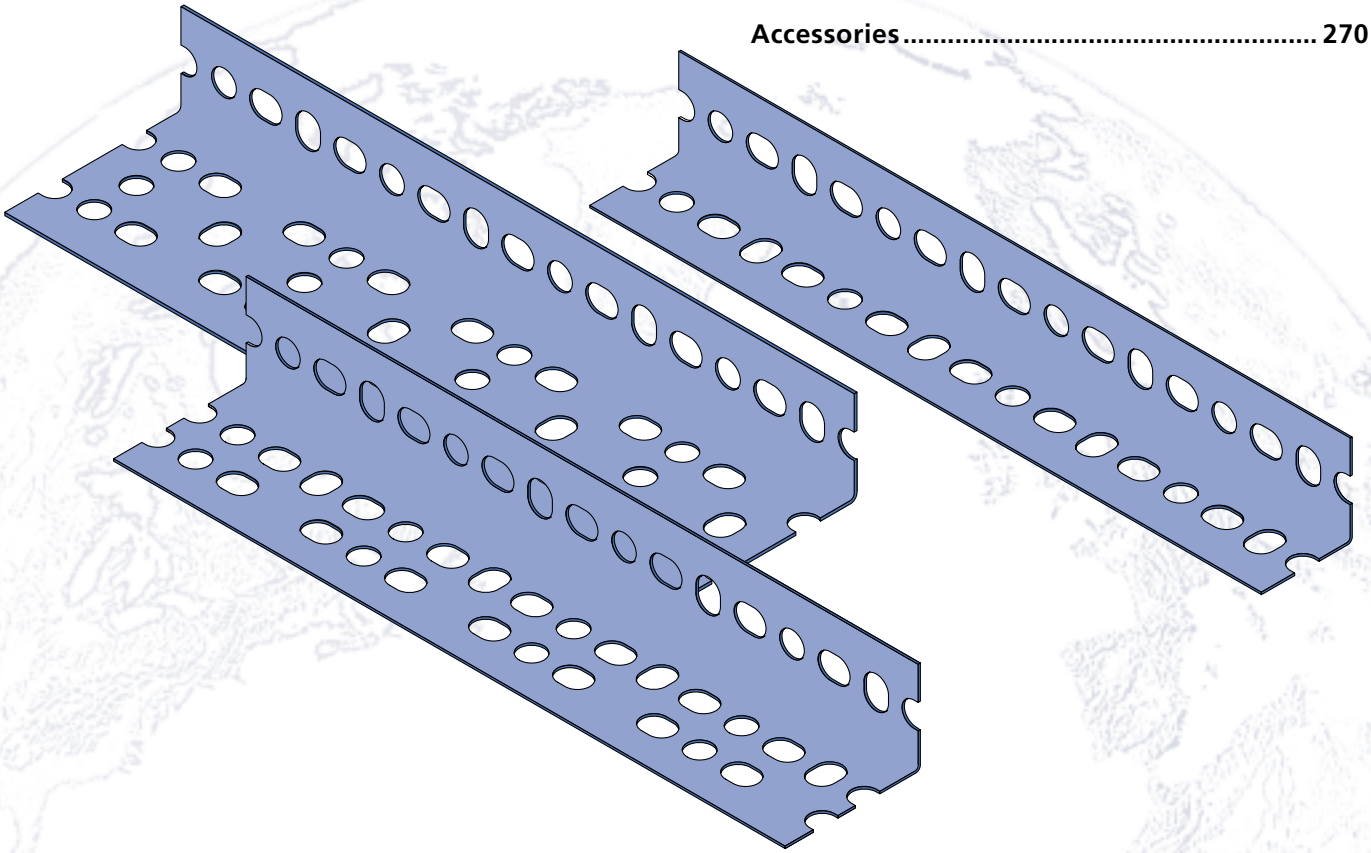


P1280 EA, P4280 EA, P5580 EA — End Caps



Part Number	Use With Channel	Wt/100 Ft Lbs *(kg/m)*
P1280 EA	P1000 EA	3.5 *1.6*
P4280 EA	P4000 EA	1.5 *0.7*
P5500 EA	P5500 EA	4.9 *2.2*

PRIMEANGLE™



MATERIAL

STEEL: PLAIN
12 Gauge (.105" 1.0 mm) and 14 Gauge (.076)
ASTM 1011 SS GR 33

STEEL: PRE-GALVANIZED
12 Gauge (.105" 1.0 mm) and 14 Gauge (.076)
ASTM A653 GR 33

FINISHES

Available in two durable, long-lasting finishes.
Pre-galvanized (PG) or Perma-Green (GR) conforming to ASTM B633 Type III SC1.

STANDARD LENGTHS

Standard lengths are 10' and 12'. Slotted angle is shipped in ten-piece bundles complete with 75 pieces of ⅜" - 16 x ¾" hex head bolts and ⅜" nuts.

ORDERING INFORMATION:

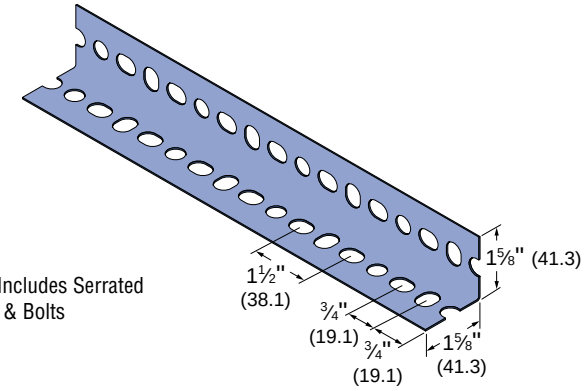
When ordering, add the length or size and finish to the part number.

DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

PA 158 Light Duty

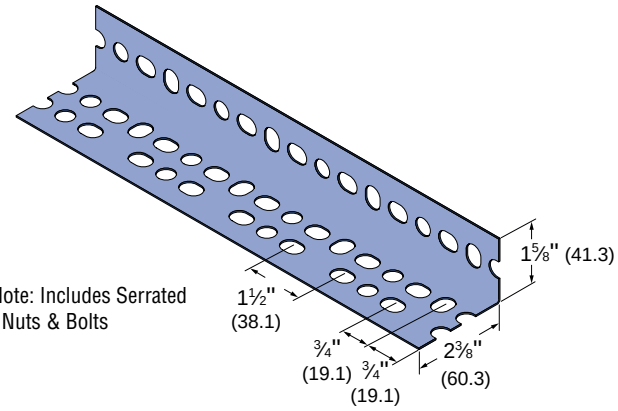
(1⅝" x 1⅝" x 14 ga.) Wt/100 Ft.: 66 lbs (29.9 kg)



Note: Includes Serrated Nuts & Bolts

PA 238 Medium Duty

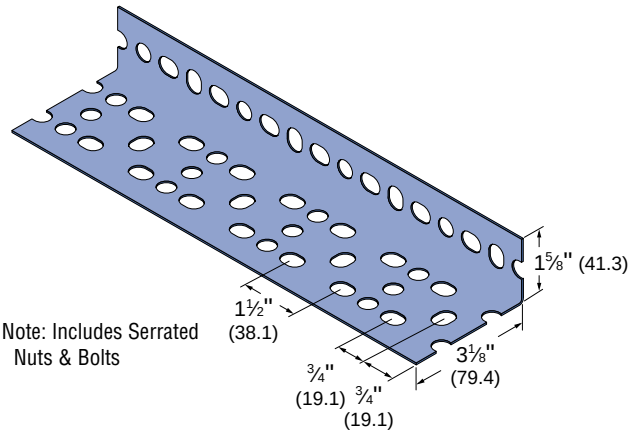
(1⅝" x 2⅜" x 14 ga.) Wt/100 Ft: 80 lbs(36.3 kg)



Note: Includes Serrated Nuts & Bolts

PA 318 Heavy Duty

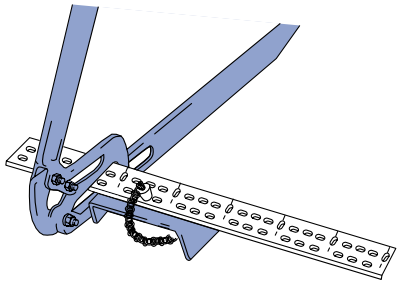
(1⅝" x 3⅛" x 12 ga.) Wt/100 Ft: 130 lbs (59.0 kg)



Note: Includes Serrated Nuts & Bolts

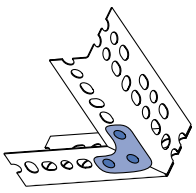
PA 1HDC Portable Cutter

Wt/100 pcs: 17 lbs (7.7 kg)



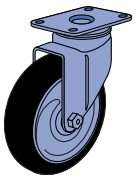
PA 1GP Gusset Plate

Wt/100 pcs: 9 lbs (4.1 kg)



PA 1SC Swivel Caster

Wt/100 pcs: 170 lbs (77.1 kg)

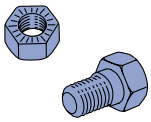


PA 1RC Rigid Caster

Wt/100 pcs: 110 lbs (49.9 kg)

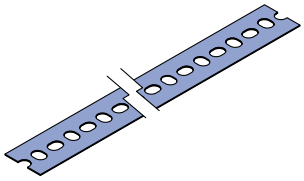
PA 1SNB Serrated Nuts and Bolts

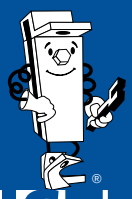
Wt/100 pcs: 7 lbs (3.2 kg)



PA 1RP Slotted Strap

Wt/100 pcs: 35 lbs (15.9 kg)





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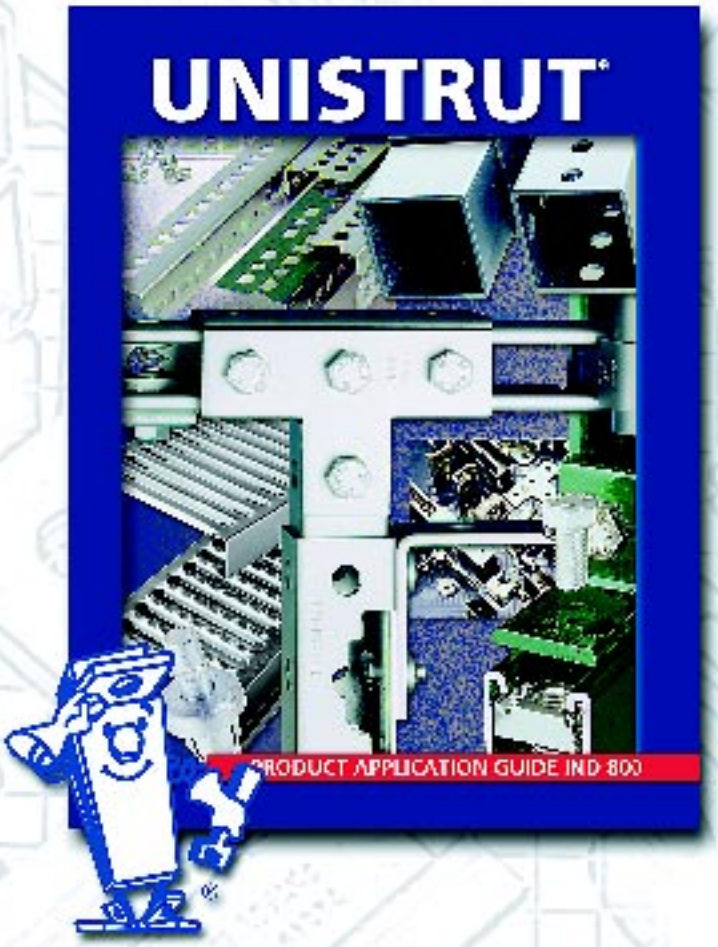
PRODUCT INDEX



The UNISTRUT® Metal Framing System

…engineered solutions you can count on!

Products of UNISTRUT are manufactured under one or more of the following United States patents:

3,362,738	3,388,809	3,415,554
3,417,951	3,421,280	3,437,779
3,443,348	3,468,567	3,601,347
3,617,076	3,618,882	3,628,296
3,721,463	3,861,107	3,877,275
3,888,440	3,888,441	3,914,063
3,927,499	3,928,930	3,948,012
3,968,624	3,994,111	4,073,114
4,277,923	4,278,288	4,289,415

Foreign patents and other patents pending

THE PRODUCT APPLICATION GUIDE (IND 800)

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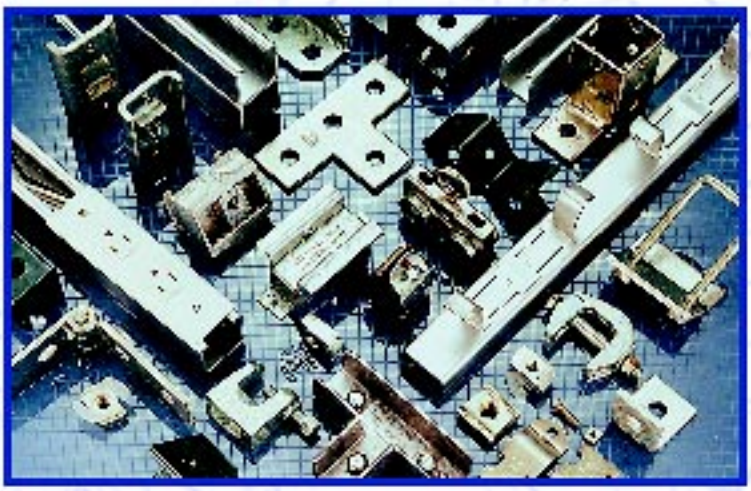

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