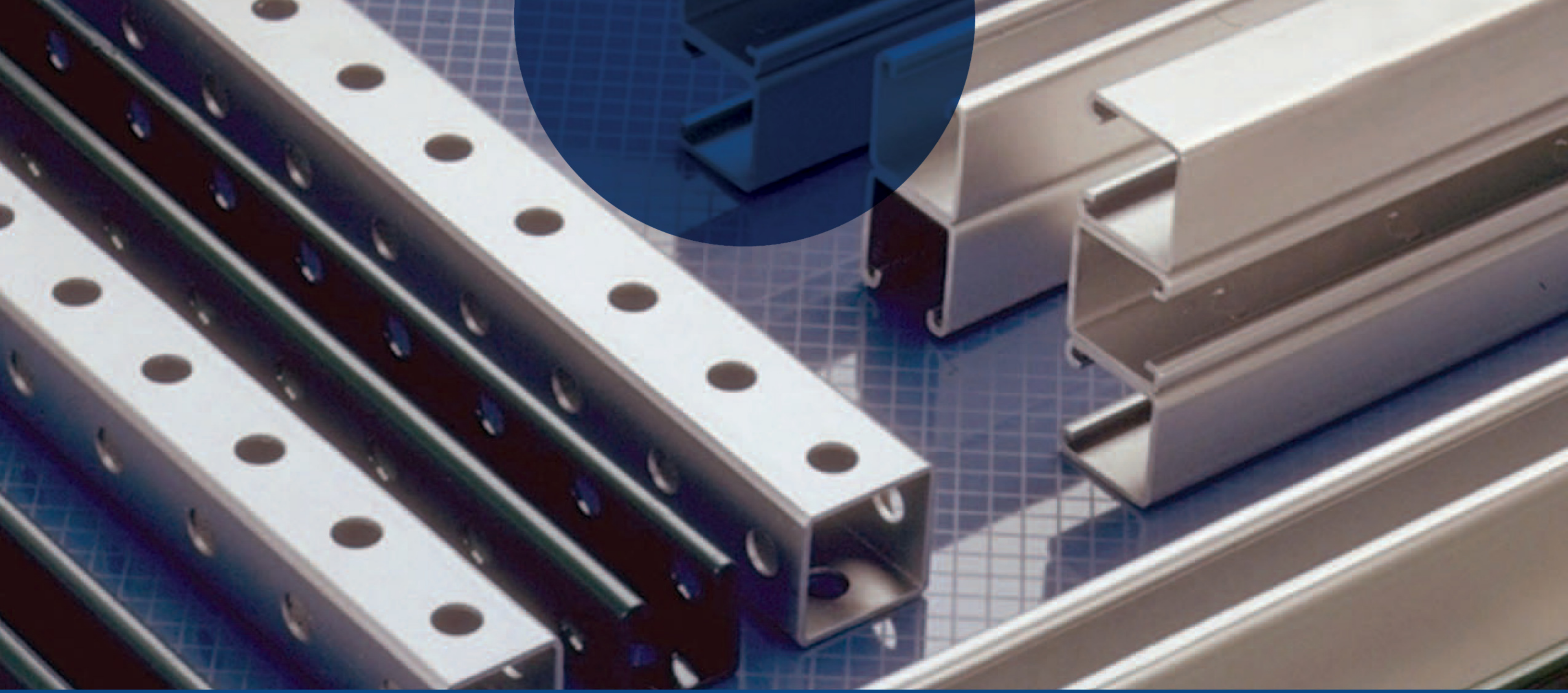

UNISTRUT®

GENERAL ENGINEERING CATALOG – NO. 17

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INTERNATIONAL

UNISTRUT®

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Unistrut is the original metal framing system featuring a unique weldless connection. The Unistrut system eliminates welding and drilling, and is easily adjustable and reusable for infinite configurations. Over time, our brand has evolved from a simple connection concept to a comprehensive engineered building and support system featuring a robust line of channels, fittings, fasteners, hangers, pipe clamps, and accessories. Backed by our worldwide network of engineering and distribution centers, we provide customers with total-resource capability, making Unistrut the brand everyone asks for by name.

UNISTRUT®

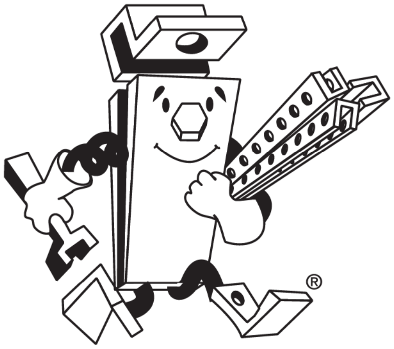
The Unistrut World of Support starts with our network of Unistrut Service Centers across the nation.

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.



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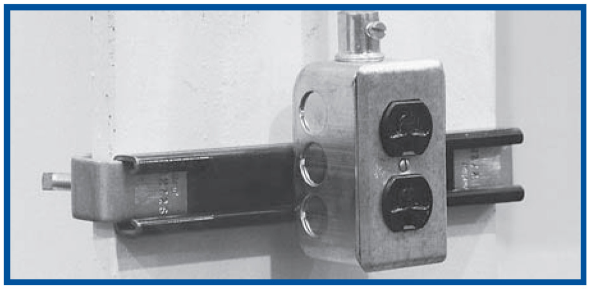
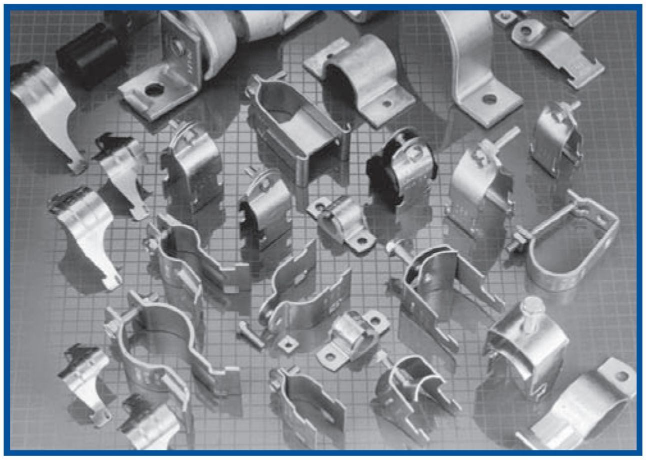
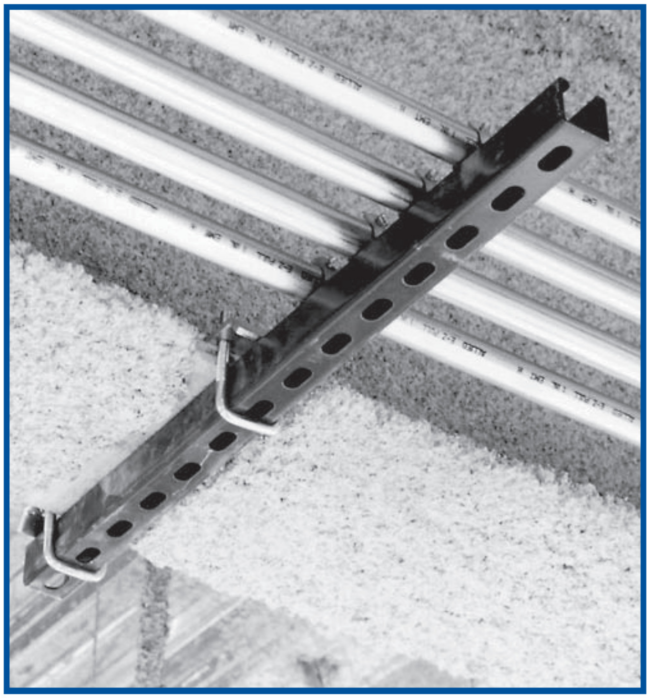
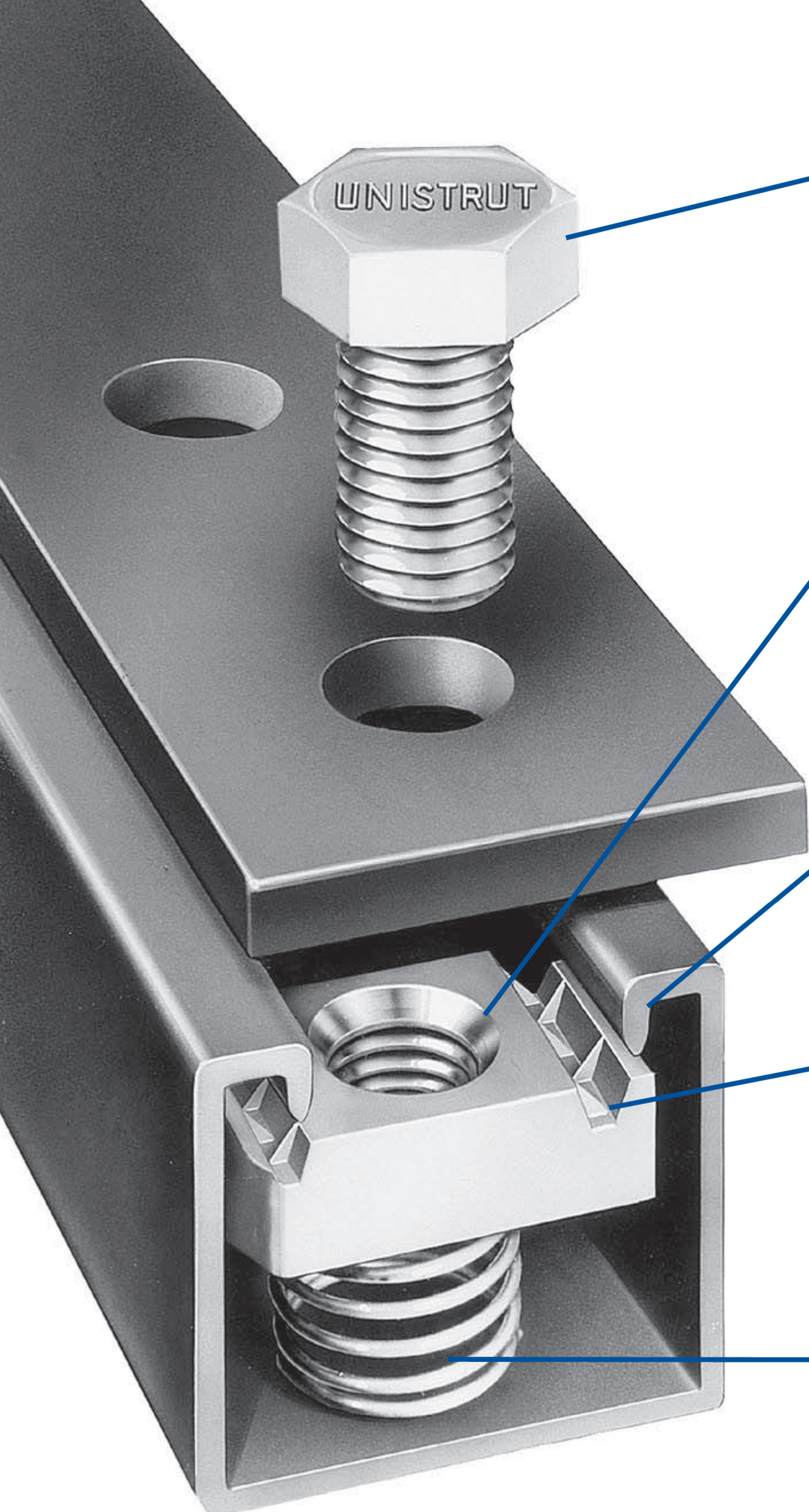






Featuring The Unique Weldless Connection



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.

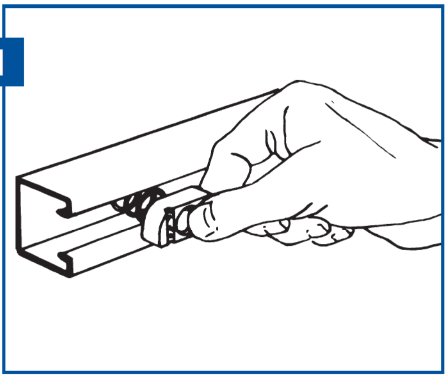
Spring allows precision placement anywhere along channel length, then holds the nut in position while the connection is completed.

UNISTRUT

Strong, Fast, Economical and Adjustable

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

1



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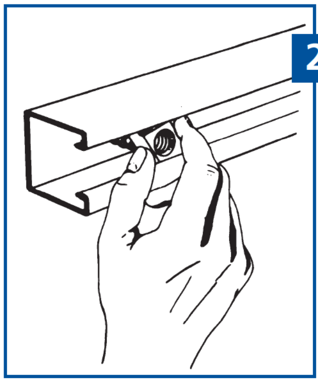
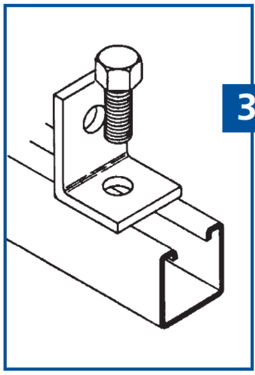


A 90° clockwise turn aligns the grooves in the nut with the inturned edges of the channel.

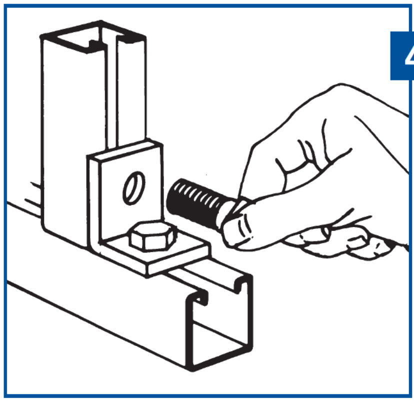
Fittings can be placed anywhere along the channel opening, permitting complete freedom of adjustment. The need for drilling holes is eliminated.

- 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)

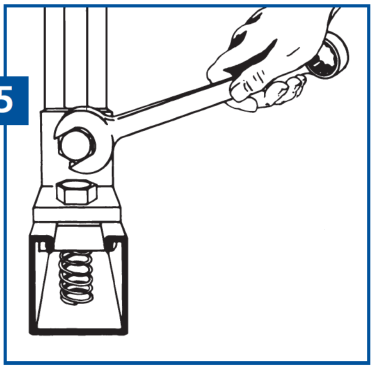


4

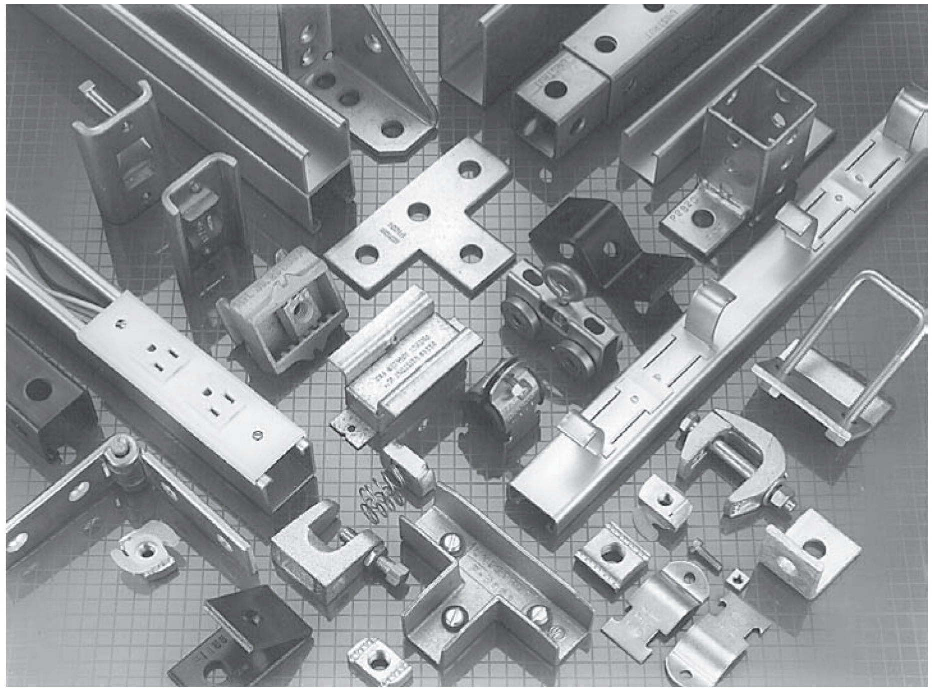
Additional channel sections can now be bolted to the fitting already in place by following procedure described in steps 1–3.

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 85 Years



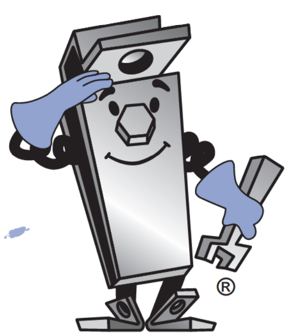
Unistrut products have been helping to build a better world since 1924. Used extensively in nuclear, industrial and commercial construction markets for over 85 years, Unistrut Metal Framing has set the standard for product design, quality and performance.
The initial Unistrut concept — a simple spring 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.

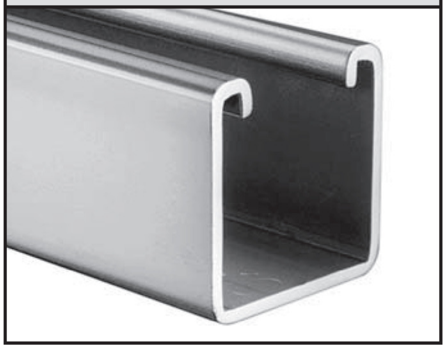
This catalog is a comprehensive presentation of Unistrut Metal Framing components plus technical data required by design, specification and construction professionals.

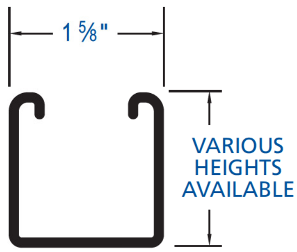


THE MOST COMPLETE METAL FRAMING SYSTEM — FOUR CHANNEL-WIDTH OPTIONS

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

1⅝" width Series Channel

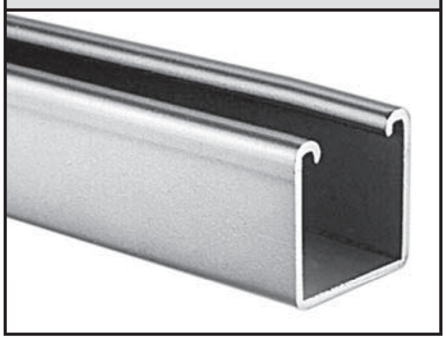


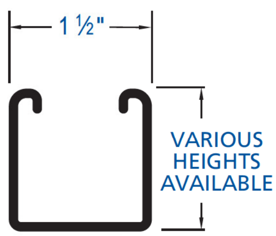


1⅝" (41.3 mm) width

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.

1½" width Series Channel

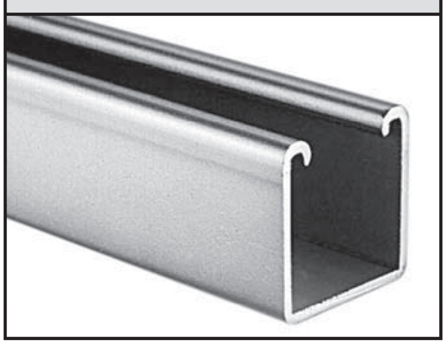


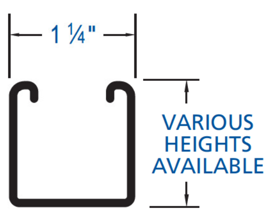


1½" (38.1 mm) width

A framing system designed for medium to heavy loads, the 1½" series offers hole spacing and fittings where all parts fit together, no matter where they're used, or at what angle.

1¼" width Series Channel

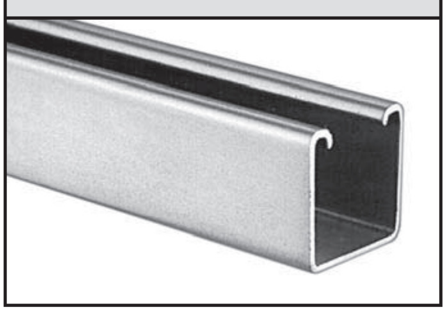




1¼" (31.8 mm) width

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" (20.6 mm) 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, 2007 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, 2007 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.

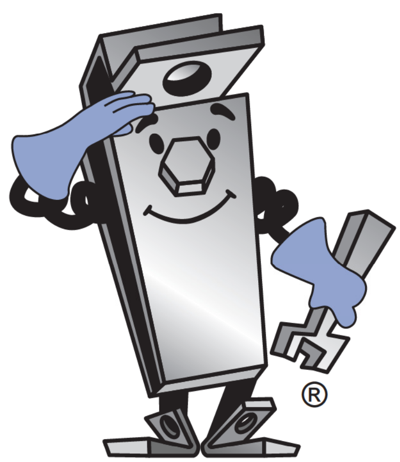
All bolts and nuts have Unified coarse screw threads. The standard framing nut is ½" and conforms to ASTM A576 GR 1015 modified and A1011 SS GR 45. Screws conform to SAE J429 GR 2.

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.

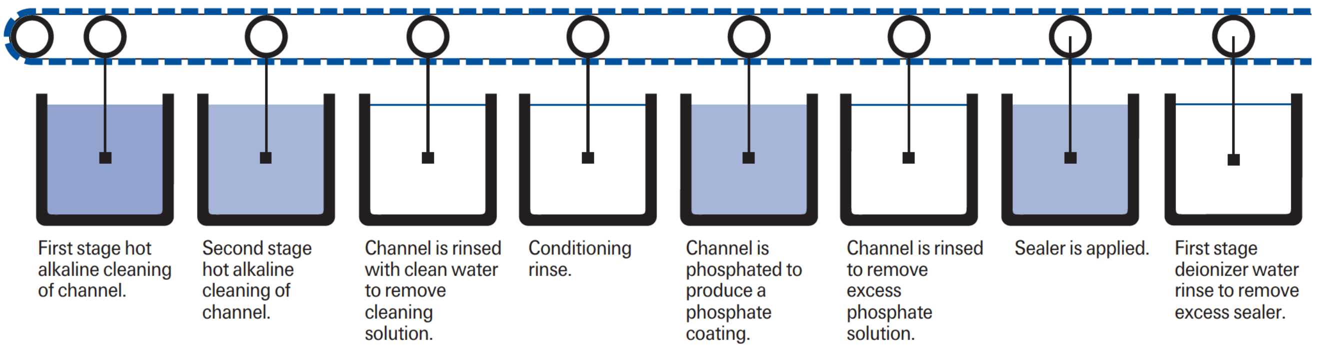
WHILE EVERY EFFORT HAS BEEN MADE TO ASSURE THE ACCURACY OF INFORMATION CONTAINED IN THIS CATALOG AT THE TIME OF PUBLICATION, WE CANNOT ACCEPT RESPONSIBILITY FOR INACCURACIES RESULTING FROM UNDETECTED ERRORS OR OMISSIONS.

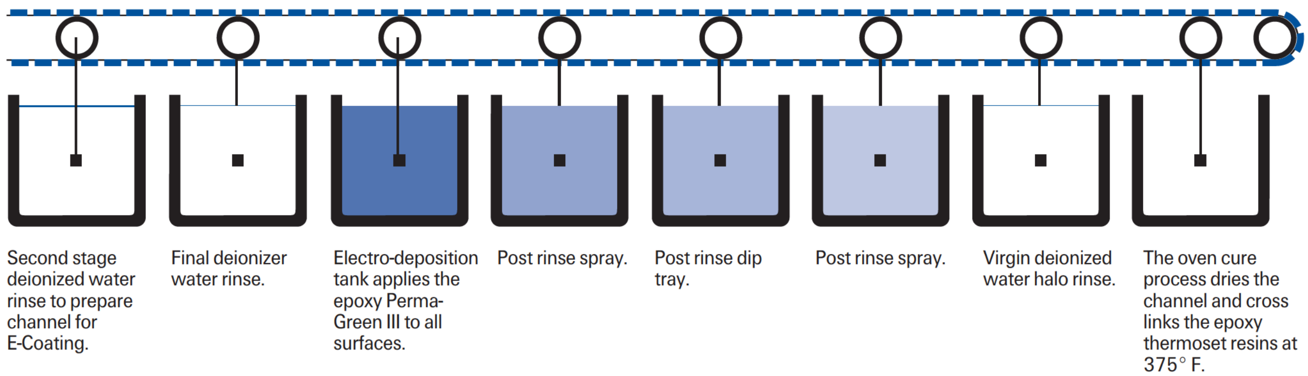
THE BLUE COLOR USED ON UNISTRUT COMPONENTS ILLUSTRATED IN THIS CATALOG IS FOR GRAPHIC ENHANCEMENT ONLY, AND DOES NOT REPRESENT ACTUAL PRODUCT COLOR.

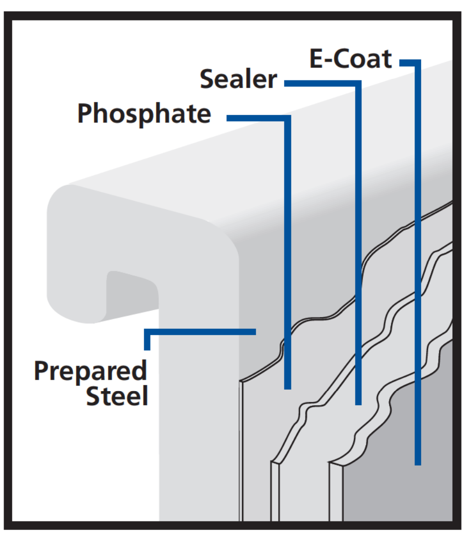
Perma-Green® III

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.







PERMA-GREEN® III (GR) TECHNICAL DATA

STEEL SUBSTRATE PREPARATION

Ten stage continuous cleaning, phosphate process.

Substrate after "prep": sealed phosphate conversion coating.

COATING

Thermoset epoxy

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

Hardness: 2H.

Coating Process:
Cathodic Electrodeposition.

PERFORMANCE

Salt Spray:
Scribed: exceeds 400 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 coil or strip steel material.

Pregalvanized Zinc (PG) 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.

Electroplated Zinc (EG)
ASTM B633, Type III SC1 or SC3

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.

SC1 (Mild) has a Zinc coating of 0.2 and is recommended for dry indoor use. SC1 is the standard finish thickness.
SC3 (Severe) has a Zinc coating of 0.5 mill and is the standard finish thickness only on UL Listed raceway products.

Perma-Gold (ZD)
ASTM B633, Type II SC3

Similar to the EG process except in a yellow color.

Zinc Coating

Unistrut products are available in four types of zinc coatings:

- Electroplated (EG)
- Perma-Gold (ZD)
- Pregalvanized (PG)
- Hot Dip Galvanized (HG).

Zinc offer two types of protection:

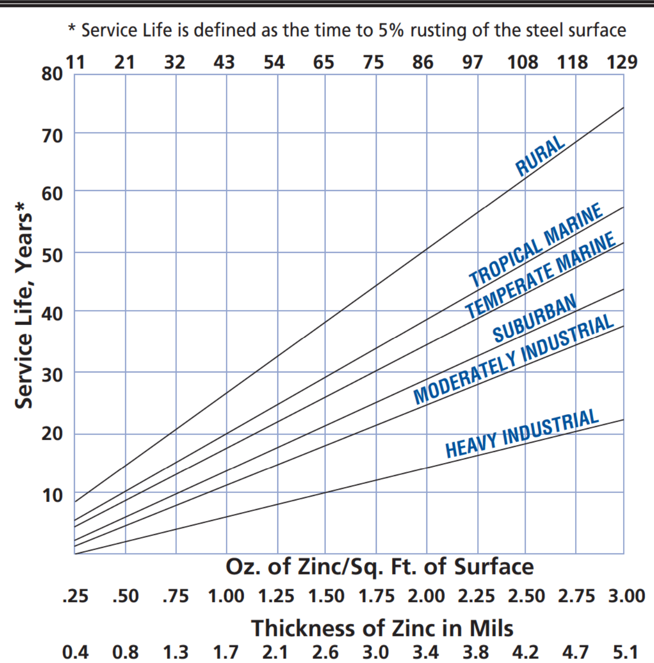
- **Barrier:** The zinc coating protects the steel substrate from direct contact with the environment.
- **Sacrificial:** The zinc coating will protect scratches, cut edges, etc. through an anodic sacrificial process.

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

Comparison of Zinc Finishes	
Finish	Zinc Thickness
Hot Dip Galvanized	2.6 MIL
Pre-galvanized	0.75 MIL
Electro-Galvanized (SC1)	0.2 MIL
Electro-Galvanized (SC3)	0.5 MIL
Perma-Gold (SC3)	0.5 MIL

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

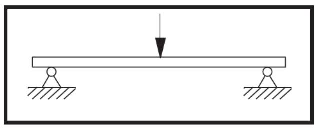
Life of Protection vs. Thickness of Zinc and Type of Atmosphere



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:

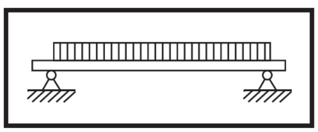
(a) The amount of load applied,
(b) The type of loading applied, and
(c) The support conditions



BEAM LOADING - POINT LOAD

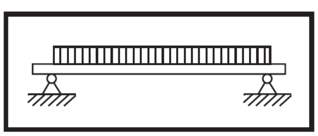
A load concentrated onto a very small length of the beam is a point load.

BEAM LOADING - UNIFORM LOAD



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

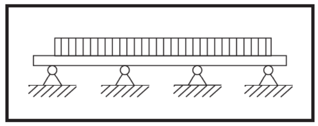
Point and uniform loads can be placed on a beam in any combination. A series of point loads can approximate a uniform loading. The load charts and tables are based on a uniform load unless identified otherwise.



SUPPORT CONDITIONS - SIMPLE BEAM

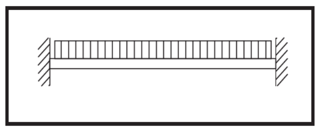
A simple beam has supports that prevent movement left and right, or up and down, but do not restrain the beam from rotating at the supports into a natural deflected curve. Most Unistrut Metal Framing connections produce simple beams. The load charts and tables are based on simple beams unless identified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

SUPPORT CONDITIONS - CONTINUOUS BEAM



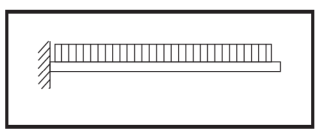
Any simple beam that is supported at one or more intermediate points is a continuous beam. A mezzanine joist that passes over three or more columns is an example of a continuous beam.

SUPPORT CONDITIONS - FIXED-END BEAM



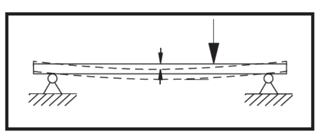
Supports that prevent the beam from rotating into a natural deflected curve produce a fixed-end beam. A welded end connection to very rigid support produces a fixed-end beam.

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

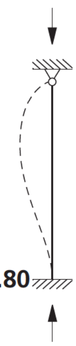
Both ends are restrained against rotation and lateral movement (translation).

K = 0.65

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.



K = 0.80

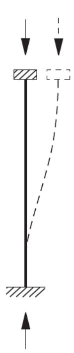
SUPPORT CONDITIONS - PINNED TOP – PINNED BOTTOM

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

K = 1.0

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).



K = 1.2

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.

Bolt Torque						
BOLT SIZE	¼" -20	5/16" -18	3/8" -16	½" -13	5/8" -11	¾" -10
Rec.Torque Ft/Lbs *(N•m)*	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs *(N•m)*	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

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

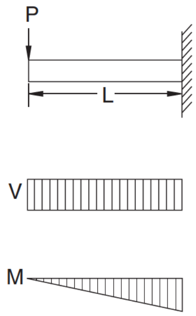
To Convert From	To	Multiply By
Length		
Inch [in]	Millimeter [mm]	25.400 000
Foot [ft]	Meter [m]	0.304 800
Yard [yd]	Meter [m]	0.914 400
Mile [mi] (U.S. Statute)	Kilometer [km]	1.609 347
Area		
Square Inch [in^2]	Square Millimeter [mm^2]	645.16
Square Foot [ft^2]	Square Meter [m^2]	0.092 903
Square Yard [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]	Foot-Pound-Force /Second [ft-lbs/s]	0.737 562
Watt [W]	British Thermal Unit /Hour [Btu/h]	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

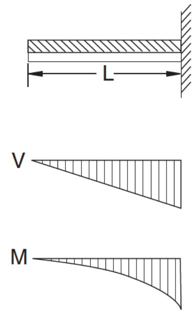
Cantilever Beams



$V\ max. = P$

$M\ max. = PL$

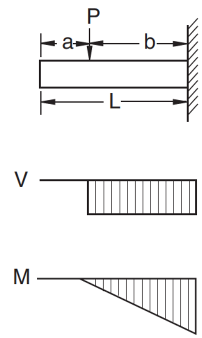
$\Delta max. = \frac{PL^3}{3EI}$



$V\ max. = W$

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

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

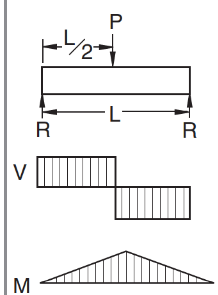


$V\ max. = P$

$M\ max. = Pb$

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

Simple Beams

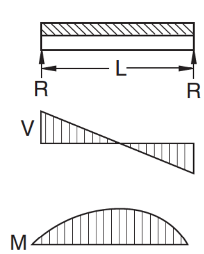


$R = \frac{P}{2}$

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

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

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

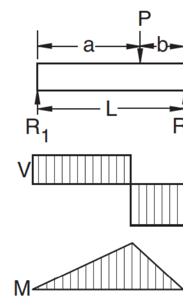


$R = \frac{W}{2}$

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

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

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



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

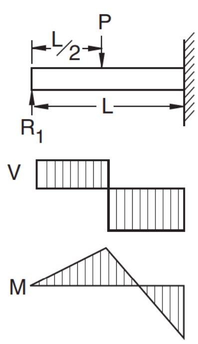
$R_2 = \frac{Pa}{L}$

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

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

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

Beams Fixed At One End & Supported At The Other



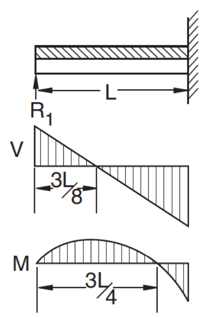
$R_1 = \frac{5P}{16}$

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

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

$\Delta max.$ at $x = 0.447L$

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



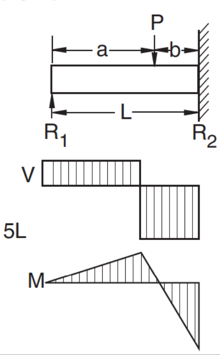
$R_1 = \frac{3W}{8}$

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

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

$\Delta max.$ at $x = 0.4215L$

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



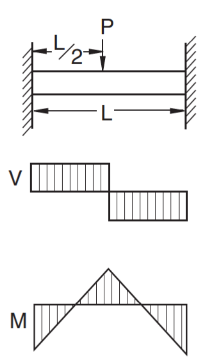
$R_1 = \frac{Pb^2}{2L^3}(a+2L)$

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

M at point of load $= R_1a$

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

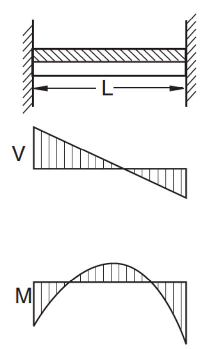
Beams Fixed At Both Ends



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

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

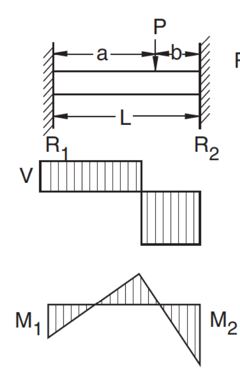
$\Delta max. = \frac{PL^3}{192EI}$



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

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

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



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

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

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

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

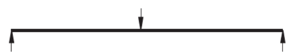
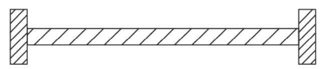
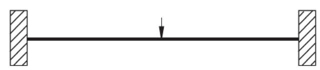
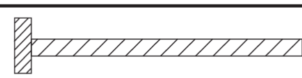
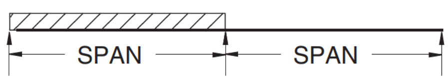
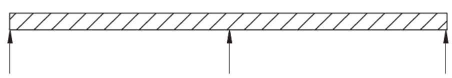
R – Reaction
M – Moment
P – Concentrated Load

W – Total Uniform Load
V – Shear
L – Length

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

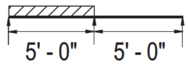
Conversion Factors For Beams With Various Static Loading Conditions

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.



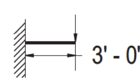
SOLUTION:

A. From load table for P1000 on page 25 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 58 load for a 3'-0" span is 2180# and deflection is .09".

B. Multiply by factors from Table above.
Load = 2180# x .12 = 262#
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 2007 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® III (GR)
   Rust inhibiting epoxy enamel paint applied by electro-deposition, after cleaning and phosphating, and thoroughly baked. Color is per Federal Highway Green, Color Tolerance Chart PR Color No. 4. Finish to withstand minimum 400 hours salt spray when tested in accordance with ASTM B117.

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

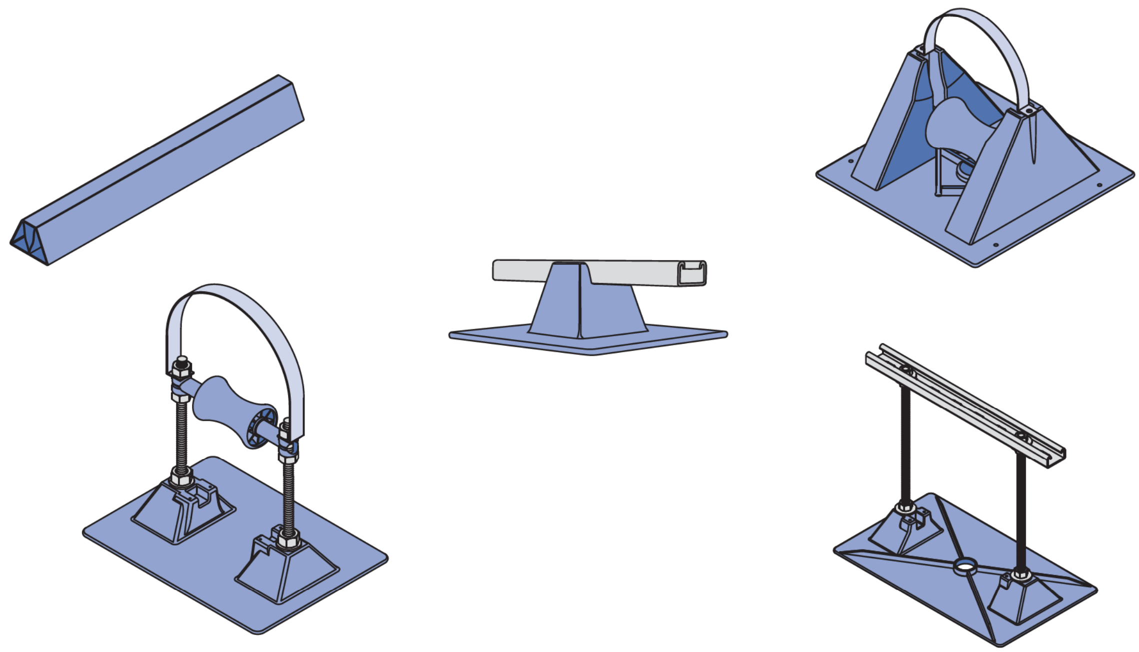
A. Upon completion of this section of work, remove all protective wraps and debris. Repair any damage due to installation of this section of work.

3.04 PROTECTION

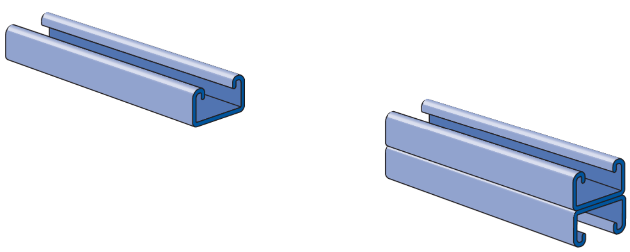
A. During installation, it shall be the responsibility of the installer to protect this work from damage.

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.

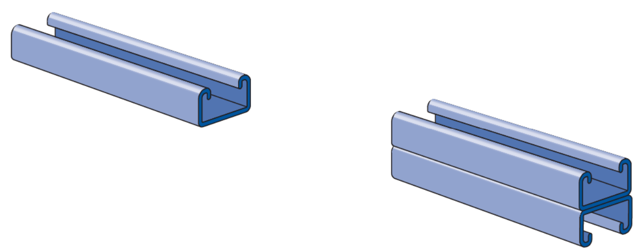
Unipier® Rooftop Pipe Support System



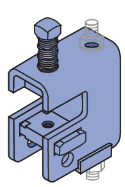
New Channel Section P4520/P4521 (1$\frac{5}{8}$" x $\frac{13}{16}$")



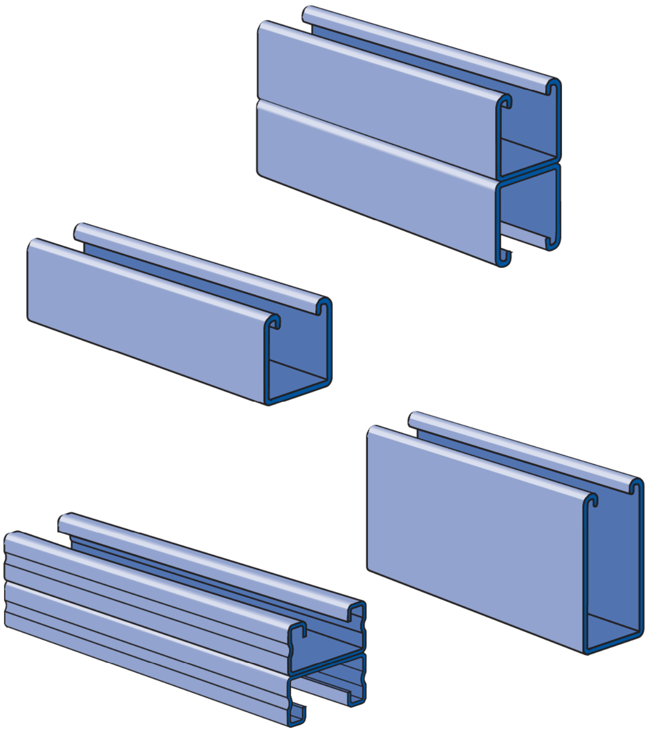
New Channel Section P4400/P4401 (1$\frac{5}{8}$" x 1")



New Beam Clamp P1640



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

DIMENSIONS

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

STANDARD LENGTHS

Standard lengths are 10 feet (3.05m) and 20 feet (6.10m). Tolerances are ±⅛" (3 mm). Special lengths are available for a small cutting charge with a tolerance of ±⅛" (3 mm).

CURVED CHANNEL

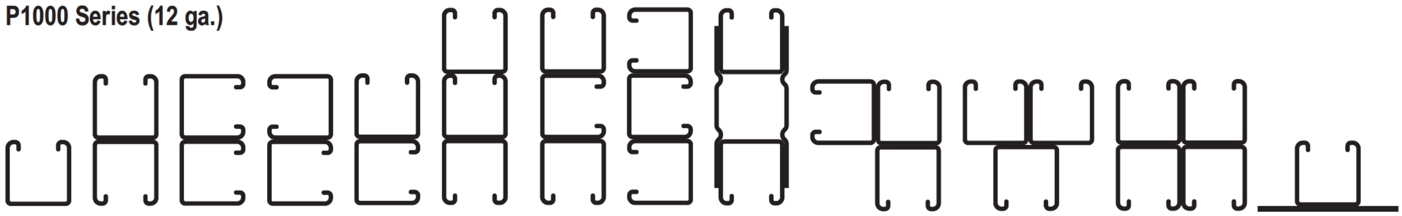
Contact your local Unistrut Service Center or Unistrut Corporation for more information.

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 2007 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE USING ASD METHOD. Loads are based on 33 ksi steel cold formed to 42 ksi.

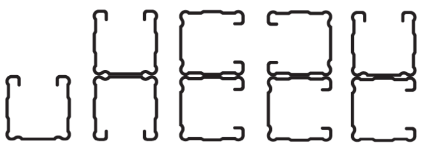
Type of Load	Safety Factor to Yield Strength	Safety Factor to Ultimate Strength
Beam Loads	1.67	2.0
Column Load	1.80	2.2

P1000 Series (12 ga.)



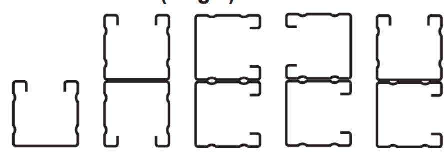
P1000 Pg 24 | P1001 Pg 24, P1001T Pg 27 | P1001A Pg 27 | P1001B Pg 27 | P1001C Pg 27 | P1001 3 Pg 27 | P1001 A3 Pg 27 | P1001 B3 Pg 27 | P1004A Pg 27 | P1001 C3 Pg 27 | P1001 D3 Pg 27 | P1001 C41 Pg 27 | P1003 Pg 27

P1100 Series (14 ga.)



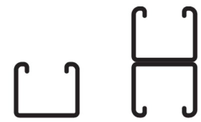
P1100 Pg 30 | P1101 Pg 30 | P1101A Pg 30 | P1101B Pg 30 | P1101C Pg 30

P2000 Series (16 ga.)



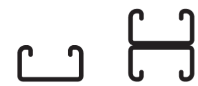
P2000 Pg 33 | P2001 Pg 33 | P2001A Pg 33 | P2001B Pg 33 | P2001C Pg 33

P3000 Series (12 ga.)



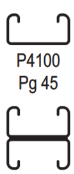
P3000 Pg 36 | P3001 Pg 36

P3300 Series (12 ga.)



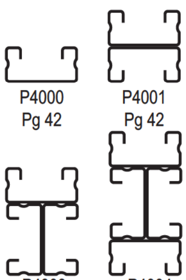
P3300 Pg 39 | P3301 Pg 39

P4100 Series (14 ga.)



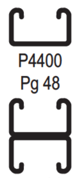
P4100 Pg 45 | P4101 Pg 45

P4000 Series (16 ga.)



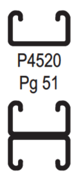
P4000 Pg 42 | P4001 Pg 42 | P4003 Pg 42 | P4004 Pg 42

P4400 Series (12 ga.)



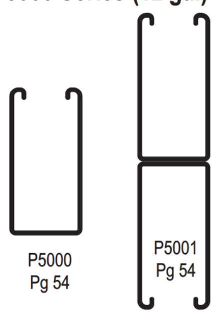
P4400 Pg 48 | P4401 Pg 48

P4520 Series (12 ga.)



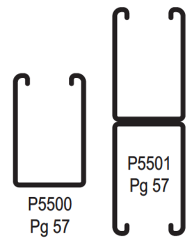
P4520 Pg 51 | P4521 Pg 51

P5000 Series (12 ga.)



P5000 Pg 54 | P5001 Pg 54

P5500 Series (12 ga.)

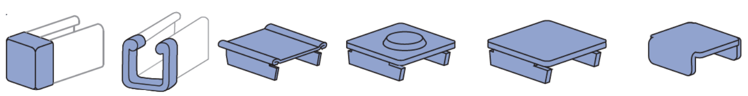


P5500 Pg 57 | P5501 Pg 57

P9000 Series (12 ga.) Telestrut Channel

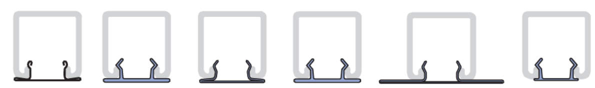
P9200 Pg 65 | P9000 Pg 65

End Caps and Frame Caps



P2860 Series Pg 61 | P2859 Pg 61 | P1280 Pg 61 | P1280 A, P2280 A Pg 61 | P1180, P2280 P4280, P5280, P5580 Pg 61 | P2407 P3280, P3380 Pg 61

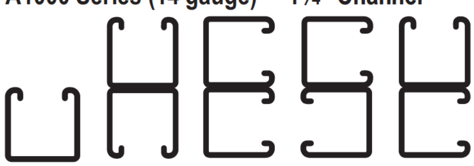
1⅝" Channel Closure Strips



P1184 Pg 60 | P1184P Pg 60 | P3184 Pg 60 | P3184P Pg 60 | P3184F Pg 60 | P3712P Pg 60

Alternate Framing Systems

A1000 Series (14 gauge) – 1¼" Channel



A1000 Pg 171 | A1001 Pg 171 | A1001A Pg 172 | A1001B Pg 172 | A1001C Pg 173

A3300 Series (14 gauge) 1¼" Channel

A3300 Pg 173 | A3301 Pg 173

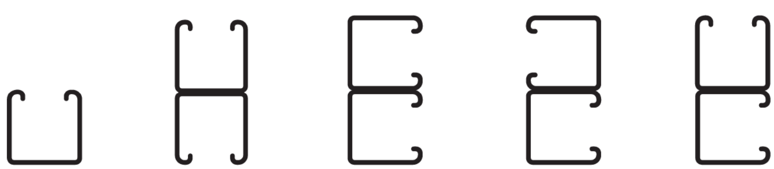
A4000 Series (19 gauge) 1¼" Channel

A4000 Pg 175 | A4001 Pg 175

A5000 Series (14 gauge) 1¼" Channel

A5000 Pg 177

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

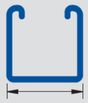
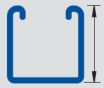
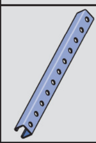
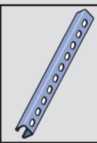
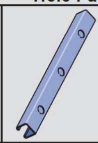
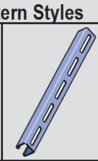
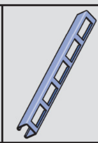
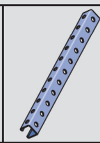


P6000 Pg 183 | P6001 Pg 183 | P6001A Pg 184 | P6001B Pg 184 | P6001C Pg 184

P7000 Series (19 gauge) 13/16" Channel

P7000 Pg 185 | P7001 Pg 185

Channel Selection Chart

Channel	Channel Dimensions		Material & Thickness			Hole Pattern Styles					
											
	Width In *(mm)*	Height In *(mm)*	Steel gauge	Stainless Steel gauge	Alum. In *(mm)*	HS	T	KO *(Steel Only)*	SL *(Steel Only)*	DS *(Steel Only)*	H3 *(Steel Only)*
P1000	1⅝ *(41.3)*	1⅝ *(41.3)*	12 ga	12 ga	0.109 *(2.8)*	■	■	■	■	■	■
P1100	1⅝ *(41.3)*	1⅝ *(41.3)*	14 ga	14 ga	—	■	■	■	■	–	–
P2000	1⅝ *(41.3)*	1⅝ *(41.3)*	16 ga	—	—	■	■	■	■	–	–
P3000	1⅝ *(41.3)*	1⅜ *(34.9)*	12 ga	—	—	■	■	■	■	–	–
P3300	1⅝ *(41.3)*	⅞ *(22.2)*	12 ga	12 ga	—	■	■	–	■	–	–
P4000	1⅝ *(41.3)*	13/16 *(20.6)*	16 ga	16 ga	0.078 *(2.0)*	■	■	–	■	–	–
P4100	1⅝ *(41.3)*	13/16 *(20.6)*	14 ga	—	—	■	■	–	■	–	–
P4400	1⅝ *(41.3)*	1*(25.4)*	12 ga	—	—	■	■	–	■	–	–
P4520	1⅝ *(41.3)*	13/16 *(20.6)*	12 ga	—	—	■	■	–	■	–	–
P5000	1⅝ *(41.3)*	3¼ *(82.6)*	12 ga	12 ga	—	■	■	■	■	–	–
P5500	1⅝ *(41.3)*	2 7/16 *(61.9)*	12 ga	—	0.109 *(2.8)*	■	■	■	■	–	–

Channels & Combinations in Descending Order of Strength

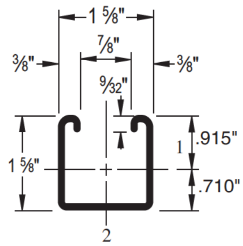
Channel	Area In² *(cm²)*	Weight lbs/ft *(kg/m)*	I In⁴ *(cm⁴)*	s In³*(cm³)*	Allow. Moment In-lbs *(N•m)*
P5001	1.793	6.10	6.227	1.916	48,180
	11.57	*9.1*	*259.2*	*31.4*	*5,440*
P1004A	1.965	6.68	4.068	1.669	41,980
	12.68	*9.9*	*169.3*	*27.4*	*4,740*
P5501	1.452	4.94	2.805	1.151	28,940
	9.37	*7.3*	*116.8*	*18.9*	*3,270*
P1001C41	2.221	7.55	1.856	1.142	28,720
	14.33	*11.2*	*77.2*	*18.7*	*3,250*
P5000	0.897	3.05	1.098	0.627	15,770
	5.78	*4.5*	*45.7*	*10.3*	*1,780*
P1001	1.111	3.78	0.928	0.571	14,360
	7.16	*5.6*	*38.6*	*9.4*	*1,620*
P1101	0.835	2.84	0.733	0.451	11,340
	5.39	*4.2*	*30.5*	*7.4*	*1,280*
P3001	1.000	3.40	0.591	0.430	10,810
	6.45	*5.1*	*24.6*	*7.0*	*1,220*
P5500	0.726	2.47	0.522	0.390	9,820
	4.68	*3.7*	*21.7*	*6.4*	*1,110*
P2001	0.684	2.32	0.618	0.381	9,570
	4.41	*3.5*	*25.7*	*6.2*	*1,080*
P9200	0.489	2.23	0.279	0.297	7,480
	3.16	*3.3*	*11.6*	*4.9*	*850*
A5000	0.492	1.67	0.358	0.265	6,670
	3.17	*2.5*	*14.9*	*4.3*	*750*
P4401	0.849	5.77	0.26	0.26	6,410
	5.48	*8.5*	*10.6*	*4.2*	*725*
A1001	0.609	2.07	0.302	0.242	6,070
	3.93	*3.1*	*12.6*	*4.0*	*690*
P9000	0.387	1.88	0.166	0.205	5,150
	2.50	*2.8*	*6.9*	*3.4*	*580*
P1000	0.555	1.89	0.185	0.202	5,070
	3.58	*2.8*	*7.7*	*3.3*	*570*
P3301	0.790	2.69	0.176	0.201	5,060
	5.10	*4.0*	*7.3*	*3.3*	*570*
P4521	0.77	2.62	0.15	0.18	4,538
	4.97	*3.9*	*6.1*	*2.9*	*513*

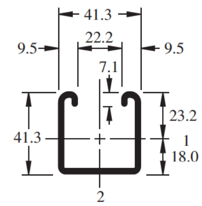
Combinations not shown in catalog are available on special order.
Consult factory for more details.

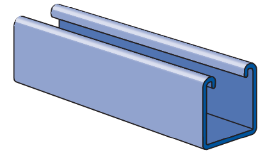
Channel	Area In² *(cm²)*	Weight lbs/ft *(kg/m)*	I In⁴ *(cm⁴)*	s In³*(cm³)*	Allow. Moment In-lbs *(N•m)*
P1100	0.418	1.42	0.145	0.162	4,060
	2.69	*2.1*	*6.0*	*2.6*	*460*
P3000	0.500	1.70	0.120	0.153	3,850
	3.23	*2.5*	*5.0*	*2.5*	*430*
P4101	0.579	1.97	0.117	0.143	3,610
	3.74	*2.9*	*4.9*	*2.4*	*410*
P2000	0.342	1.16	0.125	0.140	3,520
	2.21	*1.7*	*5.2*	*2.3*	*400*
P4001	0.478	1.66	0.104	0.128	3,210
	3.14	*2.5*	*4.3*	*2.1*	*360*
A3301	0.459	1.56	0.077	0.103	2,590
	2.96	*2.3*	*3.2*	*1.7*	*290*
P4400	0.424	2.89	0.053	0.092	2,300
	2.74	*4.3*	*2.2*	*1.5*	*260*
A1000	0.305	1.04	0.061	0.086	2,170
	1.96	*1.5*	*2.5*	*1.4*	*250*
P3300	0.395	1.34	0.037	0.072	1,800
	2.55	*2.0*	*1.5*	*1.2*	*200*
P4520	0.384	1.31	0.031	0.064	1,615
	2.48	*1.9*	*1.3*	*1.0*	*183*
A4001	0.264	0.90	0.037	0.058	1,470
	1.70	*1.3*	*1.5*	*1.0*	*170*
P6001	0.213	0.73	0.045	0.055	1,400
	1.38	*1.1*	*1.9*	*0.9*	*160*
P4100	0.290	0.98	0.026	0.054	1,360
	1.87	*1.5*	*1.1*	*0.9*	*150*
P4000	0.244	0.83	0.023	0.049	1,230
	1.57	*1.2*	*0.9*	*0.8*	*140*
A3300	0.230	0.78	0.017	0.038	950
	1.48	*1.2*	*0.7*	*0.6*	*110*
A4000	0.132	0.45	0.008	0.022	560
	0.85	*0.7*	*0.3*	*0.4*	*60*
P6000	0.107	0.36	0.009	0.020	510
	0.69	*0.5*	*0.4*	*0.3*	*60*
P7001	0.148	0.50	0.007	0.018	460
	0.96	*0.8*	*0.3*	*0.3*	*50*
P7000	0.074	0.25	0.002	0.007	170
	0.48	*0.4*	*0.1*	*0.1*	*20*

P1000®

GR HG PG PL



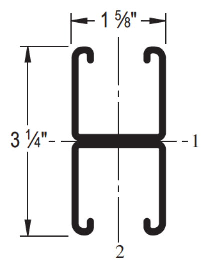


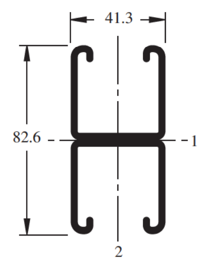


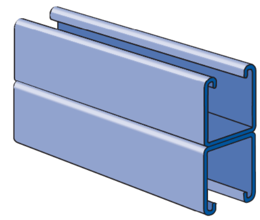
Wt/100 Ft:189 Lbs (281 kg/100 m)
Allowable Moment 5,070 In-Lbs (570 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001

GR HG PG PL



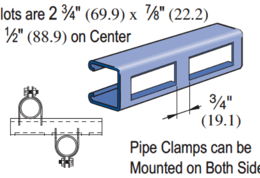




Wt/100 Ft: 378 Lbs (562 kg/100 m)
Allowable Moment 14,360 In-Lbs (1,620 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1000 DS

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



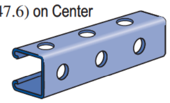
Pipe Clamps can be Mounted on Both Sides

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

P1000 H3

GR HG PG PL

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

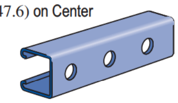


Wt/100 Ft: 175 Lbs (260 kg/100 m)

P1000 HS

GR HG PG PL

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

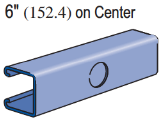


Wt/100 Ft:185 Lbs (275 kg/100 m)

P1000 KO

GR PG

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

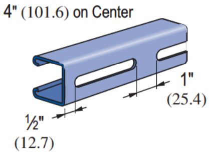


Wt/100 Ft: 190 Lbs (283 kg/100 m)

P1000 SL

GR HG PG PL

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

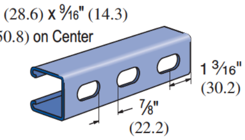


Wt/100 Ft: 185 Lbs (275 kg/100 m)

P1000 T

GR HG PG PL

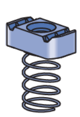
Slots are
1 1⁄8" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center



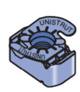
Wt/100 Ft: 185 Lbs (275 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



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



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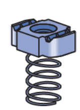
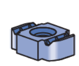
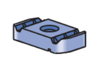
P1006T1420
P1010T



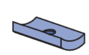
P1024
P1012S
P1023S



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, ZD; Standard Lengths: 10' & 20'

P1000 - Beam Loading

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	500
60	680	0.35	650	480	320
72	560	0.50	450	340	220
84	480	0.68	330	250	160
96	420	0.89	250	190	130
108	380	1.14	200	150	100
120	340	1.40	160	120	80
144	280	2.00	110	80	60
168	240	2.72	80	60	40
192	210	3.55	60	50	NR
216	190	4.58	50	40	NR
240	170	5.62	40	NR	NR

P1001 - Beam Loading

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	3,500*	0.02	3,500*	3,500*	3,500*
36	3,190	0.07	3,190	3,190	3,190
48	2,390	0.13	2,390	2,390	2,390
60	1,910	0.20	1,910	1,910	1,620
72	1,600	0.28	1,600	1,600	1,130
84	1,370	0.39	1,370	1,240	830
96	1,200	0.51	1,200	950	630
108	1,060	0.64	1,000	750	500
120	960	0.79	810	610	410
144	800	1.14	560	420	280
168	680	1.53	410	310	210
192	600	2.02	320	240	160
216	530	2.54	250	190	130
240	480	3.16	200	150	100

P1000 - Column Loading

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

P1001 - Column Loading

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

P1000/P1001 - Elements of Section

Parameter	P1000		P1001	
Area of Section	0.555	In^2	1.111	In^2
Axis 1-1				
Moment of Inertia (I)	0.185	In^4	0.928	In^4
Section Modulus (S)	0.202	In^3	0.571	In^3
Radius of Gyration (r)	0.577	In	0.914	In
Axis 2-2				
Moment of Inertia (I)	0.236	In^4	0.471	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. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P1000 - Beam Loading (metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	7.6	1	7.6	7.6	7.6
750	6.1	2	6.1	6.1	5.9
1,000	4.6	4	4.6	4.6	3.3
1,250	3.6	6	3.6	3.2	2.1
1,500	3.1	9	3.0	2.2	1.5
1,750	2.6	12	2.2	1.6	1.1
2,000	2.3	15	1.6	1.2	0.8
2,500	1.8	24	1.1	0.8	0.5
3,000	1.5	34	0.8	0.5	0.4
3,500	1.3	46	0.5	0.4	0.3
4,000	1.2	62	0.4	0.3	0.2
4,500	1.0	78	0.3	0.3	0.2
5,000	0.9	97	0.3	0.2	NR
6,000	0.8	136	0.2	NR	NR

P1001 - Beam Loading (metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	15.6 *	1	15.6 *	15.6 *	15.6 *
750	15.6 *	1	15.6 *	15.6 *	15.6 *
1,000	13.0	2	13.0	13.0	13.0
1,250	10.4	3	10.4	10.4	10.4
1,500	8.7	5	8.7	8.7	7.4
1,750	7.4	7	7.4	7.4	5.5
2,000	6.5	9	6.5	6.3	4.2
2,500	5.2	13	5.2	4.0	2.7
3,000	4.3	19	3.7	2.8	1.9
3,500	3.7	26	2.8	2.0	1.4
4,000	3.2	34	2.1	1.6	1.1
4,500	2.9	44	1.6	1.2	0.8
5,000	2.6	53	1.3	1.0	0.7
6,000	2.2	78	0.9	0.7	0.4

P1000 - Column Loading (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	kN	kN	kN	kN	kN
600	15.8	48.0	44.3	39.4	34.8
750	15.2	44.0	39.4	33.8	28.9
1,000	13.7	37.5	32.0	26.1	21.3
1,250	12.1	31.6	26.1	20.3	16.5
1,500	10.7	26.7	21.3	16.5	13.4
1,750	9.6	22.7	17.8	13.8	11.3
2,000	8.7	19.3	15.3	11.9	9.6
2,250	7.9	16.9	13.4	10.4	8.2
2,500	7.2	15.0	11.9	9.1	**
2,750	6.7	13.5	10.6	8.1	**

P1001 - Column Loading (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	kN	kN	kN	kN	kN
600	28.6	108.2	105.3	101.3	97.4
750	28.3	105.0	101.3	96.5	92.2
1,000	27.8	99.6	95.0	89.7	83.9
1,250	27.3	94.7	89.7	81.7	70.1
1,500	26.8	90.3	83.9	70.1	56.4
1,750	25.4	86.7	74.8	58.6	43.5
2,000	23.9	79.4	65.5	47.7	33.3
2,250	22.2	71.9	56.4	37.9	26.3
2,500	20.4	64.4	47.7	30.7	21.3
2,750	18.5	56.9	39.6	25.4	17.6

P1000/P1001 - Elements of Section (metric)

Parameter	P1000		P1001	
Area of Section	3.58	cm^2	7.16	cm^2
Axis 1-1				
Moment of Inertia (I)	7.68	cm^4	38.62	cm^4
Section Modulus (S)	3.30	cm^3	9.36	cm^3
Radius of Gyration (r)	1.46	cm	2.32	cm
Axis 2-2				
Moment of Inertia (I)	9.80	cm^4	19.60	cm^4
Section Modulus (S)	4.75	cm^3	9.50	cm^3
Radius of Gyration (r)	1.65	cm	1.65	cm

Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

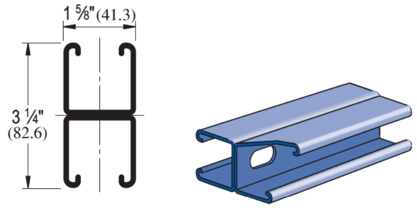
   "KO" Series.......95% **"T" Series 85%**
   "HS" Series ....90% **"SL" Series........85%**
   "H3" Series........90% **"DS" Series........70%**

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

1 ⅝" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

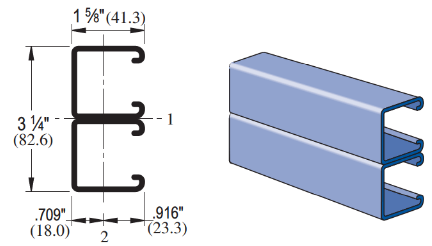
P1001 T

GR PG



Wt/100 Ft: 321 Lbs (478 kg/100 m)
Allowable Moment 12,200 In-Lbs (1,378 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

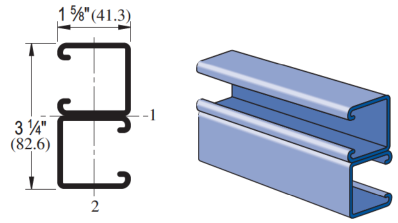
P1001 A



Wt/100 Ft: 378 Lbs (562 kg/100 m)
Allowable Moment 18,640 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 B

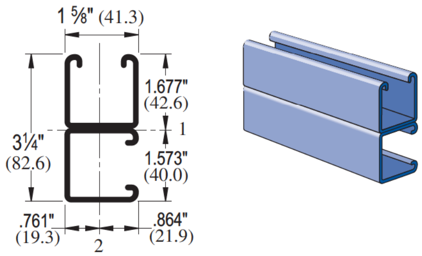
GR PG



Wt/100 Ft: 378 Lbs (562 kg/100 m)
Allowable Moment 18,640 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

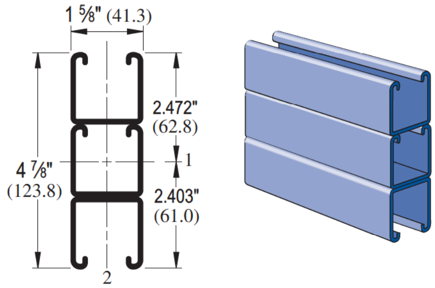
P1001 C

GR PG



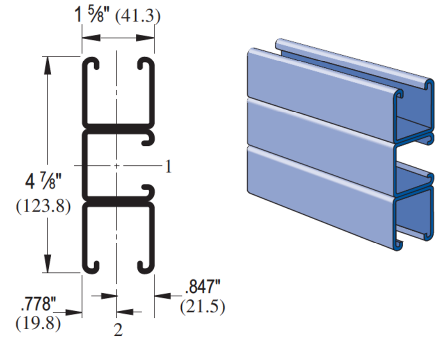
Wt/100 Ft: 378 Lbs (562 kg/100 m)
Allowable Moment 15,950 In-Lbs (1,800 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 3



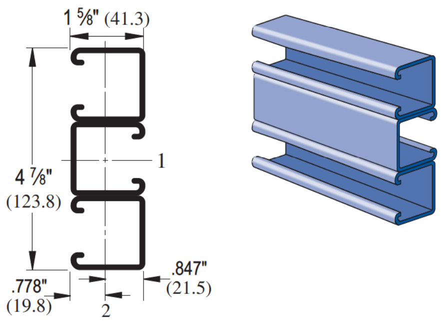
Wt/100 Ft: 566 Lbs (843 kg/100 m)
Allowable Moment 31,840 In-Lbs (3,600 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 A3



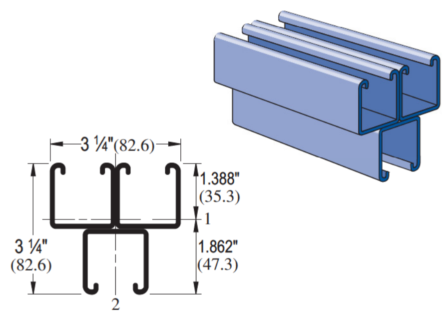
Wt/100 Ft: 566 Lbs (843 kg/100 m)
Allowable Moment 32,770 In-Lbs (3,700 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 B3



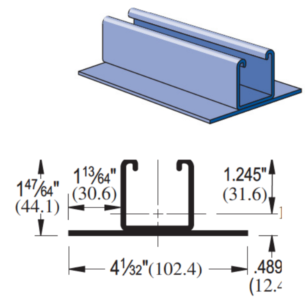
Wt/100 Ft: 566 Lbs (843 kg/100 m)
Allowable Moment 37,550 In-Lbs (4,240 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 D3



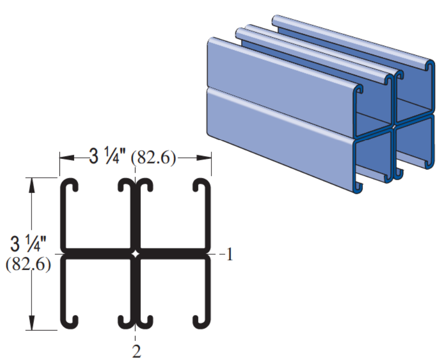
Wt/100 Ft: 566 Lbs (843 kg/100 m)
Allowable Moment 17,550 In-Lbs (1,980 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1003



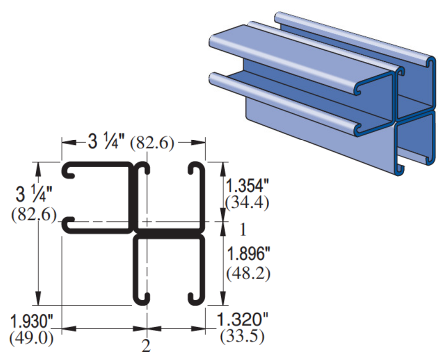
Wt/100 Ft: 333 Lbs (495 kg/100 m)
Allowable Moment 6,240 In-Lbs (700 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 C41



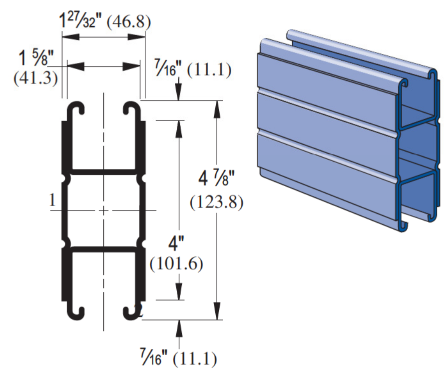
Wt/100 Ft: 755 Lbs (1,124 kg/100 m)
Allowable Moment 28,720 In-Lbs (3,250 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1001 C3



Wt/100 Ft: 566 Lbs (843 kg/100 m)
Allowable Moment 18,680 In-Lbs (2,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P1004 A



Wt/100 Ft: 668 Lbs (994 kg/100 m)
Allowable Moment 41,970 In-Lbs (4,740 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

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

P1001 C41 - Beam Loading

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	7,040*	0.02	7,040*	7,040*	7,040*
36	6,380	0.07	6,380	6,380	6,380
48	4,790	0.13	4,790	4,790	4,790
60	3,830	0.20	3,830	3,830	3,240
72	3,190	0.28	3,190	3,190	2,250
84	2,740	0.39	2,740	2,480	1,660
96	2,390	0.50	2,390	1,900	1,270
108	2,130	0.64	2,000	1,500	1,000
120	1,910	0.78	1,620	1,220	810
144	1,600	1.14	1,130	840	560
168	1,370	1.55	830	620	410
192	1,200	2.02	630	480	320
216	1,060	2.54	500	380	250
240	960	3.16	410	300	200

P1004 A - Beam Loading

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	9,100*	0.01	9,100*	9,100*	9,100*
36	9,100*	0.05	9,100*	9,100*	9,100*
48	7,000	0.08	7,000	7,000	7,000
60	5,600	0.13	5,600	5,600	5,600
72	4,660	0.19	4,660	4,660	4,660
84	4,000	0.26	4,000	4,000	3,630
96	3,500	0.34	3,500	3,500	2,780
108	3,110	0.43	3,110	3,110	2,200
120	2,800	0.52	2,800	2,670	1,780
144	2,330	0.75	2,330	1,850	1,230
168	2,000	1.03	1,810	1,360	910
192	1,750	1.34	1,390	1,040	690
216	1,550	1.69	1,100	820	550
240	1,400	2.10	890	670	440

P1001 C41 - Column Loading

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	12,690	46,920	44,980	42,360	39,890
36	12,250	42,680	39,890	36,660	34,050
48	11,820	38,740	35,720	32,640	30,430
60	11,470	35,500	32,640	29,980	28,220
72	11,180	32,970	30,430	28,220	26,820
84	10,900	31,040	28,840	27,010	24,870
96	10,580	29,570	27,680	26,170	19,840
108	10,310	28,440	26,820	22,310	15,670
120	10,070	27,560	26,170	18,280	12,700
144	8,740	26,320	19,840	12,700	8,820
168	7,360	21,890	14,570	9,330	**

P1004 A - Column Loading

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	11,420	36,800	33,890	30,440	27,600
36	10,600	30,840	27,600	24,400	22,160
48	9,860	26,400	23,560	21,060	19,470
60	9,160	23,370	21,060	19,160	18,020
72	8,610	21,310	19,470	18,020	17,140
84	8,170	19,890	18,410	17,260	15,240
96	7,790	18,890	17,670	16,760	11,670
108	7,460	18,160	17,140	13,280	9,220
120	7,150	17,590	16,760	10,750	7,470
144	5,660	16,840	11,670	7,470	**
168	4,520	12,990	8,570	**	**

P1001 C41/ P1004 A - Elements of Section

Parameter	P1001 C41		P1004 A	
Area of Section	2.221	In^2	1.965	In^2
Axis 1-1				
Moment of Inertia (I)	1.856	In^4	4.068	In^4
Section Modulus (S)	1.142	In^3	1.669	In^3
Radius of Gyration (r)	0.914	In	1.439	In
Axis 2-2				
Moment of Inertia (I)	2.408	In^4	1.092	In^4
Section Modulus (S)	1.482	In^3	1.190	In^3
Radius of Gyration (r)	1.041	In	0.745	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P1001 C41 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	31.3 *	1	31.3 *	31.3 *	31.3 *
750	31.3 *	1	31.3 *	31.3 *	31.3 *
1,000	26.0	2	26.0	26.0	26.0
1,250	20.8	3	20.8	20.8	20.8
1,500	17.3	5	17.3	17.3	14.9
1,750	14.8	7	14.8	14.8	10.9
2,000	13.0	9	13.0	12.6	8.4
2,500	10.4	13	10.4	8.1	5.4
3,000	8.7	19	7.4	5.6	3.7
3,500	7.4	26	5.5	4.1	2.8
4,000	6.5	34	4.2	3.2	2.1
4,500	5.8	44	3.3	2.5	1.6
5,000	5.2	54	2.7	2.0	1.3
6,000	4.3	77	1.9	1.4	0.9

P1004 A - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kgN	Span/360 kN
600	40.5 *	1	40.5 *	40.5 *	40.5 *
750	40.5 *	1	40.5 *	40.5 *	40.5 *
1,000	37.9	2	37.9	37.9	37.9
1,250	30.3	3	30.3	30.3	30.3
1,500	25.3	4	25.3	25.3	25.3
1,750	21.7	6	21.7	21.7	21.7
2,000	18.9	9	18.9	18.9	18.4
2,500	15.2	13	15.2	15.2	11.7
3,000	12.6	18	12.6	12.2	8.2
3,500	10.9	23	10.9	9.0	6.0
4,000	9.5	29	9.2	6.9	4.6
4,500	8.5	36	7.2	5.4	3.6
5,000	7.6	52	5.9	4.4	2.9
6,000	6.3	77	4.1	3.1	2.0

P1001 C41 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	56.5	209.3	200.8	189.3	178.4
750	55.6	200.1	189.3	175.8	164.1
1,000	53.9	184.7	171.7	157.3	146.1
1,250	52.4	170.7	157.3	143.8	134.1
1,500	51.1	158.9	146.1	134.1	126.1
1,750	50.0	149.3	137.6	127.3	120.7
2,000	49.2	141.5	131.1	122.3	116.8
2,250	47.9	135.4	126.1	118.6	101.9
2,500	46.8	130.4	122.3	114.5	83.9
2,750	45.9	126.4	119.2	98.8	69.4

P1004 A - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	50.9	164.6	151.8	136.5	123.8
750	49.1	150.8	136.5	121.1	109.5
1,000	46.3	130.9	116.9	103.4	94.3
1,250	43.5	115.8	103.4	92.6	85.8
1,500	40.9	104.8	94.3	85.8	80.6
1,750	38.9	96.8	88.1	81.3	77.0
2,000	37.1	91.0	83.7	78.1	74.8
2,250	35.7	86.6	80.6	75.8	60.9
2,500	34.3	83.3	78.1	71.1	49.4
2,750	33.1	80.7	76.2	58.8	40.8

P1001 C41/ P1004 A - Elements of Section (*metric*)

Parameter	P1001 C41		P1004 A	
Area of Section	14.33	cm^2	12.68	cm^2
Axis 1-1				
Moment of Inertia (I)	77.24	cm^4	169.33	cm^4
Section Modulus (S)	18.71	cm^3	27.35	cm^3
Radius of Gyration (r)	2.32	cm	3.66	cm
Axis 2-2				
Moment of Inertia (I)	100.24	cm^4	45.44	cm^4
Section Modulus (S)	24.29	cm^3	19.50	cm^3
Radius of Gyration (r)	2.64	cm	1.89	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

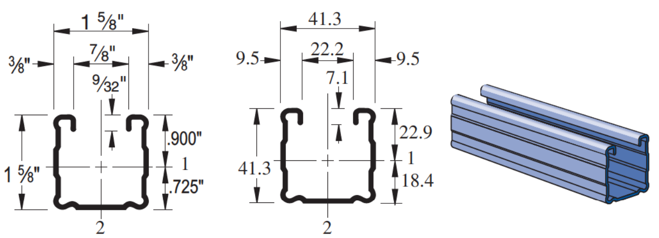
1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P1100

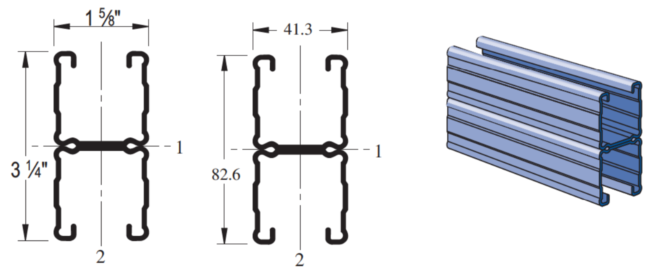
GR PG



Wt/100 Ft: 142 Lbs (211 kg/100 m)
Allowable Moment 4,060 In-Lbs (460 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

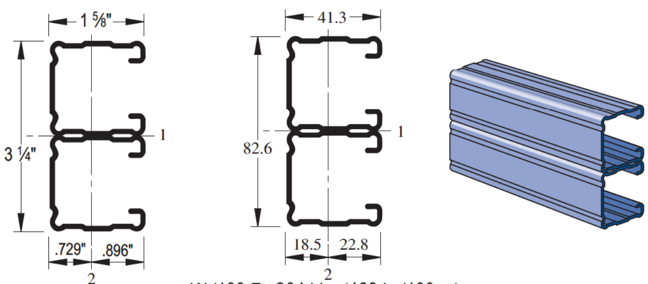
P1101

GR PG



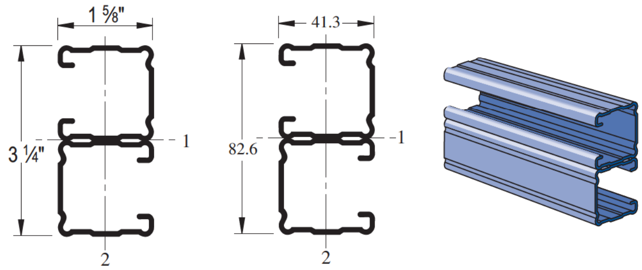
Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 11,340 In-Lbs (1,280 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

P1101 A



Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 14,000 In-Lbs (1,580 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

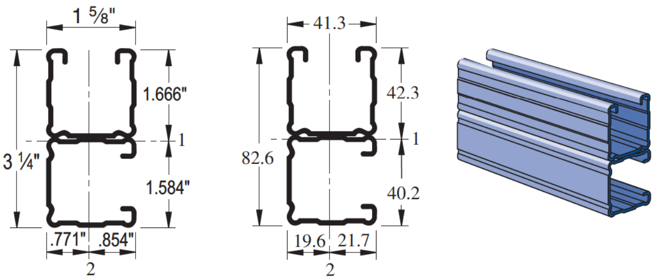
P1101 B



Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 14,000 In-Lbs (1,580 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

P1101 C

GR PG

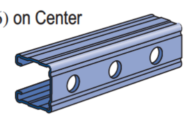


Wt/100 Ft: 284 Lbs (423 kg/100 m)
Allowable Moment 12,330 In-Lbs (1,390 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

P1100 HS

GR PG

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

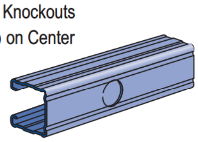


Wt/100 Ft: 136 Lbs (202 kg/100 m)

P1100 KO

GR PG

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

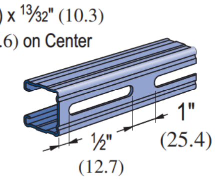


Wt/100 Ft: 140 Lbs (208 kg/100 m)

P1100 SL

GR PG

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

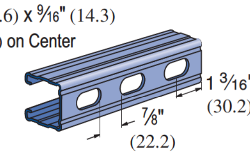


Wt/100 Ft: 136 Lbs (202 kg/100 m)

P1100 T

GR PG

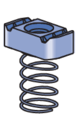
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



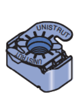
Wt/100 Ft: 136 Lbs (202 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

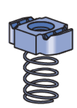
See Page 73, 74



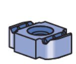
P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010



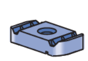
P1008T
P1006T1420
P1010T



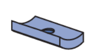
P1024
P1012S
P1023S



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, ZD; Standard Lengths: 10' & 20'

P1100 - Beam Loading

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	1,350	0.06	1,350	1,350	1,350
36	900	0.13	900	900	700
48	680	0.23	680	590	400
60	540	0.36	510	380	250
72	450	0.51	350	260	180
84	390	0.70	260	190	130
96	340	0.92	200	150	100
108	300	1.15	160	120	80
120	270	1.42	130	90	60
144	230	2.09	90	70	40
168	190	2.75	60	50	30
192	170	3.67	50	40	NR
216	150	4.61	40	30	NR
240	140	5.90	30	NR	NR

P1101 - Beam Loading

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	2,180*	0.02	2,180*	2,180*	2,180*
36	2,180*	0.06	2,180*	2,180*	2,180*
48	1,890	0.13	1,890	1,890	1,890
60	1,510	0.20	1,510	1,510	1,280
72	1,260	0.28	1,260	1,260	890
84	1,080	0.39	1,080	980	650
96	950	0.51	950	750	500
108	840	0.64	790	590	400
120	760	0.79	640	480	320
144	630	1.13	440	330	220
168	540	1.54	330	250	160
192	470	2.00	250	190	130
216	420	2.55	200	150	100
240	380	3.16	160	120	80

P1100 - Column Loading

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	2,800	8,040	7,330	6,360	5,430
36	2,410	6,480	5,430	4,190	3,210
48	1,940	4,990	3,830	2,760	2,160
60	1,550	3,740	2,760	2,050	1,640
72	1,290	2,860	2,160	1,640	1,320
84	1,100	2,310	1,780	1,370	1,110
96	950	1,950	1,520	1,180	950
108	840	1,690	1,320	1,030	**
120	760	1,490	1,180	**	**
144	630	1,210	950	**	**

P1101 - Column Loading

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	5,010	18,250	17,700	16,880	16,030
36	4,860	16,990	16,030	14,770	13,620
48	4,700	15,610	14,380	12,930	11,750
60	4,480	14,280	12,930	11,490	9,290
72	4,210	13,100	11,750	9,290	6,700
84	3,880	12,090	10,220	7,090	4,930
96	3,480	11,170	8,390	5,430	3,770
108	3,060	9,640	6,700	4,290	2,980
120	2,680	8,170	5,430	3,480	**
144	2,090	5,710	3,770	**	**

P1100/P1101 - Elements of Section

Parameter	P1100		P1101	
Area of Section	0.418	In^2	0.835	In^2
Axis 1-1				
Moment of Inertia (I)	0.145	In^4	0.733	In^4
Section Modulus (S)	0.162	In^3	0.451	In^3
Radius of Gyration (r)	0.589	In	0.937	In
Axis 2-2				
Moment of Inertia (I)	0.176	In^4	0.353	In^4
Section Modulus (S)	0.217	In^3	0.434	In^3
Radius of Gyration (r)	0.650	In	0.650	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P1100 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	6.1	1	6.1	6.1	6.1
750	4.9	2	4.9	4.9	4.7
1,000	3.7	4	3.7	3.7	2.6
1,250	2.9	6	2.9	2.5	1.7
1,500	2.4	9	2.3	1.7	1.2
1,750	2.1	12	1.7	1.3	0.8
2,000	1.8	15	1.3	1.0	0.7
2,500	1.5	24	0.8	0.6	0.4
3,000	1.2	36	0.6	0.4	0.3
3,500	1.1	49	0.4	0.3	0.2
4,000	0.9	64	0.3	0.3	0.2
4,500	0.8	77	0.3	0.2	0.1
5,000	0.8	100	0.2	0.2	NR
6,000	0.6	143	0.1	NR	NR

P1101 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	9.7 *	0	9.7 *	9.7 *	9.7 *
750	9.7 *	1	9.7 *	9.7 *	9.7 *
1,000	9.7 *	2	9.7 *	9.7 *	9.7 *
1,250	8.2	3	8.2	8.2	8.2
1,500	6.9	5	6.9	6.9	5.9
1,750	5.9	7	5.9	5.9	4.3
2,000	5.1	9	5.1	5.0	3.3
2,500	4.1	13	4.1	3.2	2.1
3,000	3.4	19	2.9	2.2	1.5
3,500	2.9	26	2.2	1.6	1.1
4,000	2.6	35	1.6	1.2	0.8
4,500	2.3	43	1.3	1.0	0.7
5,000	2.0	54	1.1	0.8	0.5
6,000	1.7	77	0.8	0.5	0.4

P1100 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	12.5	35.9	32.9	28.6	24.5
750	11.8	32.6	28.6	23.5	19.0
1,000	10.1	26.9	22.0	16.4	12.5
1,250	8.5	21.6	16.4	11.8	9.3
1,500	7.0	17.0	12.5	9.3	7.4
1,750	6.0	13.5	10.1	7.7	6.2
2,000	5.2	11.2	8.6	6.5	5.3
2,250	4.6	9.6	7.4	5.7	4.7
2,500	4.1	8.4	6.5	5.1	**
2,750	3.7	7.5	5.9	4.5	**

P1101 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	22.3	81.4	79.0	75.4	71.7
750	22.0	78.7	75.4	70.7	66.1
1,000	21.4	73.8	69.2	63.3	58.0
1,250	20.8	68.8	63.3	56.8	51.6
1,500	20.0	64.0	58.0	51.6	42.3
1,750	19.0	59.5	53.5	44.0	32.6
2,000	18.0	55.6	49.2	35.7	25.0
2,250	16.6	52.3	42.3	28.4	19.7
2,500	15.1	48.3	35.7	23.0	16.0
2,750	13.6	42.7	29.7	19.0	13.2

P1100/P1101 - Elements of Section (*metric*)

Parameter	P1100		P1101	
Area of Section	2.69	cm^2	5.39	cm^2
Axis 1-1				
Moment of Inertia (I)	6.03	cm^4	30.51	cm^4
Section Modulus (S)	2.65	cm^3	7.39	cm^3
Radius of Gyration (r)	1.50	cm	2.38	cm
Axis 2-2				
Moment of Inertia (I)	7.34	cm^4	14.69	cm^4
Section Modulus (S)	3.56	cm^3	7.12	cm^3
Radius of Gyration (r)	1.65	cm	1.65	cm

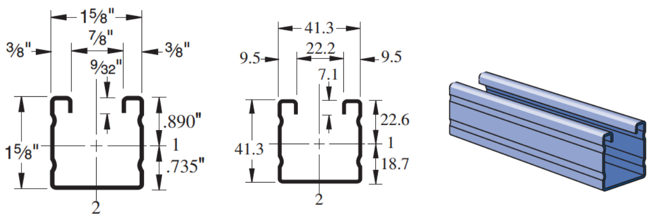
Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

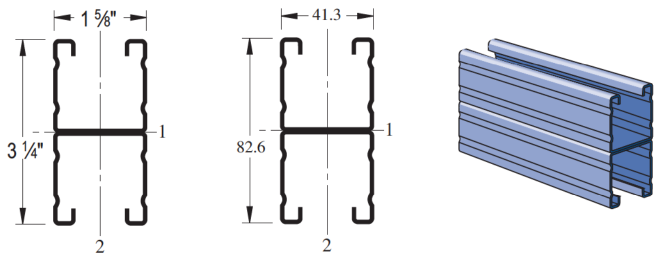
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P2000
GR PG



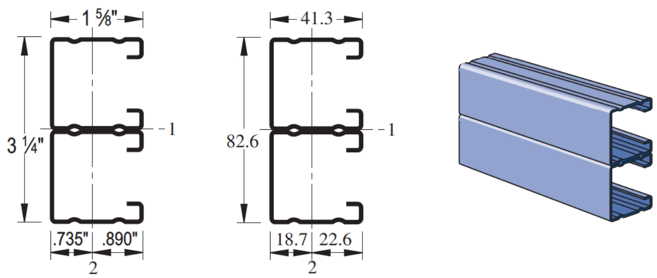
Wt/100 Ft: 116 Lbs (173 kg/100 m)
Allowable Moment 3,520 In-Lbs (400 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P2001
GR PG



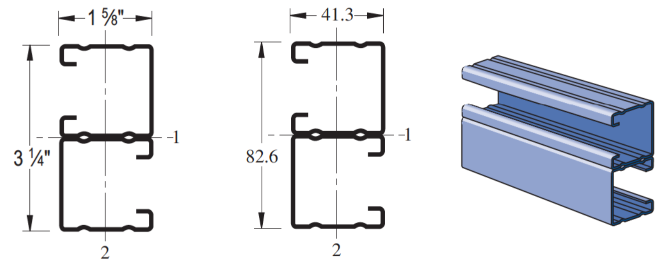
Wt/100 Ft: 232 Lbs (346 kg/100 m)
Allowable Moment 9,570 In-Lbs (1,080 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P2001 A



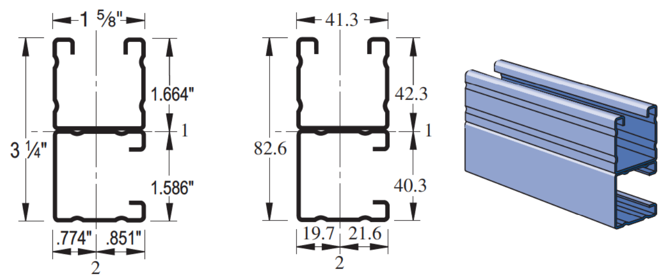
Wt/100 Ft: 232 Lbs (346 kg/100 m)
Allowable Moment 11,660 In-Lbs (1,320 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P2001 B



Wt/100 Ft: 232 Lbs (346 kg/100 m)
Allowable Moment 11,660 In-Lbs (1,320 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

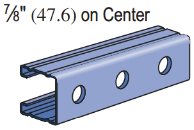
P2001 C



Wt/100 Ft: 232 Lbs (346 kg/100 m)
Allowable Moment 10,350 In-Lbs (1,170 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P2000 HS
GR PG

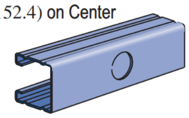
9⁄16" (14.3) Dia. Holes
1 ⅞" (47.6) on Center



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

P2000 KO
GR PG

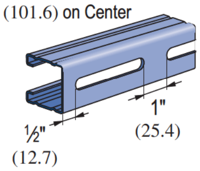
⅞" (22.2) Knockouts
6" (152.4) on Center



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

P2000 SL
GR PG

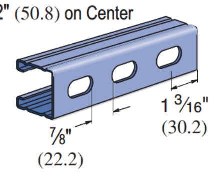
Slots are
3" (76.2) x 13⁄32" (10.3)
4" (101.6) on Center



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

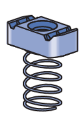
P2000 T
GR PG

Slots are
1⅛" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center



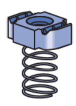
Wt/100 Ft: 113 Lbs (168 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)
See Page 73, 74

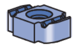


P1006-0832
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010

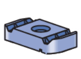
P1008T
P1006T1420
P1010T



P1024
P1012S
P1023S



P1012
P1023
P1024S



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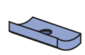
P3006-1024
P3006-1420
P3007
P3008
P3009
P3010



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

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

P2000 - Beam Loading

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	610
48	590	0.23	590	510	340
60	470	0.36	440	330	220
72	390	0.52	300	230	150
84	340	0.71	220	170	110
96	290	0.91	170	130	90
108	260	1.16	130	100	70
120	230	1.41	110	80	50
144	200	2.12	80	60	40
168	170	2.86	60	40	30
192	150	3.76	40	30	20
216	130	4.64	30	30	NR
240	120	5.88	30	NR	NR

P2001 - Beam Loading

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	1,610*	0.02	1,610*	1,610*	1,610*
36	1,610*	0.05	1,610*	1,610*	1,610*
48	1,600	0.13	1,600	1,600	1,600
60	1,280	0.20	1,280	1,280	1,080
72	1,060	0.28	1,060	1,060	750
84	910	0.38	910	830	550
96	800	0.51	800	630	420
108	710	0.64	670	500	330
120	640	0.79	540	410	270
144	530	1.13	380	280	190
168	460	1.56	280	210	140
192	400	2.02	210	160	110
216	350	2.52	170	130	80
240	320	3.16	140	100	70

P2000 - Column Loading

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	2,400	6,650	6,080	5,280	4,470
36	2,050	5,380	4,470	3,370	2,500
48	1,600	4,090	3,040	2,100	1,590
60	1,230	2,960	2,100	1,500	1,160
72	970	2,190	1,590	1,160	910
84	790	1,720	1,270	950	760
96	660	1,410	1,060	800	650
108	570	1,200	910	700	**
120	510	1,040	800	620	**
144	420	830	650	**	**

P2001 - Column Loading

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	4,200	15,030	14,600	13,940	13,220
36	4,070	14,030	13,220	12,090	10,990
48	3,920	12,850	11,720	10,290	9,040
60	3,700	11,630	10,290	8,760	7,530
72	3,410	10,460	9,040	7,530	5,740
84	3,140	9,410	7,990	6,080	4,220
96	2,890	8,490	7,120	4,650	3,230
108	2,530	7,700	5,740	3,680	2,550
120	2,210	6,950	4,650	2,980	**
144	1,690	4,890	3,230	**	**

P2000/P2001 - Elements of Section

Parameter	P2000		P2001	
Area of Section	0.342	In^2	0.684	In^2
Axis 1-1				
Moment of Inertia (I)	0.125	In^4	0.618	In^4
Section Modulus (S)	0.140	In^3	0.381	In^3
Radius of Gyration (r)	0.604	In	0.951	In
Axis 2-2				
Moment of Inertia (I)	0.151	In^4	0.302	In^4
Section Modulus (S)	0.186	In^3	0.372	In^3
Radius of Gyration (r)	0.665	In	0.665	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

UNISTRUT

P2000 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	5.3	1	5.3	5.3	5.3
750	4.2	2	4.2	4.2	4.0
1,000	3.2	4	3.2	3.2	2.3
1,250	2.5	6	2.5	2.2	1.4
1,500	2.1	9	2.0	1.5	1.0
1,750	1.8	12	1.5	1.1	0.8
2,000	1.6	16	1.1	0.8	0.6
2,500	1.3	25	0.7	0.5	0.4
3,000	1.1	36	0.5	0.4	0.3
3,500	0.9	47	0.4	0.3	0.2
4,000	0.8	63	0.3	0.2	0.1
4,500	0.7	80	0.2	0.2	0.1
5,000	0.6	96	0.2	0.1	0.1
6,000	0.5	142	0.1	NR	NR

P2001 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	7.2 *	0	7.2 *	7.2 *	7.2 *
750	7.2 *	1	7.2 *	7.2 *	7.2 *
1,000	7.2 *	2	7.2 *	7.2 *	7.2 *
1,250	6.9	3	6.9	6.9	6.9
1,500	5.8	5	5.8	5.8	5.0
1,750	4.9	7	4.9	4.9	3.6
2,000	4.3	9	4.3	4.2	2.8
2,500	3.5	13	3.5	2.7	1.8
3,000	2.9	19	2.5	1.9	1.2
3,500	2.5	27	1.8	1.4	0.9
4,000	2.2	35	1.4	1.1	0.7
4,500	1.9	43	1.1	0.8	0.5
5,000	1.7	54	0.9	0.7	0.4
6,000	1.4	76	0.6	0.4	0.3

P2000 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	10.7	29.8	27.3	23.8	20.2
750	10.1	27.0	23.8	19.3	15.3
1,000	8.5	22.3	18.0	12.9	9.6
1,250	6.9	17.6	12.9	9.0	6.8
1,500	5.6	13.5	9.6	6.8	5.2
1,750	4.6	10.5	7.6	5.5	4.3
2,000	3.8	8.5	6.2	4.6	3.6
2,250	3.3	7.1	5.2	4.0	3.2
2,500	2.8	6.1	4.6	3.5	2.8
2,750	2.5	5.3	4.1	3.1	**

P2001 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	18.7	67.0	65.1	62.2	59.1
750	18.4	64.9	62.2	58.3	54.2
1,000	17.9	61.0	56.9	51.5	46.3
1,250	17.3	56.6	51.5	45.0	39.5
1,500	16.5	52.1	46.3	39.5	34.0
1,750	15.5	47.9	41.6	34.8	27.9
2,000	14.5	43.9	37.5	30.4	21.3
2,250	13.6	40.2	34.0	24.3	16.9
2,500	12.5	37.0	30.4	19.7	13.7
2,750	11.3	34.2	25.4	16.3	11.3

P2000/P2001 - Elements of Section *(Metric)*

Parameter	P2000		P2001	
Area of Section	2.21	cm^2	4.41	cm^2
Axis 1-1				
Moment of Inertia (I)	5.19	cm^4	25.74	cm^4
Section Modulus (S)	2.29	cm^3	6.24	cm^3
Radius of Gyration (r)	1.53	cm	2.42	cm
Axis 2-2				
Moment of Inertia (I)	6.29	cm^4	12.58	cm^4
Section Modulus (S)	3.05	cm^3	6.10	cm^3
Radius of Gyration (r)	1.69	cm	1.69	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

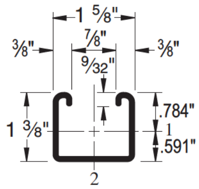
NR = Not Recommended.

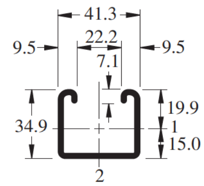
1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

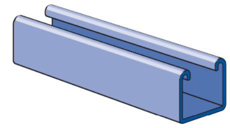
   "KO" Series.......95% **"T" Series 85%**
   "HS" Series ....90% **"SL" Series 85%**
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P3000

GR PG



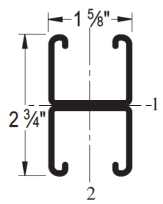


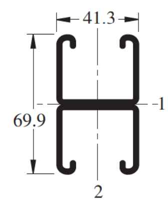


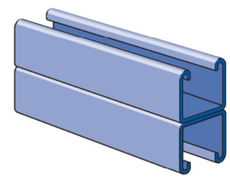
Wt/100 Ft: 170 Lbs (253 kg/100 m)
Allowable Moment 3,840 In-Lbs (430 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P3001

GR PG





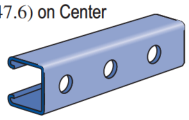


Wt/100 Ft: 340 Lbs (506 kg/100 m)
Allowable Moment 10,810 In-Lbs (1,220 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P3000 HS

GR PG

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

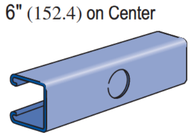


Wt/100 Ft: 165 Lbs (246 kg/100 m)

P3000 KO

GR PG

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

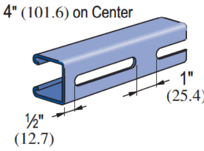


Wt/100 Ft: 170 Lbs (253 kg/100 m)

P3000 SL

GR PG

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

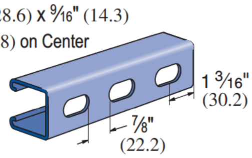


Wt/100 Ft: 165 Lbs (246 kg/100 m)

P3000 T

GR PG

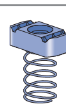
Slots are
1⅛" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center



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

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



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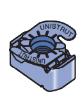
P1006-1024
P1006-1420
P1007
P1008
P1009
P1010



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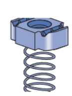
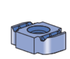


P1024
P1012S
P1023S



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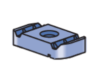
P1023
P1024S



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P3006-1024
P3006-1420
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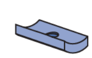
P3008
P3009
P3010



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

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

P3000 - Beam Loading

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	1,280	0.07	1,280	1,280	1,280
36	850	0.15	850	850	580
48	640	0.26	640	490	330
60	510	0.41	420	310	210
72	430	0.59	290	220	150
84	370	0.81	210	160	110
96	320	1.05	160	120	80
108	280	1.30	130	100	60
120	260	1.66	100	80	50
144	210	2.32	70	50	40
168	180	3.15	50	40	30
192	160	4.18	40	30	NR
216	140	5.21	NR	NR	NR
240	130	6.64	NR	NR	NR

P3001 - Beam Loading

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	2,960*	0.03	2,960*	2,960*	2,960*
36	2,400	0.08	2,400	2,400	2,400
48	1,800	0.15	1,800	1,800	1,610
60	1,440	0.23	1,440	1,440	1,030
72	1,200	0.33	1,200	1,080	720
84	1,030	0.46	1,030	790	530
96	900	0.59	810	610	400
108	800	0.75	640	480	320
120	720	0.93	520	390	260
144	600	1.34	360	270	180
168	510	1.81	260	200	130
192	450	2.38	200	150	100
216	400	3.01	160	120	80
240	360	3.72	130	100	NR

P3000 - Column Loading

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	3,180	9,690	8,980	8,050	7,210
36	2,920	8,160	7,210	6,130	5,240
48	2,590	6,820	5,810	4,730	3,860
60	2,300	5,740	4,730	3,690	2,990
72	2,040	4,850	3,860	2,990	2,270
84	1,830	4,100	3,240	2,400	**
96	1,650	3,530	2,770	1,840	**
108	1,450	3,080	2,270	**	**
120	1,250	2,710	1,840	**	**

P3001 - Column Loading

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	5,740	21,780	21,200	20,430	19,720
36	5,620	20,520	19,720	18,830	17,680
48	5,520	19,400	18,570	16,570	14,260
60	5,330	18,510	16,570	13,670	10,810
72	5,030	16,850	14,260	10,810	7,730
84	4,630	14,990	11,930	8,180	5,680
96	4,190	13,090	9,720	6,260	4,350
108	3,720	11,230	7,730	4,950	**
120	3,300	9,460	6,260	4,010	**
144	2,620	6,590	4,350	**	**

P3000/P3001 - Elements of Section

Parameter	P3000		P3001	
Area of Section	0.500	In^2	1.000	In^2
Axis 1-1				
Moment of Inertia (I)	0.120	In^4	0.591	In^4
Section Modulus (S)	0.153	In^3	0.430	In^3
Radius of Gyration (r)	0.489	In	0.769	In
Axis 2-2				
Moment of Inertia (I)	0.203	In^4	0.407	In^4
Section Modulus (S)	0.250	In^3	0.501	In^3
Radius of Gyration (r)	0.638	In	0.638	In

Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series 85%**
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

1 5/8" Channel
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General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
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P3000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	5.8	2	5.8	5.8	5.8
750	4.6	3	4.6	4.6	3.8
1,000	3.5	4	3.5	3.2	2.2
1,250	2.8	7	2.8	2.1	1.4
1,500	2.3	10	1.9	1.4	1.0
1,750	2.0	14	1.4	1.1	0.7
2,000	1.7	18	1.1	0.8	0.5
2,500	1.4	28	0.7	0.5	0.4
3,000	1.2	40	0.5	0.4	0.2
3,500	1.0	54	0.4	0.3	0.2
4,000	0.9	73	0.3	0.2	0.1
4,500	0.8	89	0.2	0.2	NR
5,000	0.7	115	0.2	0.1	NR
6,000	0.6	161	NR	NR	NR

P3001 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	13.2 *	1	13.2 *	13.2 *	13.2 *
750	13.0	1	13.0	13.0	13.0
1,000	9.8	3	9.8	9.8	9.8
1,250	7.8	4	7.8	7.8	6.9
1,500	6.5	6	6.5	6.5	4.8
1,750	5.6	8	5.6	5.2	3.5
2,000	4.9	10	4.9	4.0	2.7
2,500	3.9	16	3.4	2.6	1.7
3,000	3.2	23	2.4	1.8	1.2
3,500	2.8	31	1.7	1.3	0.9
4,000	2.4	41	1.3	1.0	0.7
4,500	2.2	52	1.1	0.8	0.5
5,000	2.0	64	0.8	0.6	0.4
6,000	1.6	92	0.6	0.4	0.3

P3000 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K = 1.0 *kN*	K = 1.2 *kN*
600	14.2	43.3	40.2	36.1	32.4
750	13.6	39.9	36.1	31.5	27.6
1,000	12.5	34.5	30.2	25.3	21.3
1,250	11.4	29.8	25.3	20.5	16.7
1,500	10.3	25.8	21.3	16.7	13.6
1,750	9.4	22.5	18.1	14.0	11.0
2,000	8.5	19.6	15.5	11.9	8.5
2,250	7.8	17.2	13.6	9.6	**
2,500	7.2	15.3	11.9	**	**
2,750	6.4	13.7	10.1	**	**

P3001 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K = 1.0 *kN*	K = 1.2 *kN*
600	25.5	97.1	94.5	91.1	88.0
750	25.3	94.3	91.1	87.3	84.0
1,000	24.9	89.8	86.1	82.2	74.5
1,250	24.6	85.8	82.2	72.4	61.8
1,500	23.8	82.6	74.5	61.8	49.2
1,750	22.8	77.0	66.1	51.3	37.5
2,000	21.4	70.3	57.6	41.3	28.7
2,250	19.9	63.4	49.2	32.7	22.7
2,500	18.2	56.5	41.3	26.5	18.4
2,750	16.5	49.8	34.2	21.9	**

P3000/P3001 - Elements of Section (*metric*)

Parameter		P3000		P3001	
Area of Section		3.23	cm^2	6.45	cm^2
Axis 1-1					
	Moment of Inertia (I)	4.97	cm^4	24.61	cm^4
	Section Modulus (S)	2.51	cm^3	7.05	cm^3
	Radius of Gyration (r)	1.24	cm	1.95	cm
Axis 2-2					
	Moment of Inertia (I)	8.47	cm^4	16.93	cm^4
	Section Modulus (S)	4.10	cm^3	8.20	cm^3
	Radius of Gyration (r)	1.62	cm	1.62	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

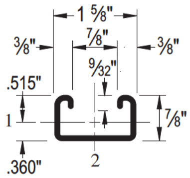
1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

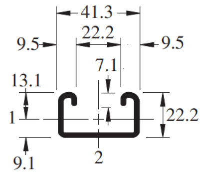
   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series........85%**

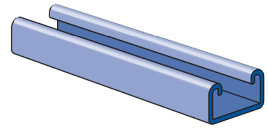
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P3300

GR PG PL



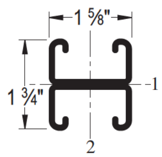


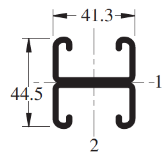


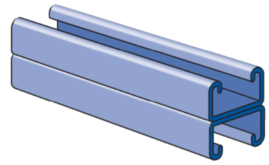
Wt/100 Ft: 134 Lbs (200 kg/100 m)
Allowable Moment 1,800 In-Lbs (200 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P3301

GR PG





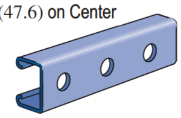


Wt/100 Ft: 269 Lbs (400 kg/100 m)
Allowable Moment 5,060 In-Lbs (570 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P3300 HS

GR PG

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

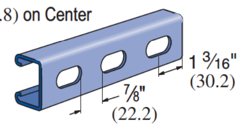


Wt/100 Ft: 130 Lbs (193 kg/100 m)

P3300 T

GR PG

Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center

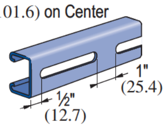


Wt/100 Ft: 130 Lbs (193 kg/100 m)

P3300 SL

GR PG

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

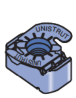


Wt/100 Ft: 130 Lbs (193 kg/100 m)

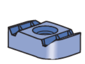
Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74

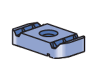
P4006-0832
P4006-1024
P4006-1420
P4007
P4008
P4009
P4010



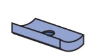
P4006T1420
P4008T
P4010T



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, ZD; Standard Lengths: 10' & 20'

P3300 - Beam Loading

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	0.89	90	70	40
84	170	1.20	70	50	30
96	150	1.59	50	40	30
108	130	1.96	40	30	20
120	120	2.48	30	20	20

P3301 - Beam Loading

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	860
48	840	0.23	840	720	480
60	680	0.37	620	460	310
72	560	0.52	430	320	210
84	480	0.71	310	240	160
96	420	0.93	240	180	120
108	380	1.20	190	140	100
120	340	1.47	150	120	80
144	280	2.09	110	80	50

P3300 - Column Loading

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	2,360	7,740	7,260	6,350	5,390
36	2,120	6,470	5,390	3,990	2,810
48	1,760	4,910	3,550	2,270	1,580
60	1,380	3,440	2,270	1,460	**
72	1,080	2,390	1,580	**	**

P3301 - Column Loading

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	4,290	16,990	16,580	15,770	14,720
36	4,150	15,890	14,720	12,980	11,120
48	3,940	14,160	12,360	9,880	7,510
60	3,650	12,210	9,880	6,940	4,820
72	3,270	10,190	7,510	4,820	3,350
84	2,800	8,220	5,530	3,540	**
96	2,410	6,420	4,240	**	**
108	2,080	5,070	3,350	**	**

P3300/P3301 - Elements of Section

Parameter	P3300		P3301	
Area of Section	0.395	In^2	0.790	In^2
Axis 1-1				
Moment of Inertia (I)	0.037	In^4	0.176	In^4
Section Modulus (S)	0.072	In^3	0.201	In^3
Radius of Gyration (r)	0.306	In	0.472	In
Axis 2-2				
Moment of Inertia (I)	0.143	In^4	0.285	In^4
Section Modulus (S)	0.176	In^3	0.351	In^3
Radius of Gyration (r)	0.601	In	0.601	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

   "KO" Series....... 95%　　**"T" Series 85%**

   "HS" Series .... 90%　　**"SL" Series........85%**
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P3300 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	2.7	2	2.7	2.7	1.9
750	2.2	4	2.2	1.8	1.2
1,000	1.6	7	1.3	1.0	0.7
1,250	1.3	10	0.8	0.6	0.4
1,500	1.1	15	0.6	0.4	0.3
1,750	0.9	21	0.4	0.3	0.2
2,000	0.8	27	0.3	0.3	0.2
2,500	0.7	43	0.2	0.2	0.1
3,000	0.5	60	0.1	0.1	0.1
3,500	0.4	79	0.1	0.1	NR

P3301 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	7.6	1	7.6	7.6	7.6
750	6.1	2	6.1	6.1	5.6
1,000	4.6	4	4.6	4.6	3.2
1,250	3.6	6	3.6	3.1	2.0
1,500	3.1	9	2.8	2.1	1.4
1,750	2.6	12	2.1	1.6	1.0
2,000	2.3	16	1.6	1.2	0.8
2,500	1.8	25	1.0	0.8	0.5
3,000	1.5	36	0.7	0.5	0.4
3,500	1.3	48	0.5	0.4	0.3
4,000	1.2	65	0.4	0.3	0.2

P3300 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	10.5	34.6	32.6	28.6	24.4
750	10.1	32.3	28.6	23.3	18.2
1,000	9.1	26.9	21.6	15.0	10.5
1,250	7.6	21.2	15.0	9.6	6.7
1,500	6.3	15.8	10.5	6.7	**
1,750	5.1	11.6	7.6	**	**

P3301 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kg*
600	19.1	75.7	73.9	70.5	66.0
750	18.9	73.8	70.5	64.7	58.4
1,000	18.2	68.6	62.7	53.9	44.8
1,250	17.4	62.1	53.9	42.6	31.9
1,500	16.4	55.0	44.8	31.9	22.2
1,750	15.0	47.6	36.0	23.4	16.3
2,000	13.3	40.3	28.0	17.9	**
2,250	11.8	33.4	22.2	14.1	**
2,500	10.4	27.2	17.9	**	**
2,750	9.2	22.5	14.8	**	**

P3300/P3301 - Elements of Section *(Metric)*

Parameter	P3300		P3301	
Area of Section	2.55	cm^2	5.10	cm^2
Axis 1-1				
Moment of Inertia (I)	1.54	cm^4	7.33	cm^4
Section Modulus (S)	1.18	cm^3	3.30	cm^3
Radius of Gyration (r)	0.78	cm	1.20	cm
Axis 2-2				
Moment of Inertia (I)	5.94	cm^4	11.87	cm^4
Section Modulus (S)	2.88	cm^3	5.75	cm^3
Radius of Gyration (r)	1.53	cm	1.53	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

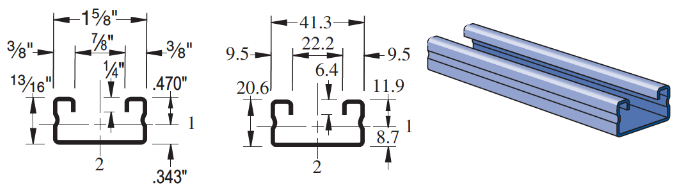
1. Beam loads are given in <u>*total*</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

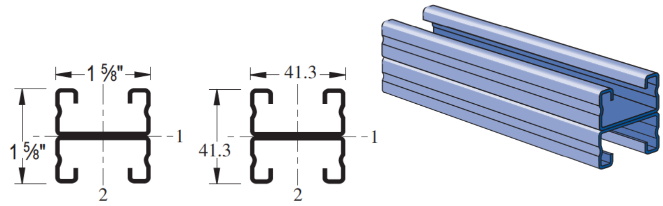
1 5/8" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

P4000 — HG PG GR



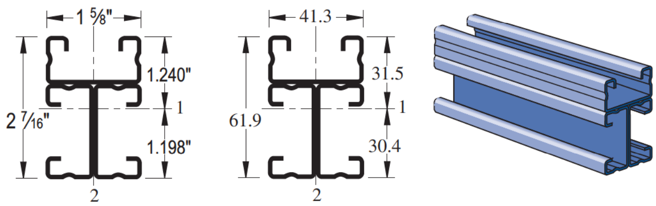
Wt/100 Ft: 83 Lbs (123 kg/100 m)
Allowable Moment 1,230 In-Lbs (140 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P4001 — GR PG



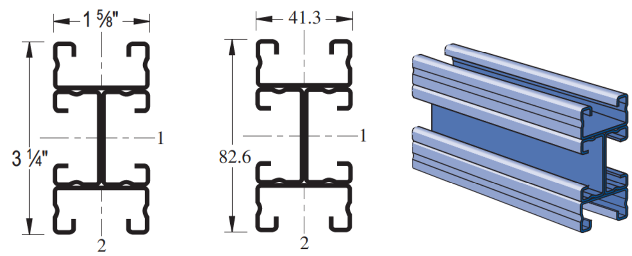
Wt/100 Ft: 166 Lbs (246 kg/100 m)
Allowable Moment 3,210 In-Lbs (360 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P4003



Wt/100 Ft: 248 Lbs (370 kg/100 m)
Allowable Moment 8,600 In-Lbs (970 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

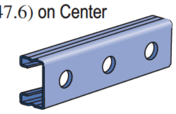
P4004



Wt/100 Ft: 331 Lbs (493 kg/100 m)
Allowable Moment 13,650 In-Lbs (1,540 N•m)
16 Gauge Nominal Thickness .060" (1.5mm)

P4000 HS — GR PG

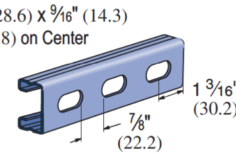
9⁄16" (14.3) Dia. Holes
1 7⁄8" (47.6) on Center



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

P4000 T — GR PG

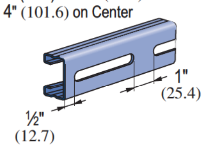
Slots are
1 1⁄8" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center



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

P4000 SL — GR PG

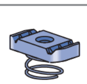
Slots are
3" (76.2) x 13⁄32" (10.3)
4" (101.6) on Center



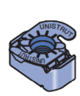
Wt/100 Ft: 79 Lbs (118 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74

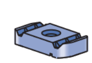


P4006-0832
P4006-1024
P4006-1420
P4007
P4008
P4009
P4010

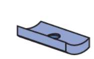


P4006T1420
P4008T
P4010T

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, ZD; Standard Lengths: 10' & 20'

P4000 - Beam Loading

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	410	0.11	410	370	250
36	270	0.24	220	170	110
48	200	0.43	120	90	60
60	160	0.67	80	60	40
72	140	1.01	60	40	30
84	120	1.38	40	30	20
96	100	1.72	30	20	20
108	90	2.20	20	20	10
120	80	2.68	20	10	10

P4001 - Beam Loading

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	810*	0.05	810*	810*	810*
36	710	0.14	710	710	500
48	540	0.25	540	430	280
60	430	0.40	360	270	180
72	360	0.57	250	190	130
84	310	0.78	190	140	90
96	270	1.02	140	110	70
108	240	1.29	110	80	60
120	210	1.54	90	70	50
144	180	2.29	60	50	30

P4000 - Column Loading

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	1,630	4,670	4,290	3,780	3,310
36	1,450	3,840	3,310	2,460	1,730
48	1,160	3,030	2,190	1,400	970
60	870	2,120	1,400	900	**
72	670	1,470	970	**	**

P4001 - Column Loading

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	2,830	10,390	10,000	9,470	8,960
36	2,740	9,530	8,960	7,870	6,700
48	2,590	8,620	7,480	5,910	4,440
60	2,340	7,380	5,910	4,090	2,840
72	2,020	6,110	4,440	2,840	1,970
84	1,700	4,880	3,260	2,090	**
96	1,440	3,780	2,500	**	**
108	1,230	2,990	1,970	**	**

P4000/P4001 - Elements of Section

Parameter	P4000		P4001	
Area of Section	0.244	In^2	0.487	In^2
Axis 1-1				
Moment of Inertia (I)	0.023	In^4	0.104	In^4
Section Modulus (S)	0.049	In^3	0.128	In^3
Radius of Gyration (r)	0.306	In	0.462	In
Axis 2-2				
Moment of Inertia (I)	0.092	In^4	0.183	In^4
Section Modulus (S)	0.113	In^3	0.225	In^3
Radius of Gyration (r)	0.613	In	0.613	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P4000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	1.9	3	1.9	1.7	1.2
750	1.5	4	1.5	1.1	0.7
1,000	1.1	8	0.8	0.6	0.4
1,250	0.9	12	0.5	0.4	0.3
1,500	0.8	17	0.4	0.3	0.2
1,750	0.6	23	0.3	0.2	0.1
2,000	0.5	29	0.2	0.1	0.1
2,500	0.4	47	0.1	0.1	NR
3,000	0.4	65	0.1	0.1	NR

P4001 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	3.6 *	1	3.6 *	3.6 *	3.6 *
750	3.6 *	2	3.6 *	3.6 *	3.3
1,000	2.9	4	2.9	2.8	1.9
1,250	2.3	7	2.3	1.8	1.2
1,500	2.0	10	1.6	1.2	0.8
1,750	1.6	13	1.2	0.9	0.6
2,000	1.5	17	0.9	0.7	0.5
2,500	1.2	27	0.6	0.4	0.3
3,000	1.0	39	0.4	0.3	0.2
3,500	0.8	54	0.3	0.2	0.1

P4000 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K = 1.0 *kN*	K = 1.2 *kN*
600	7.2	20.9	19.2	17.0	14.9
750	6.9	19.1	17.0	14.4	11.3
1,000	6.1	16.1	13.3	9.2	6.5
1,250	5.0	13.0	9.2	5.9	4.1
1,500	4.0	9.7	6.5	4.1	**
1,750	3.2	7.2	4.7	**	**

P4001 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K = 1.0 *kN*	K = 1.2 *kN*
600	12.6	46.3	44.6	42.3	40.0
750	12.4	44.5	42.3	39.5	35.4
1,000	12.1	41.3	38.2	32.6	26.9
1,250	11.4	37.8	32.6	25.4	18.8
1,500	10.5	33.3	26.9	18.8	13.0
1,750	9.4	28.6	21.3	13.8	9.6
2,000	8.1	24.1	16.5	10.5	**
2,250	7.1	19.8	13.0	8.4	**
2,500	6.2	16.0	10.5	**	**
2,750	5.4	13.2	8.7	**	**

P4000/P4001 - Elements of Section (metric)

Parameter		P4000		P4001	
Area of Section		1.57	cm^2	3.14	cm^2
Axis 1-1					
	Moment of Inertia (I)	0.95	cm^4	4.32	cm^4
	Section Modulus (S)	0.80	cm^3	2.09	cm^3
	Radius of Gyration (r)	0.78	cm	1.17	cm
Axis 2-2					
	Moment of Inertia (I)	3.81	cm^4	7.62	cm^4
	Section Modulus (S)	1.85	cm^3	3.69	cm^3
	Radius of Gyration (r)	1.56	cm	1.56	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

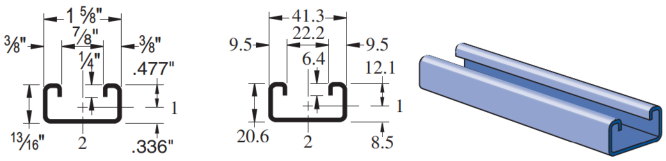
1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P4100

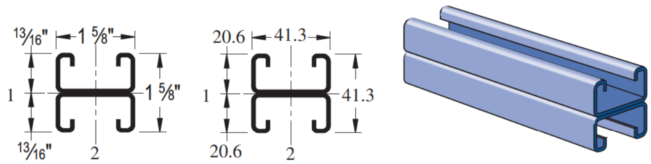
GR PG



Wt/100 Ft: 98 Lbs (147 kg/100 m)
Allowable Moment 1,360 In-Lbs (150 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

P4101

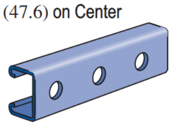
GR PG



Wt/100 Ft: 197 Lbs (293 kg/100 m)
Allowable Moment 3,610 In-Lbs (410 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

P4100 HS

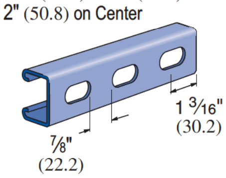
GR PG



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

P4100 T

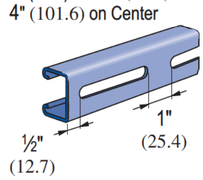
GR PG



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

P4100 SL

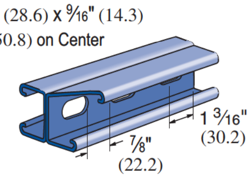
GR PG



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

P4101 T

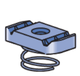
GR PG



Wt/100 Ft: 174 Lbs (259 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



P4006-0832
P4006-1024
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P4007
P4008
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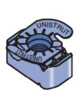

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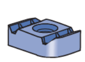
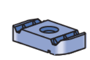


P4012
P4023



P3006-0832
P3006-1024
P3006-1420
P3007
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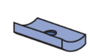


P3016-0632
P3016-0832
P3016-1024
P3016-1420

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

P4100 - Beam Loading

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	450	0.11	450	420	280
36	300	0.24	250	190	130
48	230	0.44	140	110	70
60	180	0.67	90	70	50
72	150	0.96	60	50	30
84	130	1.32	50	30	20
96	110	1.67	40	30	20
108	100	2.16	30	20	10
120	90	2.67	20	20	10
144	80	4.09	20	NR	NR
168	60	4.88	NR	NR	NR
192	60	7.28	NR	NR	NR
216	50	8.64	NR	NR	NR
240	50	11.85	NR	NR	NR

P4101 - Beam Loading

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	1,090*	0.06	1,090*	1,090*	1,090*
36	800	0.14	800	800	570
48	600	0.25	600	480	320
60	480	0.39	410	310	200
72	400	0.57	280	210	140
84	340	0.76	210	160	100
96	300	1.00	160	120	80
108	270	1.29	130	90	60
120	240	1.57	100	80	50
144	200	2.26	70	50	40
168	170	3.05	50	40	30
192	150	4.02	40	NR	NR
216	130	4.96	NR	NR	NR
240	120	6.28	NR	NR	NR

P4100 - Column Loading

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	1,840	5,610	5,210	4,570	3,850
36	1,640	4,660	3,850	2,800	1,960
48	1,310	3,490	2,480	1,590	1,100
60	1,000	2,400	1,590	**	**
72	770	1,670	1,100	**	**

P4101 - Column Loading

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	3,240	12,370	11,950	11,370	10,540
36	3,120	11,470	10,540	9,160	7,720
48	2,940	10,090	8,680	6,770	4,980
60	2,680	8,560	6,770	4,590	3,190
72	2,310	7,010	4,980	3,190	2,220
84	1,950	5,530	3,660	2,340	**
96	1,650	4,250	2,800	**	**
108	1,410	3,360	2,220	**	**

P4100/P4101 - Elements of Section

Parameter	P4100		P4101	
Area of Section	0.290	In^2	0.579	In^2
Axis 1-1				
Moment of Inertia (I)	0.026	In^4	0.117	In^4
Section Modulus (S)	0.054	In^3	0.143	In^3
Radius of Gyration (r)	0.298	In	0.449	In
Axis 2-2				
Moment of Inertia (I)	0.107	In^4	0.214	In^4
Section Modulus (S)	0.132	In^3	0.264	In^3
Radius of Gyration (r)	0.609	In	0.608	In

Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:
   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series........85%**
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P4100 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	2.0	3	2.0	2.0	1.3
750	1.6	4	1.6	1.2	0.8
1,000	1.2	7	0.9	0.7	0.4
1,250	1.0	11	0.6	0.4	0.3
1,500	0.8	16	0.4	0.3	0.2
1,750	0.7	23	0.3	0.2	0.1
2,000	0.6	30	0.2	0.2	0.1
2,500	0.5	46	0.1	0.1	0.1
3,000	0.4	65	0.1	0.1	NR

P4101 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	4.8 *	1	4.8 *	4.8 *	4.8 *
750	4.4	2	4.4	4.4	3.7
1,000	3.2	4	3.2	3.2	2.1
1,250	2.6	7	2.6	2.0	1.3
1,500	2.2	10	1.9	1.4	0.9
1,750	1.9	13	1.4	1.0	0.7
2,000	1.6	17	1.1	0.8	0.5
2,500	1.3	27	0.7	0.5	0.4
3,000	1.1	38	0.5	0.4	0.2
3,500	0.9	53	0.4	0.3	0.2

P4100 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	8.2	25.1	23.3	20.6	17.4
750	7.8	23.2	20.6	16.6	12.8
1,000	6.9	19.3	15.3	10.5	7.3
1,250	5.6	15.0	10.5	6.7	4.7
1,500	4.5	11.0	7.3	4.7	**
1,750	3.6	8.1	5.3	**	**

P4101 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	14.4	55.1	53.3	50.8	47.2
750	14.2	53.2	50.8	46.3	41.2
1,000	13.7	49.4	44.7	37.8	30.8
1,250	13.0	44.2	37.8	29.1	21.1
1,500	12.0	38.7	30.8	21.1	14.6
1,750	10.7	33.0	24.2	15.5	10.8
2,000	9.3	27.4	18.5	11.9	**
2,250	8.1	22.2	14.6	9.4	**

P4100/P4101 - Elements of Section (metric)

Parameter		P4100		P4101	
Area of Section		1.87	cm^2	3.74	cm^2
Axis 1-1					
	Moment of Inertia (I)	1.07	cm^4	4.85	cm^4
	Section Modulus (S)	0.88	cm^3	2.35	cm^3
	Radius of Gyration (r)	0.76	cm	1.14	cm
Axis 2-2					
	Moment of Inertia (I)	4.46	cm^4	8.93	cm^4
	Section Modulus (S)	2.16	cm^3	4.32	cm^3
	Radius of Gyration (r)	1.55	cm	1.55	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

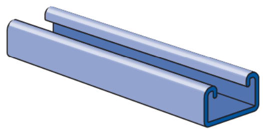
   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series 85%**

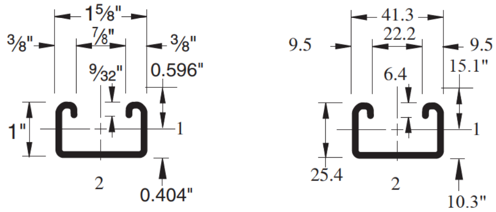
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

1 5/8" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

P4400

GR PG

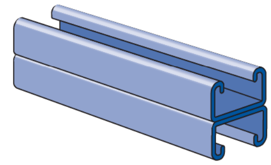


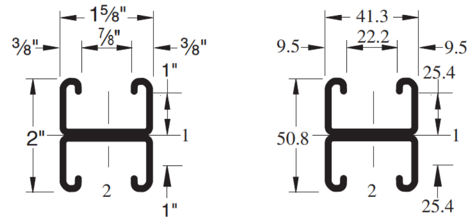


Wt/100 Ft: 144 Lbs (210 kg/100 m)
Allowable Moment 2,300 In-Lbs (260 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P4401

GR PG



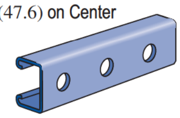


Wt/100 Ft: 289 Lbs (430 kg/100 m)
Allowable Moment 6,410 In-Lbs (725 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P4400 HS

GR PG

9⁄16" (14.3) Dia. Holes
1 ⅞" (47.6) on Center

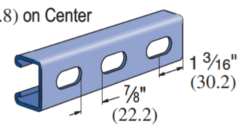


Wt/100 Ft: 136 Lbs (201 kg/100 m)

P4400 T

GR PG

Slots are
1⅛" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center

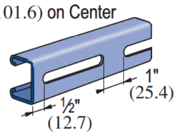


Wt/100 Ft: 136 Lbs (201 kg/100 m)

P4400 SL

GR PG

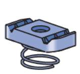
Slots are
3" (76.2) x 13⁄32" (10.3)
4" (101.6) on Center



Wt/100 Ft: 136 Lbs (201 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



P4006-0832
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P4008
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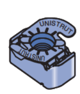
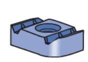
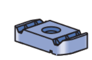


P4006T1420
P4008T
P4010T



P4012
P4023



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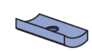
P3006-1024
P3006-1420
P3007
P3008
P3009
P3013



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

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

P4400 - Beam Loading

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	770	0.09	770	770	580
36	510	0.20	510	390	260
48	380	0.35	290	220	150
60	310	0.56	190	140	90
72	260	0.80	130	100	60
84	220	1.08	90	70	50
96	190	1.39	70	50	40
108	170	1.78	60	40	30
120	150	2.15	50	30	20
144	130	3.22	30	20	20

P4401 - Beam Loading

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	2,140*	0.05	2,140*	2,140*	2,140*
36	1,420	0.11	1,420	1,420	1,240
48	1,070	0.20	1,070	1,040	700
60	850	0.32	850	670	450
72	710	0.46	620	460	310
84	610	0.63	450	340	230
96	530	0.81	350	260	170
108	470	1.03	280	210	140
120	430	1.29	220	170	110
144	360	1.86	150	120	80
168	310	2.54	110	90	60
192	270	3.31	90	70	NR
216	240	4.19	70	NR	NR
240	210	5.03	60	NR	NR

P4400 - Column Loading

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	2,620	8,280	7,760	7,140	6,580
36	2,470	7,210	6,580	5,310	4,030
48	2,180	6,200	4,870	3,280	2,280
60	1,770	4,760	3,280	2,100	**
72	1,420	3,450	2,280	**	**
84	1,150	2,530	1,670	**	**
96	**	1,940	**	**	**

P4401 - Column Loading

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	4,720	18,310	17,840	17,300	16,760
36	4,640	17,360	16,760	15,260	13,610
48	4,470	16,280	14,720	12,460	10,170
60	4,230	14,590	12,460	9,610	6,980
72	3,930	12,750	10,170	6,980	4,840
84	3,520	10,880	7,990	5,130	3,560
96	3,070	9,050	6,130	3,920	**
108	2,690	7,340	4,840	3,100	**
120	2,360	5,940	3,920	**	**

P4400/P4401 - Elements of Section

Parameter	P4400		P4401	
Area of Section	0.424	In^2	0.849	In^2
Axis 1-1				
Moment of Inertia (I)	0.053	In^4	0.255	In^4
Section Modulus (S)	0.092	In^3	0.255	In^3
Radius of Gyration (r)	0.354	In	0.548	In
Axis 2-2				
Moment of Inertia (I)	0.161	In^4	0.322	In^4
Section Modulus (S)	0.198	In^3	0.396	In^3
Radius of Gyration (r)	0.616	In	0.616	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series 85%**
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P4400 - Beam Loading (metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	3.5	2.2	3.5	3.5	2.7
750	2.8	3.4	2.8	2.6	1.7
1000	2.1	6.0	2.0	1.5	1.0
1250	1.7	9.3	1.3	1.0	0.6
1500	1.4	13.4	0.9	0.6	0.5
1750	1.2	18.6	0.6	0.5	0.3
2000	1.0	23.6	0.5	0.4	0.2
2500	0.9	38.1	0.3	0.2	0.1
3000	0.7	55.5	0.2	0.2	0.1
3500	0.6	71.6	0.2	0.1	0.1

P4401 - Beam Loading (metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection		
			Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	9.7	1.2	9.7	9.7	9.7
750	7.9	2.0	7.9	7.9	7.9
1000	5.9	3.5	5.9	5.9	4.7
1250	4.7	5.5	4.7	4.5	3.0
1500	3.9	7.9	3.9	3.1	2.1
1750	3.4	10.6	3.1	2.3	1.5
2000	2.9	14.0	2.4	1.8	1.2
2500	2.4	21.8	1.5	1.1	0.8
3000	2.0	31.2	1.0	0.8	0.5
3500	1.7	42.6	0.8	0.6	0.4
4000	1.5	56.7	0.6	0.5	0.3
4500	1.3	70.9	0.5	0.4	0.2
5000	1.2	87.2	0.4	0.3	NR
6000	1.0	127.5	0.3	NR	NR

P4400 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	11.9	37.7	35.4	32.6	30.1
750	11.6	35.2	32.6	29.5	24.5
1000	10.9	31.5	27.9	21.3	15.3
1250	9.7	27.4	21.3	14.2	9.8
1500	8.2	22.1	15.3	9.8	**
1750	6.8	17.1	11.3	7.2	**
2000	5.7	13.1	8.6	**	**
2500	**	8.4	**	**	**

P4401 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	21.4	83.2	81.1	78.7	76.4
750	21.2	81.0	78.7	75.4	69.8
1000	20.9	77.7	73.6	65.8	57.3
1250	20.2	73.1	65.8	55.2	44.5
1500	19.3	66.8	57.3	44.5	32.7
1750	18.2	60.0	48.8	34.6	24.0
2000	16.8	53.1	40.5	26.4	18.4
2500	13.6	39.5	26.4	16.9	**
3000	10.9	27.9	18.4	**	**

P4400/P4401 - Elements of Section (metric)

Parameter		P4100		P4101	
Area of Section		2.74	cm^2	5.48	cm^2
Axis 1-1					
	Moment of Inertia (I)	2.21	cm^4	10.61	cm^4
	Section Modulus (S)	1.51	cm^3	4.18	cm^3
	Radius of Gyration (r)	0.90	cm	1.39	cm
Axis 2-2					
	Moment of Inertia (I)	6.70	cm^4	13.40	cm^4
	Section Modulus (S)	3.24	cm^3	6.49	cm^3
	Radius of Gyration (r)	1.57	cm	1.57	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

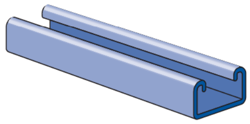
1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

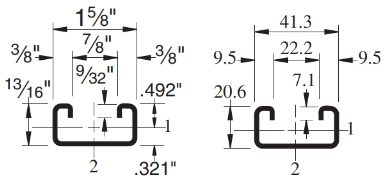
   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series........85%**

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P4520

GR PG

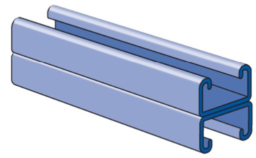


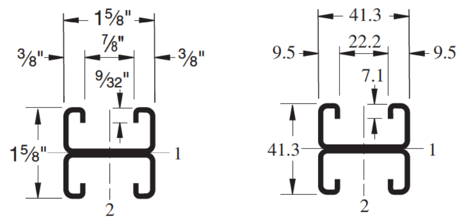


Wt/100 Ft: 131 Lbs (190 kg/100 m)
Allowable Moment 1,615 In-Lbs (183 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P4521

GR PG

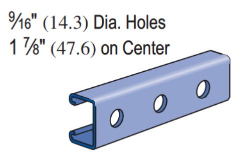




Wt/100 Ft: 262 Lbs (390 kg/100 m)
Allowable Moment 4,540 In-Lbs (513 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P4520 HS

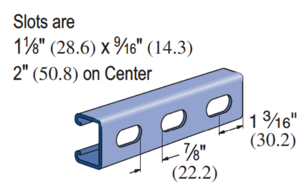
GR PG



Wt/100 Ft: 120 Lbs (177 kg/100 m)

P4520 T

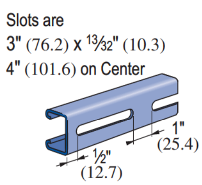
GR PG



Wt/100 Ft: 120 Lbs (177 kg/100 m)

P4520 SL

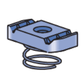
GR PG



Wt/100 Ft: 118 Lbs (175 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



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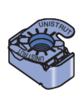

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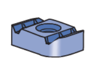
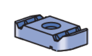


P4012
P4023



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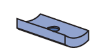


P3016-0632
P3016-0832
P3016-1024
P3016-1420

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

P4520 - Beam Loading

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	540	0.11	540	510	340
36	360	0.24	300	220	150
48	270	0.43	170	130	80
60	220	0.68	110	80	50
72	180	0.96	70	60	40
84	150	1.27	60	40	30
96	130	1.65	40	30	20
108	120	2.16	30	20	20
120	110	2.72	30	20	NR
144	90	3.84	20	NR	NR

P4521 - Beam Loading

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	1,510	0.06	1,510	1,510	1,510
36	1,010	0.14	1,010	1,010	710
48	760	0.25	760	600	400
60	610	0.40	510	380	260
72	500	0.56	360	270	180
84	430	0.77	260	200	130
96	380	1.01	200	150	100
108	340	1.29	160	120	80
120	300	1.56	130	100	60
144	250	2.25	90	70	40
168	220	3.14	70	50	NR
192	190	4.05	50	NR	NR
216	170	5.16	NR	NR	NR
240	150	6.24	NR	NR	NR

P4520 - Column Loading

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	2,250	7,480	6,800	5,820	4,810
36	1,980	5,950	4,810	3,380	2,350
48	1,580	4,310	2,970	1,900	**
60	1,210	2,880	1,900	**	**
72	950	2,000	**	**	**

P4521 - Column Loading

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	4,140	16,490	15,980	14,970	13,810
36	3,980	15,100	13,810	11,910	9,940
48	3,730	13,190	11,260	8,650	6,270
60	3,390	11,090	8,650	5,780	4,010
72	2,950	8,970	6,270	4,010	2,790
84	2,510	6,980	4,610	2,950	**
96	2,130	5,340	3,530	**	**
108	1,820	4,220	2,790	**	**
120	**	3,420	**	**	**

P4520/P4521 - Elements of Section

Parameter	P4400		P4401	
Area of Section	0.384	In^2	0.770	In^2
Axis 1-1				
Moment of Inertia (I)	0.031	In^4	0.146	In^4
Section Modulus (S)	0.064	In^3	0.180	In^3
Radius of Gyration (r)	0.283	In	0.436	In
Axis 2-2				
Moment of Inertia (I)	0.138	In^4	0.277	In^4
Section Modulus (S)	0.170	In^3	0.340	In^3
Radius of Gyration (r)	0.599	In	0.599	In

Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

UNISTRUT

P4520 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	2.5	2.6	2.5	2.4	1.6
750	2.0	4.1	2.0	1.5	1.0
1000	1.5	7.3	1.1	0.9	0.6
1250	1.2	11.3	0.7	0.5	0.4
1500	1.0	16.5	0.5	0.4	0.3
1750	0.9	22.6	0.4	0.3	0.2
2000	0.7	28.4	0.3	0.2	0.1
2500	0.6	45.0	0.2	0.1	0.1
3000	0.5	65.8	0.1	0.1	NR
3500	0.4	85.5	0.1	0.1	NR

P4521 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	7.0	1.6	7.0	7.0	7.0
750	5.6	2.4	5.6	5.6	4.8
1000	4.2	4.3	4.2	4.0	2.7
1250	3.4	6.7	3.4	2.6	1.7
1500	2.8	9.6	2.4	1.8	1.2
1750	2.4	13.3	1.8	1.3	0.9
2000	2.1	17.2	1.4	1.0	0.7
2500	1.7	27.0	0.9	0.6	0.5
3000	1.4	39.1	0.6	0.5	0.3
3500	1.2	52.0	0.5	0.3	0.2
4000	1.0	68.7	0.3	0.3	0.2
4500	0.9	85.1	0.3	0.2	NR
5000	0.8	105.0	0.2	NR	NR
6000	0.7	151.2	NR	NR	NR

P4520 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	10.3	34.1	31.1	26.8	22.2
750	9.7	30.9	26.8	21.1	15.8
1000	8.5	24.9	19.3	12.8	8.9
1250	6.9	18.9	12.8	8.2	**
1500	5.6	13.5	8.9	**	**
1750	4.6	9.9	6.5	**	**

P4521 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	18.8	74.9	72.8	68.3	63.1
750	18.5	72.5	68.3	61.8	54.7
1000	17.8	66.2	59.5	49.8	40.1
1250	16.8	58.9	49.8	37.8	27.0
1500	15.5	51.1	40.1	27.0	18.8
1750	14.0	43.1	31.1	19.9	13.8
2000	12.2	35.5	23.8	15.2	**
2500	9.3	23.0	15.2	**	**
3000	**	16.0	**	**	**

P4520/P4521 - Elements of Section (metric)

Parameter	P4100		P4101	
Area of Section	2.48	cm^2	4.97	cm^2
Axis 1-1				
Moment of Inertia (I)	1.29	cm^4	6.08	cm^4
Section Modulus (S)	1.05	cm^3	2.95	cm^3
Radius of Gyration (r)	0.72	cm	1.11	cm
Axis 2-2				
Moment of Inertia (I)	5.74	cm^4	11.53	cm^4
Section Modulus (S)	2.79	cm^3	5.57	cm^3
Radius of Gyration (r)	1.52	cm	1.53	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

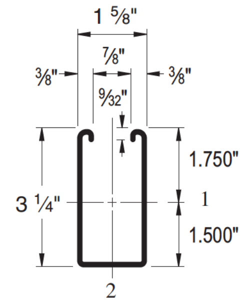
   "KO" Series.......95% **"T" Series 85%**
   "HS" Series ....90% **"SL" Series........85%**

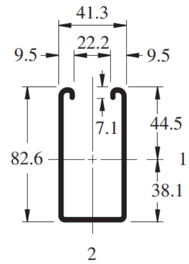
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

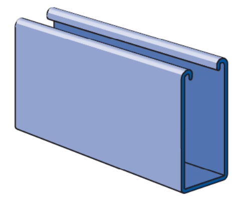
1 ⅝" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

P5000

GR PL PG



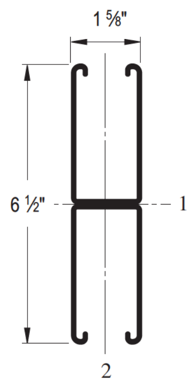


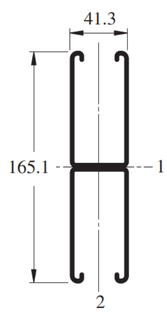


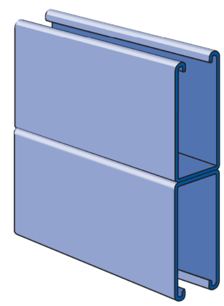
Wt/100 Ft: 305 Lbs (454 kg/100 m)
Allowable Moment 15,770 In-Lbs (1,780 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P5001

GR PG





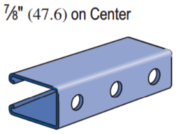


Wt/100 Ft: 610 Lbs (907 kg/100 m)
Allowable Moment 48,180 In-Lbs (5,440 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P5000 HS

GR PG

9⁄16" (14.3) Dia. Holes
1 ⅞" (47.6) on Center

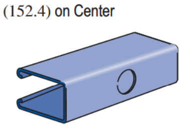


Wt/100 Ft: 300 Lbs (446 kg/100 m)

P5000 KO

GR PG

⅞" (22.2) Knockouts
6" (152.4) on Center

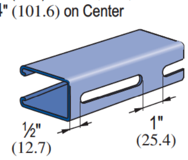


Wt/100 Ft: 305 Lbs (454 kg/100 m)

P5000 SL

GR PG

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

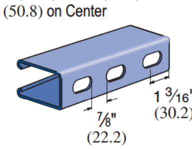


Wt/100 Ft: 300 Lbs (446 kg/100 m)

P5000 T

GR PG

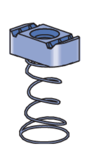
Slots are
1⅛" (28.6) x 9⁄16" (14.3)
2" (50.8) on Center



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

Channel Nuts (Refer to Pages 73,74 for Details)

See Page 73, 74



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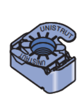
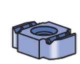
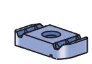
P5506-1024
P5506-1420
P5507
P5508
P5509
P5510



P1006T1420
P1008T
P1010T



P1012
P1023
P1024



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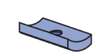
P3007
P3008
P3009
P3010



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

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

Channel Nuts (Refer to Hardware Section for Details)

P5000 - Beam Loading

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	3,500	0.07	3,500	3,500	3,500
48	2,630	0.12	2,630	2,630	2,630
60	2,100	0.18	2,100	2,100	1,920
72	1,750	0.26	1,750	1,750	1,330
84	1,500	0.36	1,500	1,470	980
96	1,310	0.47	1,310	1,120	750
108	1,170	0.59	1,170	890	590
120	1,050	0.73	960	720	480
144	880	1.06	670	500	330
168	750	1.43	490	370	240
192	660	1.88	370	280	190
216	580	2.35	300	220	150
240	530	2.95	240	180	120

P5001 - Beam Loading

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	6,890*	0.01	6,890*	6,890*	6,890*
36	6,890*	0.02	6,890*	6,890*	6,890*
48	6,890*	0.05	6,890*	6,890*	6,890*
60	6,420	0.10	6,420	6,420	6,420
72	5,350	0.14	5,350	5,350	5,350
84	4,590	0.19	4,590	4,590	4,590
96	4,020	0.25	4,020	4,020	4,020
108	3,570	0.32	3,570	3,570	3,360
120	3,210	0.39	3,210	3,210	2,720
144	2,680	0.57	2,680	2,680	1,890
168	2,290	0.77	2,290	2,080	1,390
192	2,010	1.01	2,010	1,590	1,060
216	1,780	1.27	1,680	1,260	840
240	1,610	1.58	1,360	1,020	680

P5000 - Column Loading

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	5,650	16,870	15,180	12,850	10,600
36	4,690	13,140	10,600	7,650	5,660
48	3,560	9,550	6,860	4,790	3,660
60	2,730	6,680	4,790	3,450	2,710
72	2,160	4,980	3,660	2,710	2,170
84	1,760	3,950	2,960	2,240	1,820
96	1,500	3,270	2,500	1,930	1,580
108	1,310	2,800	2,170	1,690	1,390
120	1,170	2,450	1,930	1,510	**
144	980	1,980	1,580	**	**
168	850	1,670	1,340	**	**

P5001 - Column Loading

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	10,670	39,230	38,030	36,210	34,240
36	10,350	36,450	34,240	31,200	28,260
48	9,940	33,220	30,200	26,430	23,190
60	9,290	29,950	26,430	22,470	19,380
72	8,560	26,880	23,190	19,380	16,450
84	7,860	24,140	20,520	17,040	12,090
96	7,220	21,790	18,370	13,330	9,250
108	6,600	19,790	16,450	10,530	7,310
120	5,760	18,130	13,330	8,530	**
144	4,390	14,020	9,250	**	**
168	3,420	10,300	6,800	**	**

P5000/P5001 - Elements of Section

Parameter	P5000		P5001	
Area of Section	0.897	In^2	1.793	In^2
Axis 1-1				
Moment of Inertia (I)	1.098	In^4	6.227	In^4
Section Modulus (S)	0.627	In^3	1.916	In^3
Radius of Gyration (r)	1.107	In	1.864	In
Axis 2-2				
Moment of Inertia (I)	0.433	In^4	0.866	In^4
Section Modulus (S)	0.533	In^3	1.066	In^3
Radius of Gyration (r)	0.695	In	0.695	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

1 5/8" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

1 5/8" Channel
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General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
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P5000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	23.8	1	23.8	23.8	23.8
750	19.0	1	19.0	19.0	19.0
1,000	14.2	2	14.2	14.2	14.2
1,250	11.4	3	11.4	11.4	11.4
1,500	9.5	5	9.5	9.5	8.8
1,750	8.1	6	8.1	8.1	6.5
2,000	7.1	8	7.1	7.1	4.9
2,500	5.7	12	5.7	4.8	3.2
3,000	4.8	18	4.4	3.3	2.2
3,500	4.1	25	3.2	2.4	1.6
4,000	3.6	32	2.5	1.9	1.2
4,500	3.2	40	2.0	1.5	1.0
5,000	2.8	50	1.6	1.2	0.8
6,000	2.4	71	1.1	0.8	0.5

P5001 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	30.6 *	0	30.6 *	30.6 *	30.6 *
750	30.6 *	0	30.6 *	30.6 *	30.6 *
1,000	30.6 *	1	30.6 *	30.6 *	30.6 *
1,250	30.6 *	1	30.6 *	30.6 *	30.6 *
1,500	29.0	2	29.0	29.0	29.0
1,750	24.9	3	24.9	24.9	24.9
2,000	21.8	4	21.8	21.8	21.8
2,500	17.4	7	17.4	17.4	17.4
3,000	14.5	10	14.5	14.5	12.5
3,500	12.5	13	12.5	12.5	9.2
4,000	10.9	17	10.9	10.5	7.0
4,500	9.7	22	9.7	8.3	5.6
5,000	8.7	27	8.7	6.8	4.5
6,000	7.2	39	6.2	4.7	3.1

P5000 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	25.2	75.5	68.1	58.0	48.0
750	23.5	67.5	58.0	45.7	35.0
1,000	19.4	53.7	41.9	29.3	21.8
1,250	15.4	41.0	29.3	20.5	15.7
1,500	12.4	30.5	21.8	15.7	12.3
1,750	10.2	23.8	17.3	12.8	10.2
2,000	8.5	19.3	14.4	10.8	8.7
2,250	7.3	16.3	12.3	9.4	7.6
2,500	6.5	14.1	10.8	8.3	6.9
2,750	5.8	12.4	9.6	7.5	6.2

P5001 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	47.5	174.9	169.7	161.7	153.2
750	46.8	169.2	161.7	150.9	139.8
1,000	45.6	158.2	147.2	132.6	118.8
1,250	44.0	146.3	132.6	115.6	101.2
1,500	41.6	134.3	118.8	101.2	87.4
1,750	38.9	122.9	106.6	89.4	76.8
2,000	36.3	112.5	96.2	80.0	61.2
2,250	33.9	103.2	87.4	69.6	48.4
2,500	31.6	95.0	80.0	56.4	39.1
2,750	29.3	87.8	72.9	46.6	32.4

P5000/P5001 - Elements of Section (metric)

Parameter	P5000		P5001	
Area of Section	5.78	cm^2	11.57	cm^2
Axis 1-1				
Moment of Inertia (I)	45.70	cm^4	259.17	cm^4
Section Modulus (S)	10.28	cm^3	31.40	cm^3
Radius of Gyration (r)	2.81	cm	4.73	cm
Axis 2-2				
Moment of Inertia (I)	18.02	cm^4	36.04	cm^4
Section Modulus (S)	8.73	cm^3	17.46	cm^3
Radius of Gyration (r)	1.77	cm	1.77	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

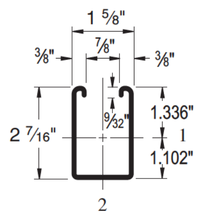
1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

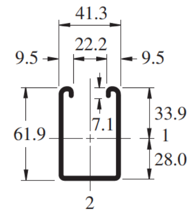
   "KO" Series....... 95% **"T" Series 85%**
   "HS" Series .... 90% **"SL" Series........85%**

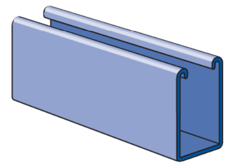
4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P5500

GR PG



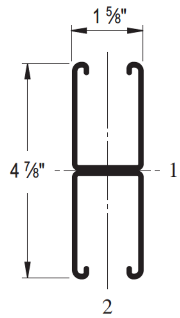


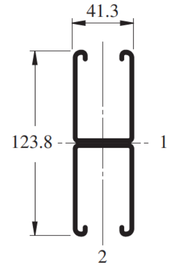


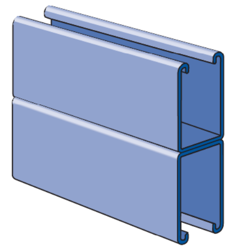
Wt/100 Ft: 247 Lbs (367 kg/100 m)
Allowable Moment 9,820 In-Lbs (1,110 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P5501

GR PG





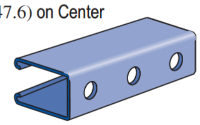


Wt/100 Ft: 494 Lbs (734 kg/100 m)
Allowable Moment 28,940 In-Lbs (3,270 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P5500 HS

GR PG

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

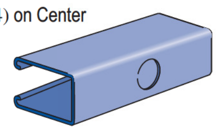


Wt/100 Ft: 242 Lbs (360 kg/100 m)

P5500 KO

GR PG

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

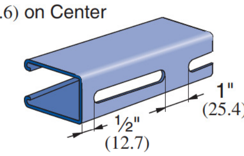


Wt/100 Ft: 247 Lbs (368 kg/100 m)

P5500 SL

GR PG

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

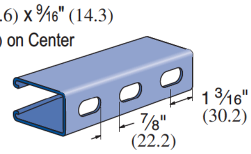


Wt/100 Ft: 242 Lbs (360 kg/100 m)

P5500 T

GR PG

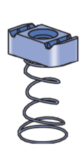
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



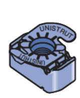
Wt/100 Ft: 242 Lbs (360 kg/100 m)

Channel Nuts (Refer to Pages 73,74 for Details)

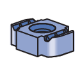
See Page 73, 74



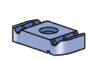
P5506-0832
P5506-1024
P5506-1420
P5507
P5508
P5509
P5510



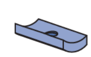
P1006T1420
P1008T
P1010T



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, ZD; Standard Lengths: 10' & 20'

P5500 - Beam Loading

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	3,270	0.04	3,270	3,270	3,270
36	2,180	0.09	2,180	2,180	2,180
48	1,640	0.15	1,640	1,640	1,420
60	1,310	0.24	1,310	1,310	910
72	1,090	0.34	1,090	950	630
84	940	0.47	930	700	470
96	820	0.61	710	530	360
108	730	0.78	560	420	280
120	650	0.95	460	340	230
144	550	1.39	320	240	160
168	470	1.89	230	170	120
192	410	2.46	180	130	90
216	360	3.07	140	110	70
240	330	3.86	110	90	60

P5501 - Beam Loading

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	5,220*	0.01	5,220*	5,220*	5,220*
36	5,220*	0.04	5,220*	5,220*	5,220*
48	4,820	0.08	4,820	4,820	4,820
60	3,860	0.13	3,860	3,860	3,860
72	3,220	0.19	3,220	3,220	3,220
84	2,760	0.26	2,760	2,760	2,500
96	2,410	0.34	2,410	2,410	1,920
108	2,140	0.42	2,140	2,140	1,510
120	1,930	0.52	1,930	1,840	1,230
144	1,610	0.76	1,610	1,280	850
168	1,380	1.03	1,250	940	630
192	1,210	1.35	960	720	480
216	1,070	1.70	760	570	380
240	960	2.09	610	460	310

P5500 - Column Loading

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	4,640	13,840	12,570	10,840	9,190
36	3,970	11,050	9,190	7,030	5,370
48	3,180	8,420	6,390	4,620	3,630
60	2,550	6,250	4,620	3,450	2,780
72	2,120	4,790	3,630	2,780	2,260
84	1,810	3,890	3,010	2,330	1,910
96	1,580	3,290	2,580	2,020	1,650
108	1,400	2,860	2,260	1,770	1,440
120	1,270	2,530	2,020	1,580	**
144	1,060	2,070	1,650	**	**
168	920	1,750	1,380	**	**

P5501 - Column Loading

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	8,580	31,810	30,880	29,520	28,100
36	8,350	29,700	28,100	26,000	24,070
48	8,080	27,390	25,330	22,910	20,940
60	7,720	25,170	22,910	20,510	17,170
72	7,270	23,190	20,940	17,170	12,700
84	6,780	21,510	18,740	13,430	9,330
96	6,130	20,110	15,630	10,290	7,150
108	5,450	17,750	12,700	8,130	5,650
120	4,800	15,260	10,290	6,590	**
144	3,760	10,830	7,150	**	**
168	2,970	7,950	5,250	**	**

P5500/P5501 - Elements of Section

Parameter	P5500		P5501	
Area of Section	0.726	In^2	1.452	In^2
Axis 1-1				
Moment of Inertia (I)	0.522	In^4	2.805	In^4
Section Modulus (S)	0.390	In^3	1.151	In^3
Radius of Gyration (r)	0.848	In	1.390	In
Axis 2-2				
Moment of Inertia (I)	0.334	In^4	0.669	In^4
Section Modulus (S)	0.411	In^3	0.823	In^3
Radius of Gyration (r)	0.679	In	0.679	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P5500 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	14.8	1	14.8	14.8	14.8
750	11.8	1	11.8	11.8	11.8
1,000	8.9	3	8.9	8.9	8.9
1,250	7.1	4	7.1	7.1	6.1
1,500	5.9	6	5.9	5.9	4.2
1,750	5.1	8	5.1	4.6	3.1
2,000	4.5	10	4.5	3.5	2.4
2,500	3.6	16	3.0	2.3	1.5
3,000	3.0	24	2.1	1.6	1.1
3,500	2.5	32	1.6	1.2	0.8
4,000	2.2	42	1.2	0.9	0.6
4,500	2.0	53	0.9	0.7	0.4
5,000	1.8	66	0.8	0.6	0.4
6,000	1.5	94	0.5	0.4	0.3

P5501 - Beam Loading (Metric)

Span	Max Allowable Uniform Load	Defl. at Uniform Load	Uniform Loading at Deflection Span/180	Span/240	Span/360
mm	kN	mm	kN	kN	kN
600	23.2 *	0	23.2 *	23.2 *	23.2 *
750	23.2 *	1	23.2 *	23.2 *	23.2 *
1,000	23.2 *	1	23.2 *	23.2 *	23.2 *
1,250	20.9	2	20.9	20.9	20.9
1,500	17.4	3	17.4	17.4	17.4
1,750	14.9	4	14.9	14.9	14.9
2,000	13.1	6	13.1	13.1	12.7
2,500	10.5	9	10.5	10.5	8.1
3,000	8.7	13	8.7	8.5	5.6
3,500	7.5	18	7.5	6.2	4.1
4,000	6.5	23	6.3	4.8	3.2
4,500	5.8	29	5.0	3.7	2.5
5,000	5.2	36	4.1	3.0	2.0
6,000	4.4	52	2.8	2.1	1.4

P5500 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	20.7	61.9	56.4	48.8	41.6
750	19.6	55.9	48.8	39.8	31.9
1,000	16.7	45.7	37.0	27.4	21.0
1,250	13.8	36.4	27.4	19.9	15.7
1,500	11.5	28.5	21.0	15.7	12.6
1,750	9.8	22.6	17.1	13.0	10.6
2,000	8.6	18.9	14.5	11.2	9.1
2,250	7.6	16.2	12.6	9.8	8.0
2,500	6.9	14.2	11.2	8.7	7.2
2,750	6.2	12.7	10.1	7.9	6.4

P5501 - Column Loading (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	*kN*	*kN*	*kN*	*kN*	*kN*
600	38.2	141.5	137.4	131.3	125.0
750	37.1	132.1	125.0	115.6	107.1
1,000	35.9	121.8	112.7	101.9	93.1
1,250	34.3	112.0	101.9	91.2	76.4
1,500	32.3	103.2	93.1	76.4	56.5
1,750	30.2	95.7	83.4	59.7	41.5
2,000	27.3	89.5	69.5	45.8	31.8
2,500	24.2	79.0	56.5	36.2	25.1
3,000	21.3	67.9	45.8	29.3	**
3,500	16.7	48.2	31.8	**	**
4,000	13.2	35.4	23.3	**	**

P5500/P5501 - Elements of Section (Metric)

Parameter		P5500		P5501	
Area of Section		4.68	cm^2	9.37	cm^2
Axis 1-1					
	Moment of Inertia (I)	21.71	cm^4	116.76	cm^4
	Section Modulus (S)	6.40	cm^3	18.86	cm^3
	Radius of Gyration (r)	2.15	cm	3.53	cm
Axis 2-2					
	Moment of Inertia (I)	13.91	cm^4	27.83	cm^4
	Section Modulus (S)	6.74	cm^3	13.48	cm^3
	Radius of Gyration (r)	1.72	cm	1.72	cm

Notes:

* Load limited by spot weld shear.

** KL/r > 200

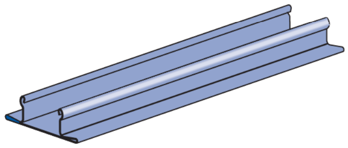
NR = Not Recommended.

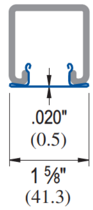
1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 62 for reduction factors for unbraced lengths.
3. For pierced channel, multiply beam loads by the following factor:

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

4. Deduct channel weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
6. All beam loads are for bending about Axis 1-1.

P1184



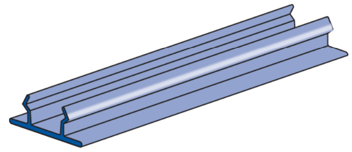


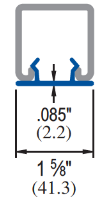
Finish: PG, PL
Standard length: 10' (3m)

Wt/100 Ft: 27 Lbs (40.2 kg/100 m)

P1184 P

P



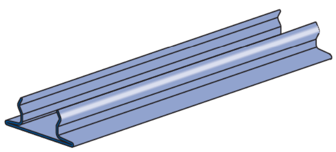


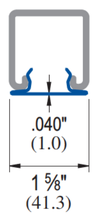
Material: Paintable PVC
Color: Green, Grey
Standard length: 10' (3m)

Wt/100 Ft: 11 Lbs (16.5 kg/100 m)

P3184

PG

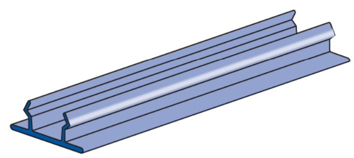


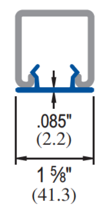


Finish: GR, PG, PL
Standard length: 10' (3m)

Wt/100 Ft: 47 Lbs (69.9 kg/100 m)

P3184 P

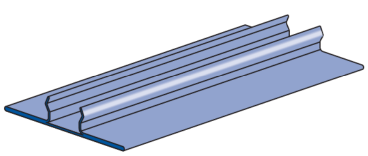


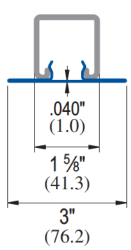


Material : G.E. Noryl® Plastic
Color: Green, Grey and White
Standard length: 10' (3m)

Wt/100 Ft: 9.4 Lbs (14.0 kg/100 m)

P3184 F



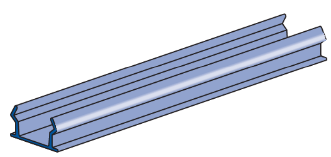


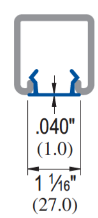
Finish: GR, PG, PL
Standard length: 16' (4.9m)

Wt/100 Ft: 90 Lbs (134 kg/100 m)

P3712 P

P



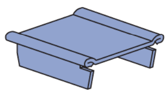


Material: Plastic
Color: Black
Standard length: 10' (3m)
Note: Use with P3170, P3270, and
P3370 series concrete insert.

Wt/100 Ft: 5.4 Lbs (8.0 kg/100 m)

P1280

EG



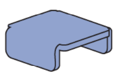
Use with P1000
Material: .060" (1.5)

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

P2407, P3280, P3380

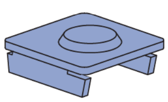
End Caps

EG



Part Number	Fits Channel	Wt/100 pcs Lbs *(kg)*
P2407	P1000	10 *4.5*
P3280	P3000	8 *3.6*
P3380*	P3300	5 *2.3*

P1280 A, P2280 A

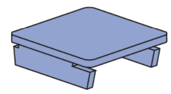


Part Number	Use With Channel	Wt/100 pcs Lbs *(kg)*
P1280A	P1000	11 *5.0*
P2280A	P2000	11 *5.0*

Material: .075" (1.9)

P1180, P2280,P4280, P5280, P5580

EG



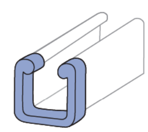
Part Number	Use With Channel	Wt/100 pcs Lbs (kg)
P1180	P1100	12 *5.4*
P2280	P2000	11 *5.0*
P4280	P4000	5 *2.3*
P5280	P5000	22 *10.0*
P5580	P5500	17 *7.7*

Material: .075" (1.9)

P2859

Frame Caps

GY WH



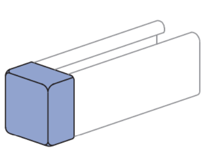
Part Number*	Use With Channel	Wt/100 pcs Lbs *(kg)*
P2859-10	P1000	12 *5.4*
P2859-11	P1001	12 *5.4*
P2859-12	P3300	5 *2.3*
P2859-13	P5000	22 *10.0*
P2859-14	P5500	17 *7.7*

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

P2860

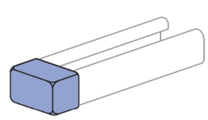
Plastic White End Caps

VY



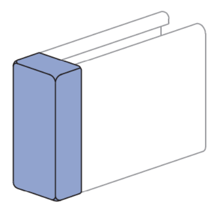
P2860-10

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



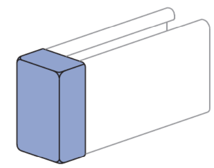
P2860-33

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)



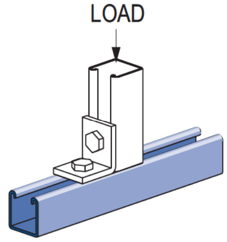
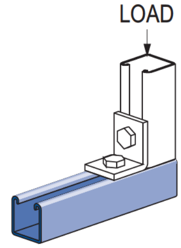
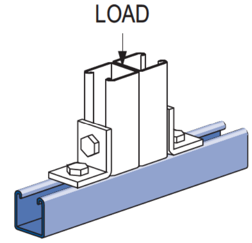
P2860-55

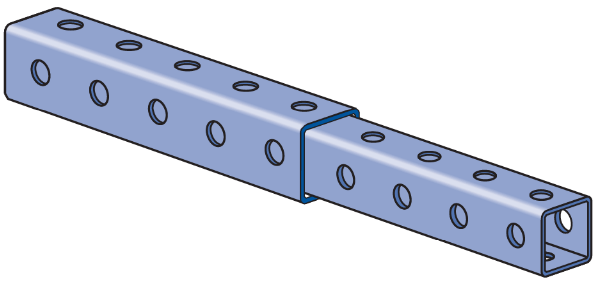
Use with P5500 channel.
Wt/100 pcs 4.7 Lbs (2.1 kg)

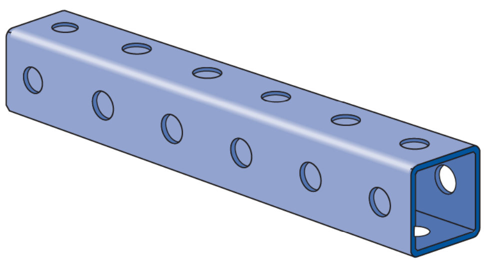
Lateral Bracing Load Reduction Charts

Span		Single Channel											Double Channel										
Ft. *(m)*	In. *(cm)*	P1000	P1100	P2000	P3000	P3300	P4000	P4100	P4400	P4520	P5000	P5500	P1001	P1101	P2001	P3001	P3301	P4001	P4101	P4401	P4521	P5001	P5501
2 *(0.61)*	24 *(61)*	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3 *(0.91)*	36 *(91)*	0.94	0.89	0.88	0.96	1.00	0.94	0.98	1.00	1.00	0.85	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4 *(1.22)*	48 *(122)*	0.88	0.78	0.75	0.91	1.00	0.88	0.94	0.98	1.00	0.70	0.77	1.00	0.98	0.98	1.00	1.00	0.98	1.00	1.00	1.00	0.97	0.98
5 *(1.52)*	60 *(152)*	0.82	0.68	0.61	0.88	0.98	0.83	0.91	0.96	1.00	0.55	0.67	0.97	0.93	0.92	0.98	1.00	0.93	0.96	1.00	1.00	0.90	0.93
6 *(1.83)*	72 *(183)*	0.78	0.59	0.48	0.84	0.97	0.79	0.89	0.94	0.98	0.44	0.58	0.93	0.87	0.85	0.95	0.97	0.88	0.92	0.97	0.97	0.83	0.87
7 *(2.13)*	84 *(213)*	0.75	0.52	0.41	0.82	0.96	0.75	0.86	0.92	0.97	0.38	0.51	0.89	0.82	0.78	0.92	0.95	0.83	0.89	0.95	0.95	0.76	0.81
8 *(2.44)*	96 *(244)*	0.71	0.47	0.35	0.79	0.94	0.72	0.84	0.91	0.96	0.33	0.46	0.85	0.76	0.71	0.88	0.92	0.79	0.85	0.92	0.92	0.68	0.76
9 *(2.74)*	108 *(274)*	0.69	0.43	0.32	0.77	0.93	0.69	0.82	0.89	0.95	0.30	0.42	0.81	0.70	0.64	0.85	0.90	0.74	0.81	0.90	0.90	0.61	0.70
10 *(3.05)*	120 *(305)*	0.66	0.40	0.29	0.75	0.92	0.66	0.80	0.87	0.94	0.28	0.40	0.78	0.65	0.57	0.82	0.87	0.69	0.78	0.87	0.87	0.54	0.64
12 *(3.66)*	144 *(366)*	0.61	0.36	0.25	0.70	0.89	0.60	0.76	0.84	0.91	0.24	0.36	0.70	0.54	0.45	0.76	0.82	0.60	0.71	0.82	0.83	0.43	0.53
14 *(4.27)*	168 *(427)*	0.55	0.32	0.23	0.66	0.86	0.55	0.73	0.81	0.89	0.22	0.32	0.63	0.45	0.38	0.70	0.78	0.51	0.64	0.77	0.78	0.35	0.45
16 *(4.88)*	192 *(488)*	0.51	0.30	0.21	0.62	0.84	0.50	0.69	0.78	0.87	0.21	0.30	0.56	0.39	0.32	0.64	0.73	0.44	0.57	0.72	0.73	0.30	0.39
18 *(5.49)*	216 *(549)*	0.47	0.28	0.19	0.58	0.81	0.47	0.65	0.75	0.84	0.19	0.28	0.49	0.34	0.28	0.58	0.68	0.39	0.50	0.67	0.68	0.27	0.34
20 *(6.10)*	240 *(610)*	0.44	0.26	0.18	0.54	0.78	0.43	0.61	0.72	0.82	0.18	0.26	0.44	0.31	0.25	0.52	0.63	0.35	0.45	0.62	0.63	0.24	0.30

Bearing Loads on Unistrut Channel

Loads are calculated based on 2007 Specification For The Design Of Cold Formed Steel Structural Members published by AISI	LOAD 	LOAD 	LOAD 
Channel	**Bearing Length 1⅝" (41 mm) Maximum Allowable Loads Lbs** *(kN)*	**Bearing Length 1⅝" (41 mm) Maximum Allowable Loads Lbs** *(kN)*	**Bearing Length 3¼" (82 mm) Maximum Allowable Loads Lbs** *(kN)*
P1000	6,700 *29.80*	3,100 *13.79*	7,700 *34.25*
P1100	3,500 *15.57*	1,700 *7.56*	4,000 *17.79*
P2000	2,500 *11.12*	1,200 *5.34*	3,000 *13.34*
P3000	6,700 *29.80*	3,200 *14.23*	7,700 *34.25*
P3300	6,800 *30.25*	3,200 *14.23*	7,800 *34.70*
P4000	2,600 *11.57*	1,200 *5.34*	3,000 *13.34*
P4100	3,500 *15.57*	1,800 *8.01*	4,100 *18.24*
P4400	7,300 *32.47*	3,400 *15.12*	8,400 *37.37*
P4520	7,300 *32.47*	3,400 *15.12*	8,400 *37.37*
P5000	6,500 *28.91*	3,000 *13.34*	7,500 *33.36*
P5500	6,600 *29.36*	3,100 *13.79*	7,600 *33.81*





MATERIAL

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

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:

Green Powder Coat (GR), conforming to commercial standards for Powder Coating,

Electro-galvanized (EG), conforming to ASTM B633 Type III SC1;

Hot-dipped Galvanized (HG), conforming to ASTM A123 or A153

Plain (PL).

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
Rec.Torque Ft/Lbs *(N•m)*	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs *(N•m)*	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

DESIGN LOAD

Load tables and charts are constructed to be in accordance with the SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE USING ASD METHOD.

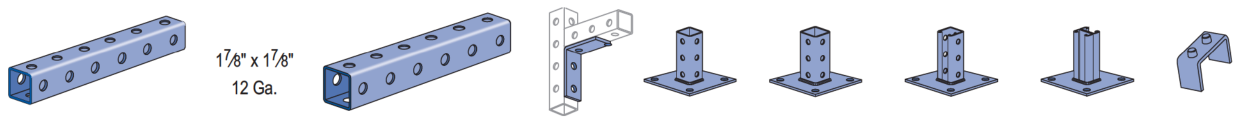
Type of Load	Safety Factor to Yield Strength	Safety Factor to Ultimate Strength
Beam Loads	1.67	2.0
Column Load	1.80	2.2

Telestrut Telescoping Tubing

Special Fittings and Post Bases for Telestrut Telescoping Tubing

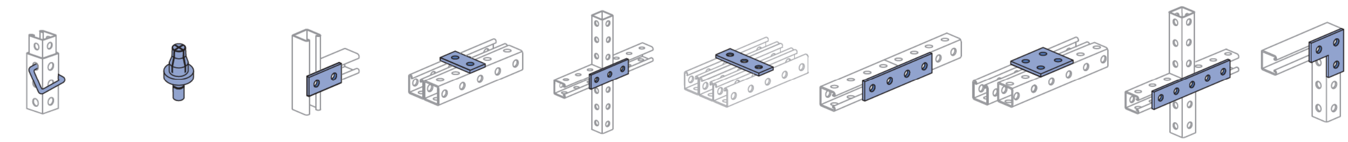
1⅝" x 1⅝"
12 Ga.

1⅞" x 1⅞"
12 Ga.

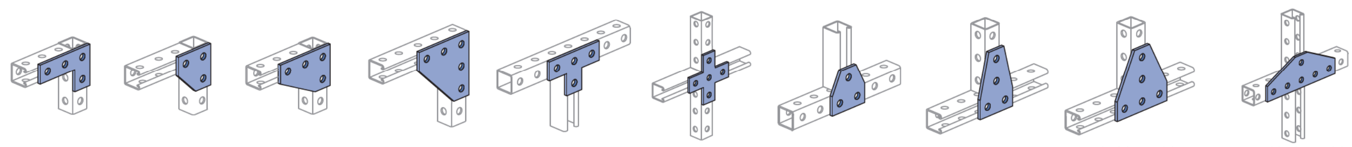


P9000-Pg 65 | P9200-Pg 65 | P9324-Pg 68 | P9011-Pg 68 | P9012-Pg 68 | P9013-Pg 69 | P9014-Pg 69 | P9207-Pg 68

Standard 1⅝" – Flat Plate Fittings

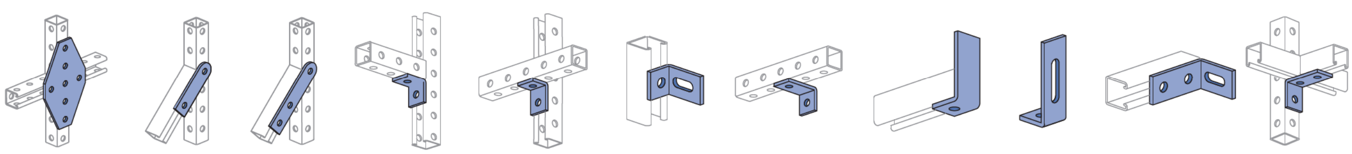


P9209-Pg 68 | P9010-Pg 68 | P1065-Pg 81 | P1924-Pg 81 | P1066-Pg 81 | P1925-Pg 81 | P1067-Pg 81 | P2079-Pg 81 | P1941-Pg 81 | P1036-Pg 81

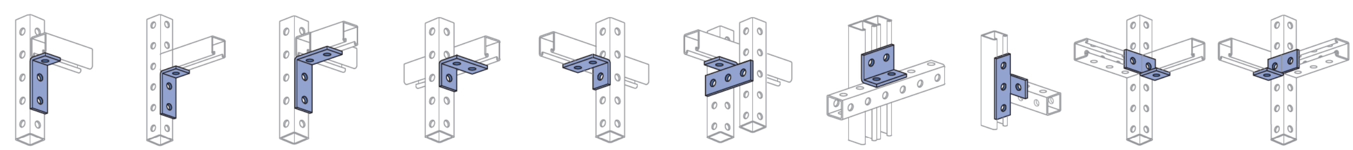


P1380A-Pg 81 | P1334-Pg 81 | P1380-Pg 81 | P1873-Pg 82 | P1031-Pg 82 | P1028-Pg 82 | P1356-Pg 82 | P1358-Pg 82 | P1726-Pg 82 | P1953-Pg 82

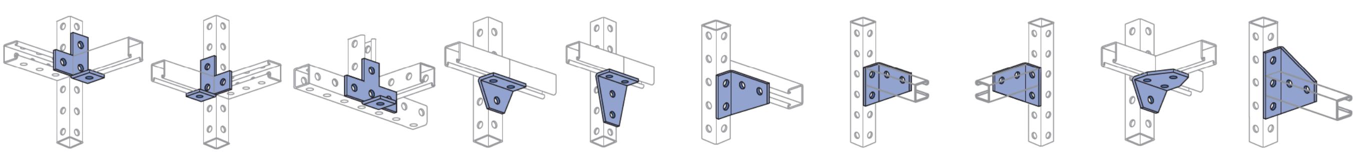
Standard 1⅝" – Ninety Degree Fittings



P1950-Pg 82 | P2325-Pg 81 | P2324-Pg 81 | P1026-Pg 82 | P1068-Pg 82 | P1750-Pg 83 | P1281-Pg 82 | P1538A-Pg 83 | P1498-Pg 83 | P1747-Pg 83 | P1458-Pg 82

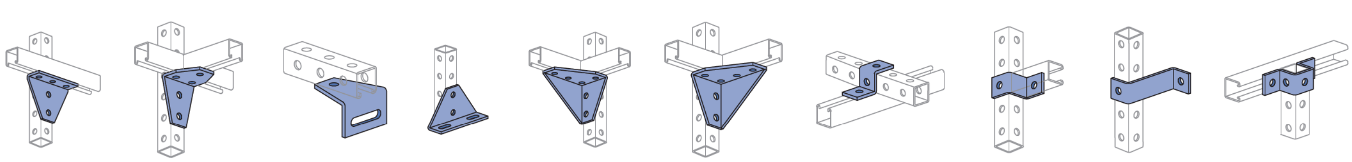


P1326-Pg 83 | P1346-Pg 83 | P1325-Pg 83 | P1822-Pg 83 | P1823-Pg 83 | P1821-Pg 83 | P1934-Pg 84 | P1033-Pg 83 | P1037-Pg 83 | P1038-Pg 83



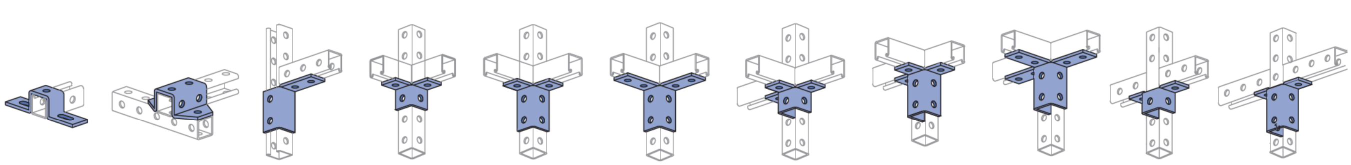
P1034-Pg 83 | P1035-Pg 84 | P1029-Pg 84 | P1357-Pg 84 | P1359-Pg 84 | P1381-Pg 84 | P1290-Pg 84 | P1291-Pg 84 | P1579-Pg 84 | P1727-Pg 84

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



P1728-Pg 84 | P2235-Pg 84 | P1713-Pg 84 | P1130-Pg 85 | P1956-Pg 84 | P1957-Pg 84 | P1045-Pg 86 | P1347-Pg 86 | P1479A-Pg 86 | P1047-Pg 87

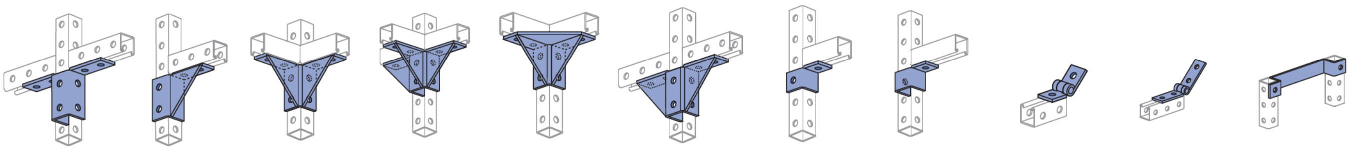
Standard 1⅝" – Wing Shape Fittings



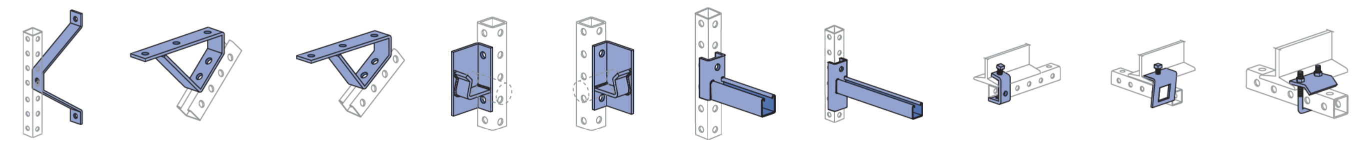
P1048-Pg 88 | P2326-Pg 88 | P2343 R-L-Pg 89 | P2223-Pg 89 | P2224-Pg 89 | P2225-Pg 89 | P2227-Pg 89 | P2228-Pg 89 | P2229-Pg 89 | P2345-Pg 89 | P2346-Pg 89

Standard 1⅝" Metal Framing – Wing Shape Fittings

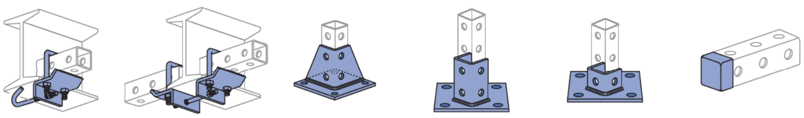
Standard 1⅝" – Misc. Fittings



P2347-Pg 89 | P2344 R-L-Pg 89 | P2226-Pg 89 | P2230-Pg 89 | P2245-Pg 89 | P2348-Pg 90 | P2341 R-L-Pg 89 | P2472 R-L-Pg 89 | P1843-Pg 104 | P1354A-Pg 104 | P1201-Pg 103



P1204-Pg 103 | P1944-Pg 103 | P2655-Pg 103 | P2354L-Pg 103 | P2354R-Pg 103 | P2231-Pg 93 | P2233-Pg 93 | P1271S-Pg 98 | P1796S-Pg 98 | P2785-Pg 98

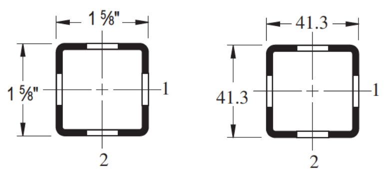


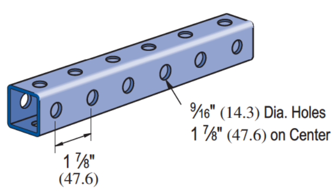
P2867-Pg 98 | P2868-Pg 99 | P1887-Pg 90 | P2072A-Pg 90 | P2072-Pg 90 | P2860-10-Pg 61

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.

P9000

GR PG

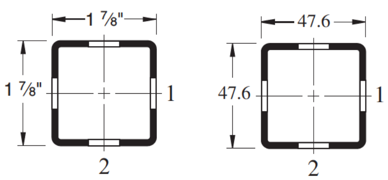


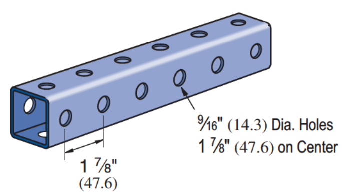


Wt/100 Ft: 188 Lbs (279 kg/100 m)
Allowable Moment 5,140 In-Lbs (580 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

P9200

GR PG

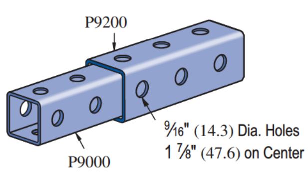


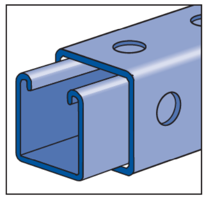


Wt/100 Ft: 223 Lbs (331 kg/100 m)
Allowable Moment 7,480 In-Lbs (850 N•m)
12 Gauge Nominal Thickness .105" (2.7mm)

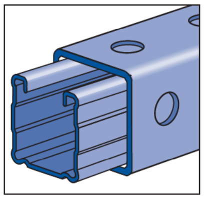
Telestrut's Telescoping Power

Telestrut can be combined with metal framing channel

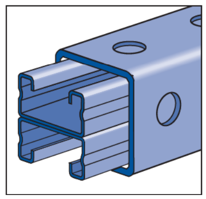




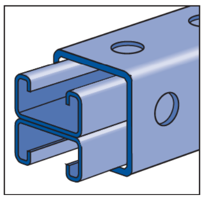
P1000 Series



P1100 Series



P4001 Series



P4101 Series

Note: Will not telescope with GR or HG finish

P9000 - Beam Loading

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	1,710	0.06	1,710	1,710	1,710
36	1,140	0.14	1,140	1,140	810
48	860	0.25	860	680	450
60	690	0.40	580	440	290
72	570	0.57	400	300	200
84	490	0.77	300	220	150
96	430	1.01	230	170	110
108	380	1.27	180	130	90
120	340	1.56	150	110	70
144	290	2.30	100	80	50
168	240	3.02	70	60	40
192	210	3.95	60	40	NR
216	190	5.09	40	NR	NR
240	170	6.24	40	NR	NR

P9200 - Beam Loading

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	980	730	490
72	830	0.49	680	510	340
84	710	0.67	500	370	250
96	620	0.87	380	290	190
108	550	1.10	300	230	150
120	500	1.37	240	180	120
144	420	1.98	170	130	80
168	360	2.70	120	90	60
192	310	3.47	100	70	50
216	280	4.47	80	60	NR
240	250	5.47	60	50	NR

P9000 - Column Loading

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	3,640	8,730	8,570	8,330	8,040
36	3,540	8,360	8,040	7,530	6,950
48	3,400	7,880	7,340	6,530	5,660
60	3,210	7,290	6,530	5,440	4,360
72	2,990	6,640	5,660	4,360	3,160
84	2,730	5,940	4,790	3,340	2,320
96	2,430	5,220	3,940	2,560	1,780
108	2,110	4,520	3,160	2,020	1,400
120	1,820	3,840	2,560	1,640	**
144	1,390	2,690	1,780	**	**

P9200 - Column Loading

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	4,620	11,120	10,980	10,740	10,460
36	4,530	10,770	10,460	9,950	9,370
48	4,390	10,300	9,760	8,940	8,030
60	4,220	9,720	8,940	7,800	6,590
72	4,000	9,050	8,030	6,590	5,180
84	3,750	8,320	7,080	5,410	3,890
96	3,460	7,560	6,110	4,290	2,980
108	3,140	6,770	5,180	3,390	2,360
120	2,790	5,990	4,290	2,750	1,910
144	2,170	4,510	2,980	1,910	**
168	1,720	3,320	2,190	**	**

P9000/P9200 - Elements of Section

Parameter	P9000		P9200	
Area of Section	0.387	In^2	0.489	In^2
Axis 1-1				
Moment of Inertia (I)	0.166	In^4	0.279	In^4
Section Modulus (S)	0.205	In^3	0.297	In^3
Radius of Gyration (r)	0.655	In	0.755	In
Axis 2-2				
Moment of Inertia (I)	0.166	In^4	0.279	In^4
Section Modulus (S)	0.205	In^3	0.297	In^3
Radius of Gyration (r)	0.655	In	0.755	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
4. Deduct Telestrut weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.

P9000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/z0 kN	Span/360 kN
600	7.7	2	7.7	7.7	7.7
750	6.2	2	6.2	6.2	5.3
1,000	4.7	4	4.7	4.5	3.0
1,250	3.7	7	3.7	2.9	1.9
1,500	3.1	10	2.7	2.0	1.3
1,750	2.7	13	2.0	1.5	1.0
2,000	2.3	17	1.5	1.1	0.8
2,500	1.9	27	1.0	0.7	0.5
3,000	1.6	39	0.7	0.5	0.3
3,500	1.3	53	0.5	0.4	0.3
4,000	1.2	68	0.4	0.3	0.2
4,500	1.0	86	0.3	0.2	0.1
5,000	0.9	108	0.2	0.2	NR
6,000	0.8	151	0.2	NR	NR

P9200 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	11.3	1	11.3	11.3	11.3
750	9.0	2	9.0	9.0	8.9
1,000	6.8	4	6.8	6.8	5.0
1,250	5.4	6	5.4	4.8	3.2
1,500	4.5	8	4.5	3.3	2.2
1,750	3.9	11	3.3	2.4	1.6
2,000	3.4	15	2.5	1.9	1.2
2,500	2.7	23	1.6	1.2	0.8
3,000	2.3	34	1.1	0.8	0.6
3,500	1.9	45	0.8	0.6	0.4
4,000	1.7	60	0.6	0.5	0.3
4,500	1.5	76	0.5	0.4	0.3
5,000	1.3	92	0.4	0.3	0.2
6,000	1.1	132	0.3	0.2	NR

P9000 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	16.2	38.9	38.2	37.1	35.9
750	16.0	38.2	37.1	35.5	33.7
1,000	15.6	36.7	35.0	32.3	29.4
1,250	15.0	34.8	32.3	28.6	24.6
1,500	14.4	32.6	29.4	24.6	19.8
1,750	13.6	30.3	26.2	20.6	15.3
2,000	12.7	27.8	23.0	16.8	11.7
2,250	11.7	25.2	19.8	13.3	9.3
2,500	10.5	22.6	16.8	10.8	7.5
2,750	9.3	20.0	14.0	8.9	6.2

P9200 - Column Loading (metric)

Unbraced Height *mm*	Maximum Allowable Load at Slot Face *kN*	Maximum Column Load Applied at C.G. K = 0.65 *kN*	K = 0.80 *kN*	K =1.0 *kN*	K = 1.2 *kN*
600	20.6	49.5	48.9	47.9	46.6
750	20.4	48.8	47.9	46.3	44.4
1,000	20.0	47.4	45.7	43.1	40.1
1,250	19.5	45.6	43.1	39.3	35.1
1,500	18.8	43.5	40.1	35.1	29.9
1,750	18.1	41.1	36.8	30.7	24.6
2,000	17.2	38.5	33.4	26.3	19.7
2,250	16.2	35.7	29.9	22.1	15.6
2,500	15.1	32.9	26.3	18.2	12.6
2,750	13.9	30.1	23.0	15.0	10.4

P9000/P9200 - Elements of Section (metric)

Parameter	P9000		P9200	
Area of Section	2.50	cm^2	3.16	cm^2
Axis 1-1				
Moment of Inertia (I)	6.92	cm^4	11.61	cm^4
Section Modulus (S)	3.35	cm^3	4.87	cm^3
Radius of Gyration (r)	1.66	cm	1.92	cm
Axis 2-2				
Moment of Inertia (I)	6.92	cm^4	11.61	cm^4
Section Modulus (S)	3.35	cm^3	4.87	cm^3
Radius of Gyration (r)	1.66	cm	1.92	cm

Notes:

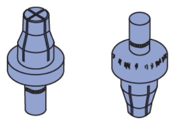
* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
4. Deduct Telestrut weight from the beam loads.
5. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.

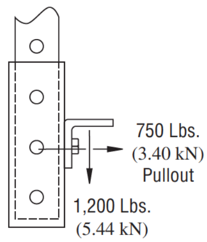
P9010 — Multi-grip Rivet



P9000 Inside P9200

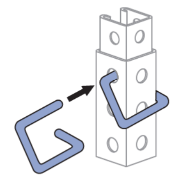
Fitting Attached to Tube Section or Channel

Fitting Attached to Tube Section with Tube Section or Channel Inside



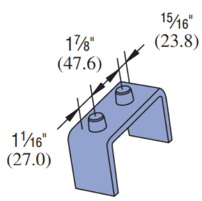
Wt/100 pcs: 10 Lbs (4.5 kg)

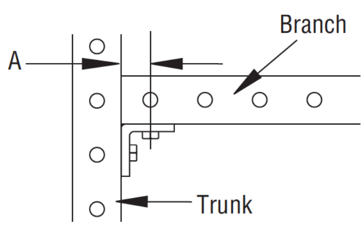
P9209 — Gravity Pin

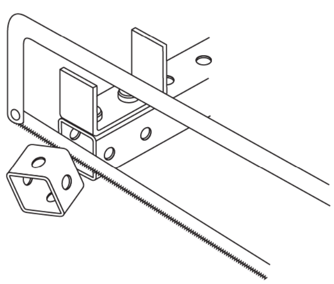


Wt/100 pcs: 47 Lbs (21.3 kg)

P9207 — Cutting Alignment Gauge

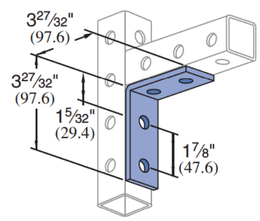






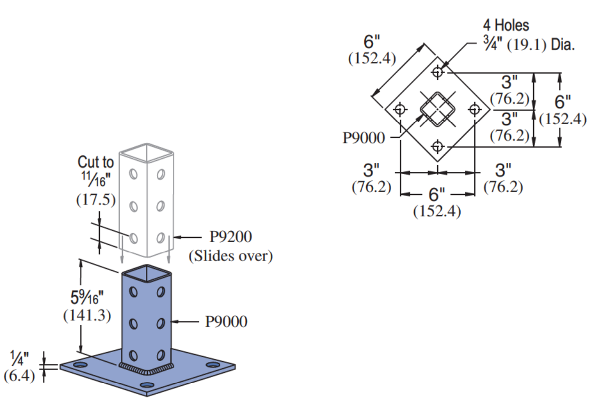
The cutting alignment guide ensures correct cutting of branch members when used with fittings to make connections. Refer to the table of page 70 for the appropriate value for "A" for cutting.

P9324 — EG, GR



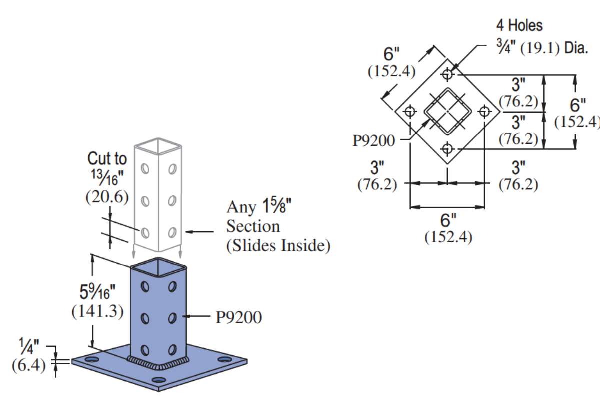
Wt/100 pcs: 78 Lbs (35.0 kg)

P9011 — EG, GR



Wt/100 pcs: 332 Lbs (150.7 kg)

P9012 — EG, GR

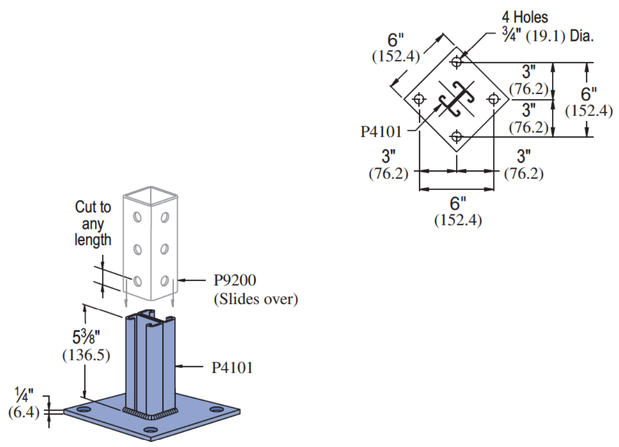


Wt/100 pcs: 340 Lbs (154 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9⁄16" (14mm); Hole Spacing - From End: 13⁄16" (21mm); Hole Spacing - On Center: 1⅞" (48mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6mm)

P9014

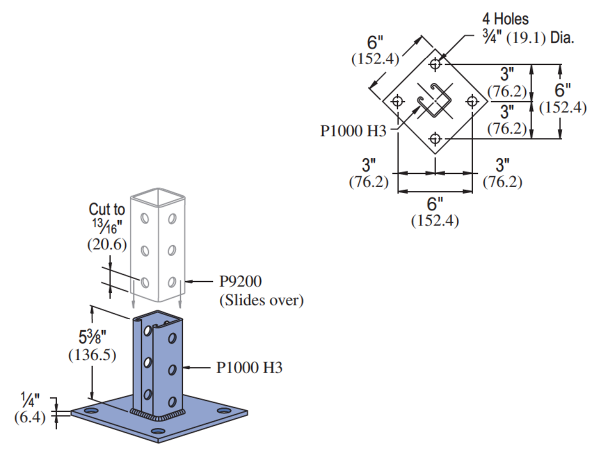
EG, GR



Wt/100 pcs: 303 Lbs (137.5 kg)

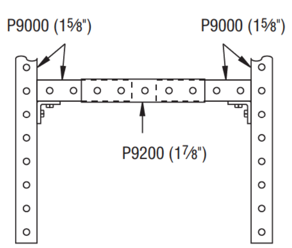
P9013

EG, GR



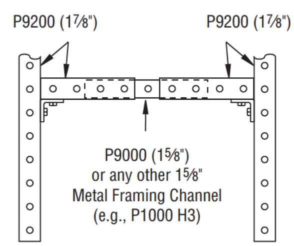
Wt/100 pcs: 318 Lbs (144.7 kg)

Preferred Three-Piece Assembly



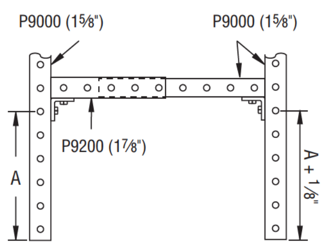
In most applications, telescoping assemblies should be made from three sections of Telestrut material. The simplest construction utilizes a center section of 1⅞" material (P9200) into which a 1⅝" member (P9000) is telescoped from each end. In this way, all intersecting verticals and horizontals are formed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

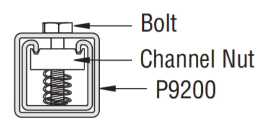
Two-Piece Assembly



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.

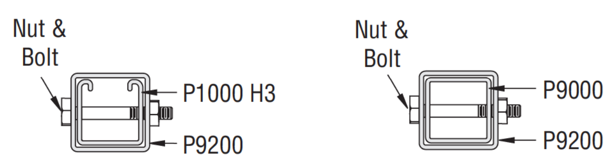
In addition, the right-angle members to which telescoping pieces are attached must be cut according to the illustration at right to insure smooth movement of telescoping members.

Channel Nut Connection – Infinite Adjustment



Any of the 1⅝" (41.3 mm) channel can be connected to the P9000 using standard channel nuts.

Through-Bolt Connection – Incremental Adjustment



Standard Dimensions for 1⅝" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

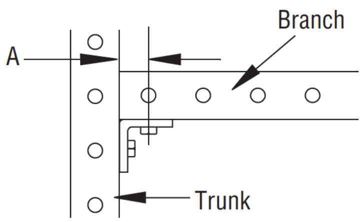
Hole Diameter: 9/16" (14mm); Hole Spacing - From End: 13/16" (21mm); Hole Spacing - On Center: 1⅞" (48mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6mm)

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.

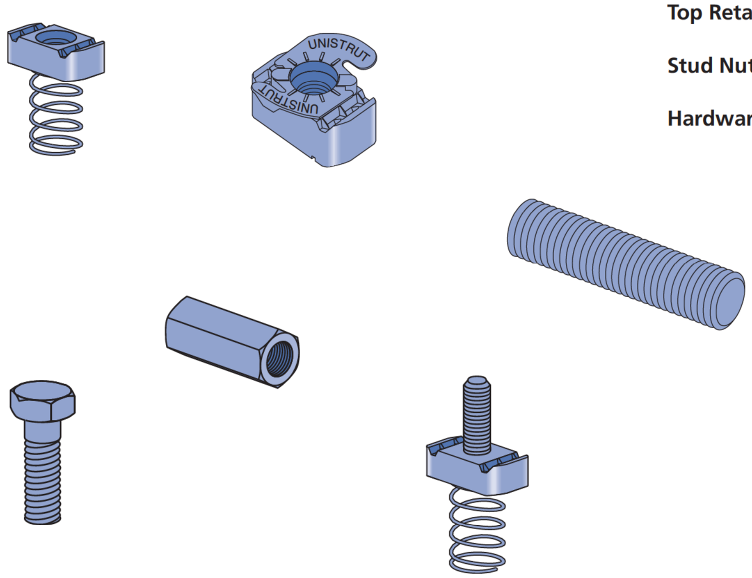


Legend

Designator	"A" In *(mm)*
A	1¹⁄₁₆" *27.0*
B	¹⁵⁄₁₆" *23.8*
C	¹³⁄₁₆" *20.6*
D	1¼" *31.8*
E	⅝" * *15.9*

Designator	"A" In *(mm)*
F	⁷⁄₁₆" * *11.1*
G	1⁵⁄₃₂" *29.4*
NR	Not Recommended
†	Special Cutting Req'd (See part dwg)

NUTS & HARDWARE



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.

Screws conform to SAE J429 GR 2 (exceeds ASTM A307). Proof Load 55KSI, Tensile Load 74 KSI

Bolt Size	Channel Nut ASTM
¼" & 5⁄16"	A1011 SS GR45
⅜", 7⁄16" & ½"	A576 GR1015 Modified
⅝" & ¾"	A36 or A675 GR60
⅞"	A36

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	⅝"-11	¾"-10
Rec.Torque Ft/Lbs *(N•m)*	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs *(N•m)*	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

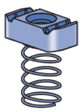
DIMENSIONS

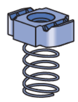
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted.
Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

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

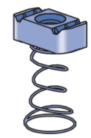
1 5⁄8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

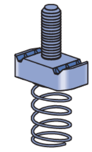
Channel Nuts With Spring


P1006 - P1010
Pg 73

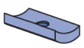

P1012S - P1024S
Pg 73

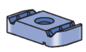

P4006 - P4010
Pg 73

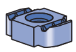

P5506 - P5510
Pg 73

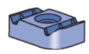

P2378 - P2382
Pg 74

Channel Nuts Without Spring

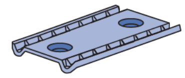

P3016
Pg 73

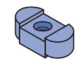

P3006 - P3013
Pg 73


P1012 - P1024
Pg 73

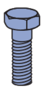

P4012 - P4023
Pg 73

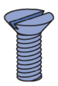

P1006T - P1010T, P4010T
Pg 73

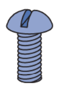

P4908
Pg 73

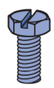

P1016
Pg 73

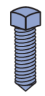
Hardware


HHCS
Pg 74


HFMS
Pg 74


HRMS
Pg 74


HSHS
Pg 74

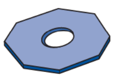

HCSS
Pg 74

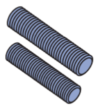

HSQN
Pg 75

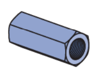

HHXN
Pg 75

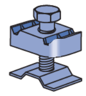

HFLW
Pg 75

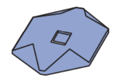

HLKW
Pg 75

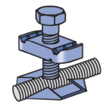

HOCW
Pg 76

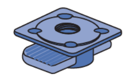

HTHR
Pg 75


HRCN
Pg 75


P2486
Pg 76


P2485
Pg 76


P2485K
Pg 76


K1062 - K1064
Pg 76

Maximum Allowable Pull-out And Slip Loads

Channel	Channel Nut Size-Thread	Gauge	Allowable Pull-Out Strength Lbs *(kN)*	Resistance to Slip Lbs *(kN)*	Torque Ft-Lbs *(N•m)*
P1000 P3000 P5000 P5500	7⁄8" - 9	12	2,500	1,700	*125
			11.12	*7.56*	*170*
	3⁄4" - 10	12	2,500	1,700	*125
			11.12	*7.56*	*170*
	5⁄8" - 11	12	2,500	1,500	*100
			11.12	*6.67*	*135*
	1⁄2" - 13	12	2,000	1,500	50
			8.90	*6.67*	*70*
	7⁄16" - 14	12	1,400	1,000	35
			6.23	*4.45*	*50*
	3⁄8" - 16	12	1,000	800	19
			4.45	*3.56*	*25*
	5⁄16" - 18	12	800	500	11
			3.56	*2.22*	*15*
	1⁄4" - 20	12	600	300	6
			2.67	*1.33*	*8*
P3300	1⁄2" - 13	12	1,500	1,500	50
			6.67	*6.67*	*70*
	3⁄8" - 16	12	1,000	800	19
			4.45	*3.56*	*25*
	5⁄16" - 18	12	800	500	11
			3.56	*2.22*	*15*
	1⁄4" - 20	12	600	300	6
			2.67	*1.33*	*8*

Channel	Channel Nut Size-Thread	Gauge	Allowable Pull-Out Strength Lbs *(kN)*	Resistance to Slip Lbs *(kN)*	Torque Ft-Lbs *(N•m)*
P1100 & P4100	1⁄2" - 13	14	1,400	1,000	50
			6.23	*4.45*	*70*
	3⁄8" - 16	14	1,000	750	19
			4.45	*3.34*	*25*
	5⁄16" - 18	14	800	400	11
			3.56	*1.78*	*15*
	1⁄4" - 20	14	600	300	6
			2.67	*1.33*	*8*
P2000 & P4000	1⁄2" - 13	16	1,000	1,000	50
			4.45	*4.54*	*70*
	3⁄8" - 16	16	1,000	750	19
			4.45	*3.34*	*25*
	5⁄16" - 18	16	800	400	11
			3.56	*1.78*	*15*
	1⁄4" - 20	16	600	300	6
			2.67	*1.33*	*8*

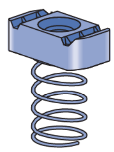
* May require 3⁄8" or 1⁄2" thick fitting.

Nut design loads include a minimum safety factor of 3.

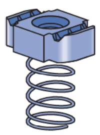
Note: Refer to the Channel Nut Selection Chart on the following two pages for the part number.

Channel Nut With Spring

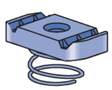
EG, HG



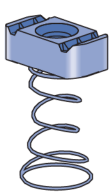
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P1006-0832	#8	-32	7 *(3.2)*	P1000, P1100, P2000, P3000
P1006-1024	#10	-24	7 *(3.2)*	
P1006-1420	¼"	-20	7 *(3.2)*	
P1007	5/16"	-18	6 *(2.7)*	
P1008	⅜"	-16	10 *(4.5)*	
P1009	7/16"	-14	9 *(4.1)*	
P1010	½"	-13	12 *(5.4)*	



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



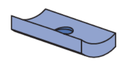
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P4006-0832	# 8	-32	7 *(3.2)*	P3300, P4000, P4400, P4520, P4100
P4006-1024	#10	-24	7 *(3.2)*	
P4006-1420	¼"	-20	7 *(3.2)*	
P4007	5/16"	-18	6 *(2.7)*	
P4008	⅜"	-16	9 *(4.1)*	
P4009	7/16"	-14	9 *(4.1)*	
P4010	½"	-13	8 *(3.6)*	



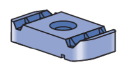
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P5506-0832	#8	-32	7 *(3.2)*	P5000, P5500
P5506-1024	#10	-24	7 *(3.2)*	
P5506-1420	¼"	-20	7 *(3.2)*	
P5507	5/16"	-18	6 *(2.7)*	
P5508	⅜"	-16	10 *(4.5)*	
P5509	7/16"	-14	10 *(4.5)*	
P5510	½"	-13	12 *(5.4)*	

Channel Nut Without Spring

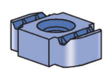
EG, HG



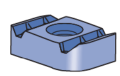
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P3016-0632	#6	-32	2 *(0.9)*	Any Channel
P3016-0832	#8	-32	2 *(0.9)*	
P3016-1024	#10	-24	4 *(1.8)*	
P3016-1420	¼"	-20	4 *(1.8)*	



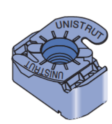
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P3006-0832	#8	-32	6 *(2.7)*	Any Channel
P3006-1024	#10	-24	6 *(2.7)*	
P3006-1420	¼"	-20	6 *(2.7)*	
P3007	5/16"	-18	6 *(2.7)*	
P3008	⅜"	-16	9 *(4.1)*	
P3009	7/16"	-14	9 *(4.1)*	
P3010	½"	-13	11 *(5.0)*	Any Channel Except P3300, P4000, P4400, P4520,P4100
P3013	½"	-13	8 *(3.6)*	P3300, P4000,P4400, P4520,P4100



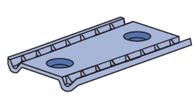
Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P1012	⅝"	-11	20 *(9.1)*	Any Channel Except P3300, P4000, P4400, P4520,P4100
P1023	¾"	-10	20 *(9.1)*	
P1024	⅞"	-9	20 *(9.1)*	



Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P4012	⅝"	-11	11 *(5.0)*	P3300, P4000, P4400,P4520, P4100
P4023	¾"	-10	11 *(5.0)*	

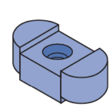


Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P1006T1420	¼"	-20	7 *(3.2)*	Any Channel
P1008T	⅜"	-16	10 *(4.5)*	
P1010T	½"	-13	12 *(5.4)*	Any Channel Except P3300, P4000, P4400, P4520, P4100
P4010T	½"	-13	8 *(3.6)*	P3300, P4000, P4400, P4520, P4100



Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P4908	⅜"	-16	17.5 *(7.9)*	Any Channel

Double Conveyor Adjusting Nut

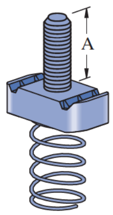


Part Number	Nut Size	Thread	Wt/100 pcs Lbs *(kg)*	Use With
P1016	⅜"	-16	17.5 *(7.9)*	Any Slotted Channel

Missing Link Multi-Purpose Strut Fastener

Channel Stud Nut With Spring

EG



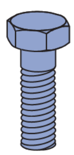
All Stud Nut grooves are serrated.

Part No.	Thread	"A" Stud In *(mm)*	Wt/100 pcs Lbs *(kg)*	
P2378-1	¼" - 20	1 *(25.4)*	8 *(3.6)*	Use With P1000, P1100, P2000, P3000
P2378-2		1¼ *(31.8)*	9 *(4.1)*	
P2378-3		1½ *(38.1)*	9 *(4.1)*	
P2379-1	5/16" - 18	1 *(25.4)*	12 *(5.4)*	
P2379-2		1¼ *(31.8)*	12 *(5.4)*	
P2379-3		1½ *(38.1)*	13 *(5.9)*	
P2380-1	⅜" - 16	1 *(25.4)*	13 *(5.9)*	
P2380-2		1¼ *(31.8)*	13 *(5.9)*	
P2380-3		1½ *(38.1)*	13 *(5.9)*	
P2380-4		1¾ *(44.5)*	15 *(6.8)*	

Part No.	Thread	"A" Stud In *(mm)*	Wt/100 pcs Lbs *(kg)*	
P2380-5	⅜" - 16	2 *(50.8)*	16 *(7.3)*	Use With P1000, P1100, P2000, P3000
P2380-6		2¼ *(57.2)*	16 *(7.3)*	
P2381-2	½" - 13	1 *(25.4)*	14 *(6.4)*	
P2381-3		1¼ *(31.8)*	15 *(6.8)*	
P2381-4		1½ *(38.1)*	17 *(7.7)*	
P2381-5		1¾ *(44.5)*	18 *(8.2)*	
P2381-6		2 *(50.8)*	19 *(8.6)*	
P2381-7		2¼ *(57.2)*	20 *(9.1)*	
P2382-2	⅝" - 11	1¼ *(31.8)*	18 *(8.2)*	
P2382-3		1½ *(38.1)*	20 *(9.1)*	

Hex Head Cap Screws

EG



Part No.	Size	Wt/ 100 pcs Lbs *(kg)*
HHCS025044EG	¼" x 7/16"	1.0 *(0.5)*
HHCS025075EG	¼" x ¾"	1.3 *(0.6)*
HHCS025150EG	¼" x 1½"	2.6 *(1.2)*
HHCS031125EG	5/16" x 1¼"	3.6 *(1.6)*
HHCS037075EG	⅜" x ¾"	4.0 *(1.8)*
HHCS037087EG	⅜" x ⅞"	4.4 *(2.0)*
HHCS037100EG	⅜" x 1"	4.5 *(2.0)*
HHCS037125EG	⅜" x 1¼"	5.3 *(2.4)*
HHCS037150EG	⅜" x 1½"	6.0 *(2.7)*
HHCS037200EG	⅜" x 2"	7.6 *(3.4)*
HHCS037225EG	⅜" x 2¼"	8.4 *(3.8)*
HHCS037250EG	⅜" x 2½"	9.2 *(4.2)*
HHCS050094EG	½" x 15/16"	9.1 *(4.1)*
HHCS050119EG	½" x 1 3/16"	10.2 *(4.6)*
HHCS050150EG	½" x 1½"	11.6 *(5.3)*
HHCS050175EG	½" x 1¾"	13.1 *(5.9)*
HHCS050200EG	½" x 2"	14.6 *(6.6)*
HHCS050225EG	½" x 2¼"	16 *(7.3)*
HHCS050250EG	½" x 2½"	17.5 *(7.9)*

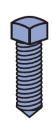
Hex Slotted Machine Screws

Part No.	Size	Wt/ 100 pcs Lbs *(kg)*
HSHS025050EG	¼" x ½"	1.4 *(0.6)*
HSHS025062EG	¼" x ⅝"	1.5 *(0.7)*
HSHS025075EG	¼" x ¾"	1.7 *(0.8)*
HSHS031100EG	5/16" x 1"	2.6 *(1.2)*
HSHS031125EG	5/16" x 1¼"	3.0 *(1.4)*
HSHS031150EG	5/16" x 1½"	3.4 *(1.5)*
HSHS037125EG	⅜" x 1¼"	5.3 *(2.4)*

Flat Head Machine Screws

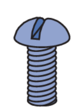
Part No.	Size	Wt/ 100 pcs Lbs *(kg)*
HFMS025062EG	¼" x ⅝"	1.2 *(0.5)*
HFMS031100EG	5/16" x 1"	2.6 *(1.2)*
HFMS050100EG	½" x 1"	9.3 *(4.2)*

Cone Point Set Screws



Part No.	Size	Wt/ 100 pcs Lbs *(kg)*
HCSS025100EG	¼" x 1"	2.8 *(1.3)*
HCSS031150EG	5/16" x 1½"	3.9 *(1.8)*
HCSS037150EG	⅜" x 1½"	4.5 *(2.0)*
HCSS037200EG	⅜" x 2"	6.1 *(2.8)*
HCSS050150EG	½" x 1½"	8.5 *(3.9)*
HCSS050200EG	½" x 2"	11.4 *(5.2)*
HCSS062150EG	⅝" x 1½"	14.5 *(6.6)*
HCSS062200EG	⅝" x 2"	23.0 *(10.4)*

Round Head Machine Screws



Part No.	Size	Wt/ 100 pcs Lbs *(kg)*
HRMS025050EG	¼" x ½"	1 *(0.5)*
HRMS025075EG	¼" x ¾"	1.2 *(0.5)*
HRMS025100EG	¼" x 1"	1.5 *(0.7)*
HRMS031100EG	5/16" x 1"	2.6 *(1.2)*
HRMS031125EG	5/16" x 1¼"	3.0 *(1.4)*
HRMS037100EG	⅜" x 1"	4.1 *(1.9)*
HRMS037125EG	⅜" x 1¼"	4.7 *(2.1)*
HRMS037150EG	⅜" x 1½"	5.3 *(2.4)*

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

EG

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"	19.0 *(8.6)*
HHXN100EG	1"	28.3 *(12.8)*

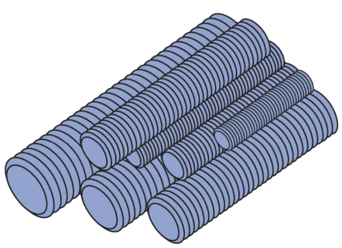
Flat Washers

EG

Part No.	Size	Wt/100 pcs Lbs*(kg)*
HFLW025EG	¼"	0.8 *(0.4)*
HFLW031EG	5/16"	1.0 *(0.5)*
HFLW037EG	⅜"	1.5 *(0.7)*
HFLW050EG	½"	3.5 *(1.6)*
HFLW062EG	⅝"	7.7 *(3.5)*
HFLW075EG	¾"	11.0 *(5.0)*
HFLW087EG	⅞"	15.3 *(6.9)*
HFLW100EG	1"	18.8 *(8.5)*

Steel Threaded Rod

EG



Standard Length 12' (3.7m)

Low Carbon Steel Grade 1006 - 1010

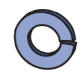
F_y = 36,000 psi minimum

F_t = 58,000 psi minimum

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)*

Lock Washers

EG



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)*

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

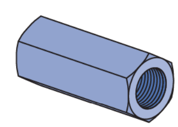
Threaded Rod Loads for Piping Applications (based on MSS SP-58)

Nominal Dia.	Root Area In² *(mm²)*	Max. Safe Load at 650°F (343°C) Lbs *(kN)*
⅜	0.068 *(43.9)*	730 *(3.25)*
½	0.126 *(81.3)*	1,350 *(6.01)*
⅝	0.202 *(130.3)*	2,160 *(9.61)*
¾	0.302 *(194.8)*	3,230 *(14.37)*
⅞	0.419 *(270.3)*	4,480 *(19.93)*
1	0.552 *(356.1)*	5,900 *(26.24)*

Threaded Rod Loads for Structural Applications
(Based on AISC, Steel Construction Manual, ASD, 14th Edition. Per AISC, Allowed Tensile Stress = 0.33 * Fu)

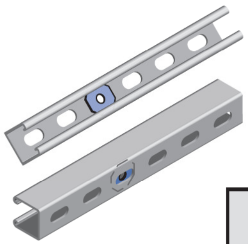
Nominal Dia.	Nominal Area In² *(mm²)*	Allowed Tension Load Lbs *(kN)*
¼	0.049 *(31.6)*	930 *(4.14)*
⅜	0.110 *(71.0)*	2,110 *(9.39)*
7/16	0.150 *(96.8)*	2,870 *(12.77)*
½	0.196 *(126.5)*	3,750 *(16.68)*
⅝	0.307 *(198.2)*	5,870 *(26.11)*
¾	0.442 *(285.4)*	8,450 *(37.59)*
⅞	0.601 *(388.0)*	11,500 *(51.15)*
1	0.785 *(506.8)*	15,030 *(66.86)*

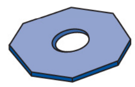
Steel Coupler Nuts



Part Number	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)*

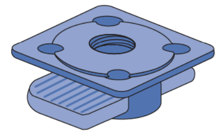
Slot Adapter™ EG



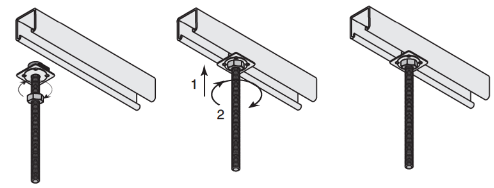


Part No.	Bolt Size	Wt/100 pcs Lbs (kg)
HOCW025	¼" *(6.4)*	1 *(0.5)*
HOCW037	⅜" *(9.5)*	1.5 *(0.7)*

Kwik Washer™ EG

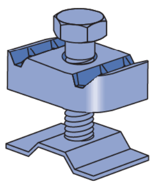


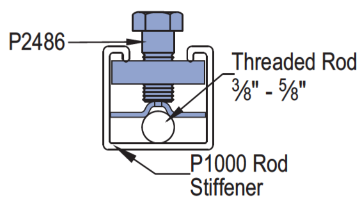
Overhead installation with one hand.
Available in zinc plated and hot dip galvanized



Part No.	Size In *(mm)*	Load Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
K1062	¼" *(6.4)*	250 *(1.11)*	1.2 *(0.5)*
K1063	⅜" *(9.5)*	610 *(2.71)*	2.6 *(1.2)*
K1064	½" *(12.7)*	1,130 *(5.03)*	9.3 *(4.2)*

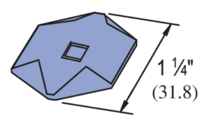
P2486 Seismic Rod Stiffener EG

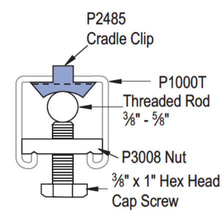




Wt/100 pcs: 16 Lbs (7.3 kg)

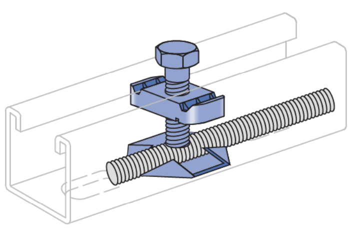
P2485 Cradle Clip EG

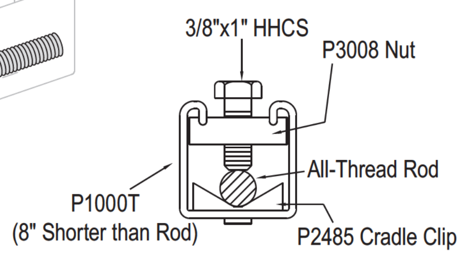


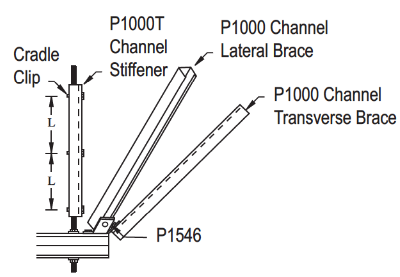


Cradle clip only, order
other items seperately.

P2485K Seismic Cradle Clip Assembly







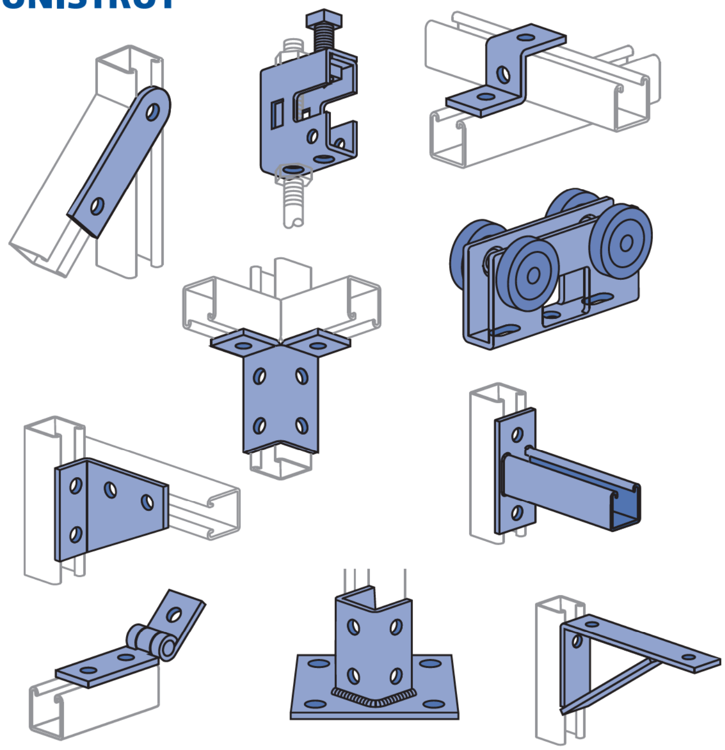
Wt/100 pcs: 3.0 Lbs (1.4 kg)

P2485 & P2486 – Spacing Chart

Rod Size In *(mm)*	Root Area In2 *(mm2)*	Radius of Gyration In *(mm)*	Design Load Lbs *(kN)*	............Rod Stiffener Clip Spacing (L)........... Rod Stress @100% 10,700 PSI In *(mm)*	Rod Stress @75% 8,025 PSI In *(mm)*	Rod Stress @50% 5,350 PSI In *(mm)*	Rod Stress @35% 3,745 PSI In *(mm)*
⅜	0.068	0.074	730	9	11	13	15
9.5	*49.5*	*1.99*	*3.25*	*228.6*	*279.4*	*330.2*	*381.0*
½	0.126	0.100	1,350	12	14	17	21
12.7	*72.4*	*2.40*	*6.01*	*304.8*	*355.6*	*431.8*	*533.4*
⅝	0.202	0.127	2,160	15	18	22	26
15.9	*138.3*	*3.32*	*9.61*	*381.0*	*457.2*	*558.8*	*660.4*

Notes:
1. Minimum Tensile Stress is 50,000 psi (345MPa)
2. Working Stress is 10,700 psi (73.9 MPa) – Same as for Tension
3. Compression Will Only Occur During a Seismic Event
4. Compression Requires the Use of Rod Stiffeners
5. KL/r = 200 When Rod Stress is at 35%

Refer to seismic bracing systems catalog for more detailed information.



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:

- Green Powder Coat (GR), conforming to commercial standards for Powder Coating
- 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, P3010, 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	⅝"-11	¾"-10
Rec. Torque Ft/Lbs (N•m)	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs (N•m)	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

SET SCREW TORQUE

BOLT SIZE	¼"-20	5⁄16"-18	⅜"-16	½"-13	⅝"-11	¾"-10
Set Screw Torque In/Lbs (N•m)	40 *(4)*	60 *(7)*	125 *(14)*	250 *(28)*	400 *(44.5)*	665 *(75)*

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

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.

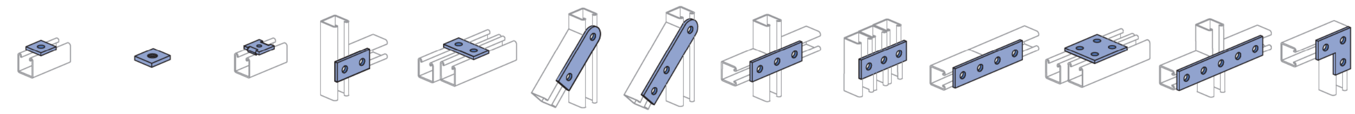
DESIGN LOAD

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

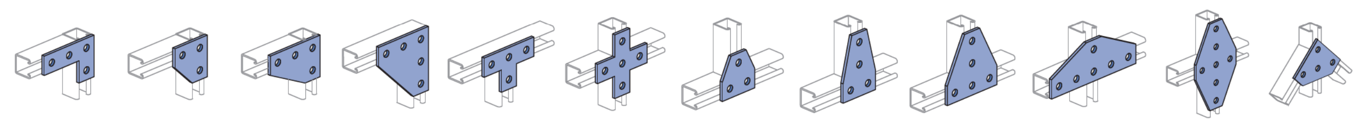
BEAM CLAMPS

Clamps are designed to be used with W, M, S and HP Shape beams, Standard C and Miscellaneous MC Channels, Angles and Structural Tees. Clamps must be used in pairs mounted in opposite directions where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

Flat Plate Fittings

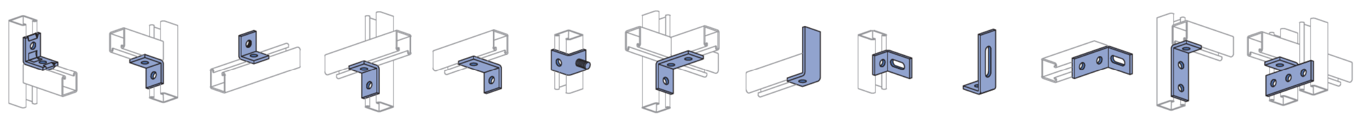


P1062-Pg 81 P1959-Pg 81 P2862-Pg 81 P1065-Pg 81 P1924-Pg 81 P2325-Pg 81 P2324-Pg 81 P1066-Pg 81 P1925-Pg 81 P1067-Pg 81 P2079-Pg 81 P1941-Pg 81 P1036-Pg 81

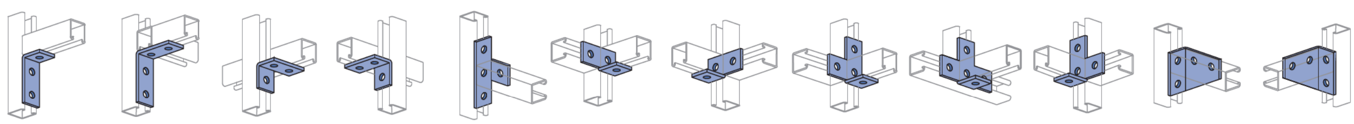


P1380 A-Pg 81 P1334-Pg 81 P1380-Pg 81 P1873-Pg 82 P1031-Pg 82 P1028-Pg 82 P1356-Pg 82 P1358-Pg 82 P1726-Pg 82 P1953-Pg 82 P1950-Pg 82 P1962-Pg 82

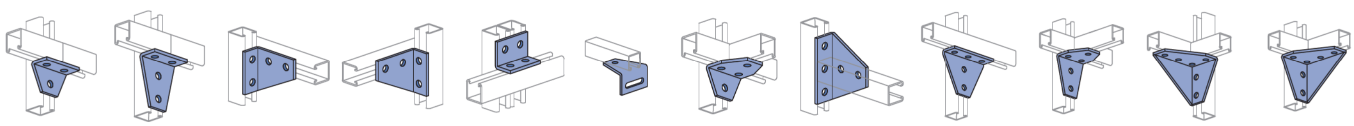
Angle Fittings



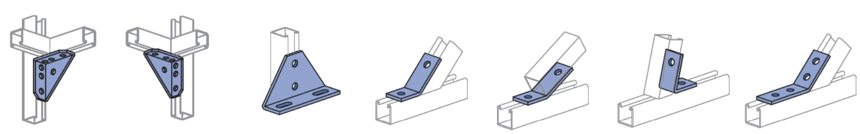
P2626-Pg 82 P1026-Pg 82 P1723-Pg 82 P1068-Pg 82 P1281-Pg 82 P1315-Pg 82 P1458-Pg 82 P1538A-Pg 83 P1750-Pg 83 P1498-Pg 83 P1747-Pg 83 P1326-Pg 83 P1821-Pg 83



P1346-Pg 83 P1325-Pg 83 P1822-Pg 83 P1823-Pg 83 P1033-Pg 83 P1037-Pg 83 P1038- Pg 83 P1034-Pg 83 P1029-Pg 84 P1035-Pg 84 P1290-Pg 84 P1291-Pg 84

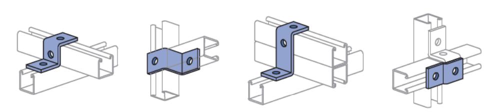


P1357-Pg 84 P1359-Pg 84 P1381-Pg 84 P1382- Pg 84 P1934-Pg 84 P1713-Pg 84 P1579-Pg 84 P1727-Pg 84 P1728-Pg 84 P2235-Pg 84 P1956-Pg 84 P1957-Pg 84

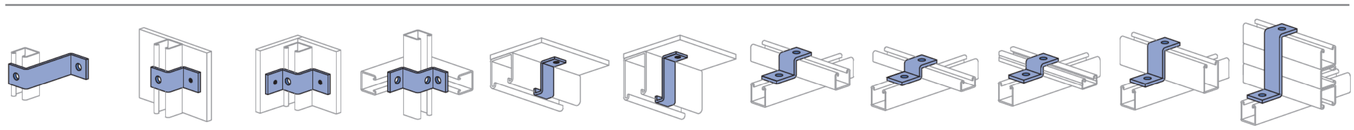


P2484-Pg 85 P2484W-Pg 85 P1130-Pg 85 P1546-Pg 85 P2101-Pg 85 P1186-Pg 85 P2260-Pg 85

"Z" Shape Fittings

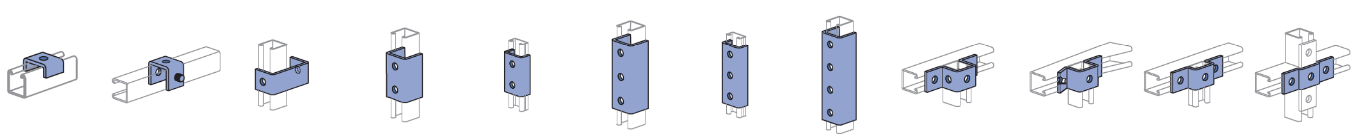


P1045-Pg 86 P1347-Pg 86 P1453-Pg 86 P1454-Pg 86

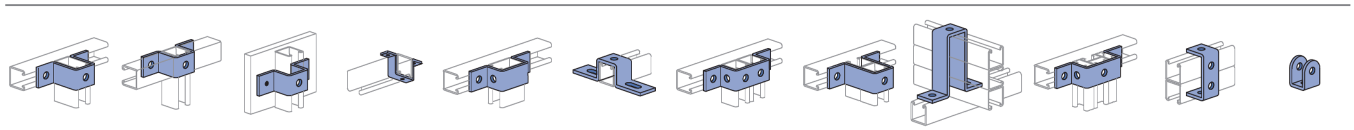


P1479A-Pg 86 P1730-Pg 86 P1734-Pg 86 P1736-Pg 86 P2360-Pg 86 P5560-Pg 86 P3045-Pg 86 P3345, P612-Pg 86 P4045-Pg 86 P5545-Pg 86 P2469-Pg 86

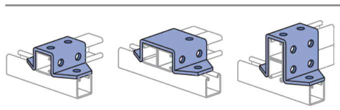
"U" Shape Fittings



P2800-Pg 87 P1320-Pg 87 P1363A-Pg 87 P1376-Pg 87 P4376-Pg 87 P1376A-Pg 87 P4376A-Pg 87 P1377-Pg 87 P1047-Pg 87 P3047, P976-Pg 87 P4047-Pg 87 P1455-Pg 87

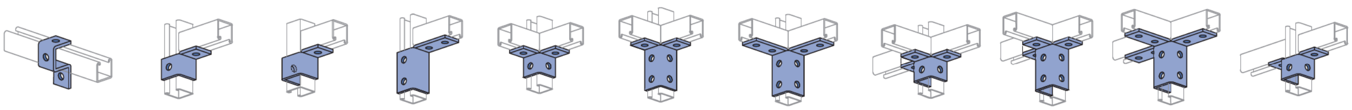


P5547-Pg 87 P1383-Pg 88 P1732-Pg 88 P2237-Pg 88 P5543-Pg 88 P1048-Pg 88 P1043A-Pg 88 P1737-Pg 88 P2473-Pg 88 P4043-Pg 88 P1044-Pg 88 P1973-Pg 88



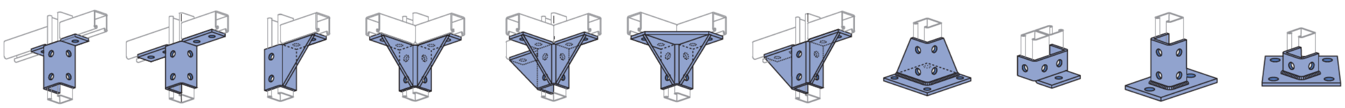
P2326-Pg 88 P2328-Pg 88 P2329-Pg 88

Wing Shape Fittings



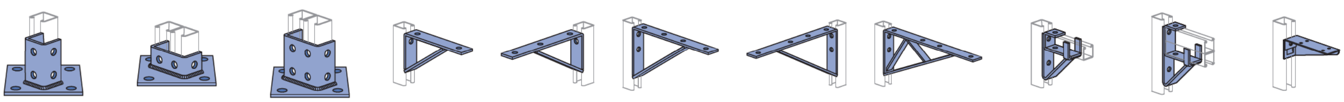
P1046A-Pg 88	P2341-Pg 89	P2472-Pg 89	P2343-Pg 89	P2223-Pg 89	P2224-Pg 89	P2225-Pg 89	P2227-Pg 89	P2228-Pg 89	P2229-Pg 89	P2345-Pg 89

Post Bases

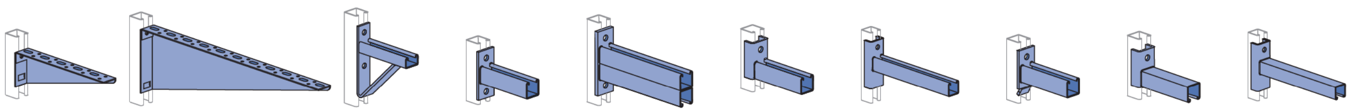


P2346-Pg 89	P2347-Pg 89	P2344-Pg 89	P2226-Pg 89	P2230-Pg 89	P2245-Pg 89	P2348-Pg 90	P1887-Pg 90	P2453-Pg 90	P2941-Pg 90	P2072-Pg 90

Brackets and Brace Fittings

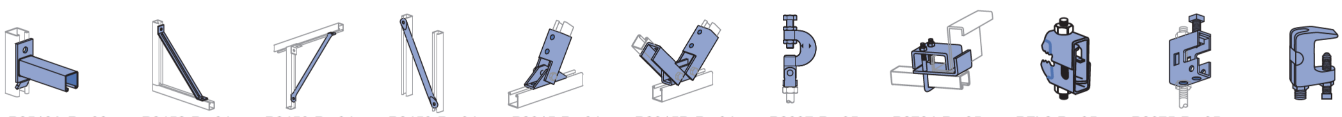


P2072A-Pg 90	P2073-Pg 90	P2073A-Pg 90	P1769-Pg 90	P1771-Pg 90	P1773-Pg 91	P1775-Pg 91	P1777-Pg 91	P1075-Pg 91	P1593-Pg 91	P2491-Pg 91

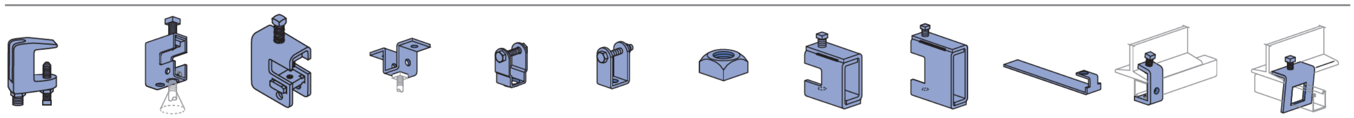


P2494-Pg 92	P2500-Pg 92	P2547-Pg 91	P2944-Pg 92	P2542-Pg 92	P2231-Pg 93	P2233-Pg 93	P2513-Pg 93	P2231A-Pg 93	P2233A-Pg 93

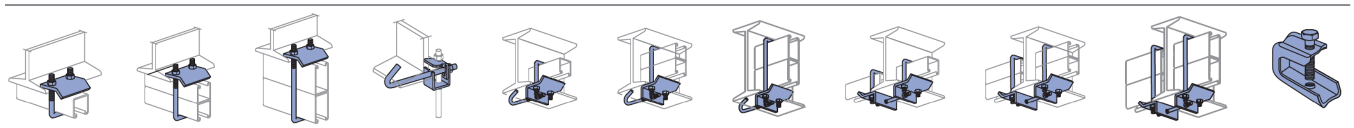
Beam Clamps



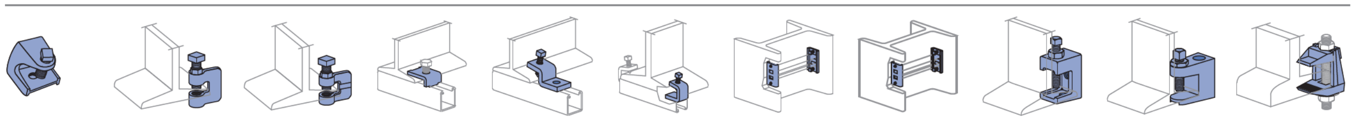
P2513A-Pg 93	P2452-Pg 94	P2458-Pg 94	P2459-Pg 94	P2815-Pg 94	P2815D-Pg 94	P2897-Pg 95	P2784-Pg 95	PFL2-Pg 95	P2675-Pg 95	P2898-Pg 96



P2899-Pg 96	P2676-Pg 96	P1640-Pg 97	P2682-Pg 96	P2677-Pg 96	P2674-Pg 97	P2679-Pg 96	P1648S-Pg 97	P2398S-Pg 97	P1654A-Pg 97	P1271S-Pg 98	P1796S-Pg 98



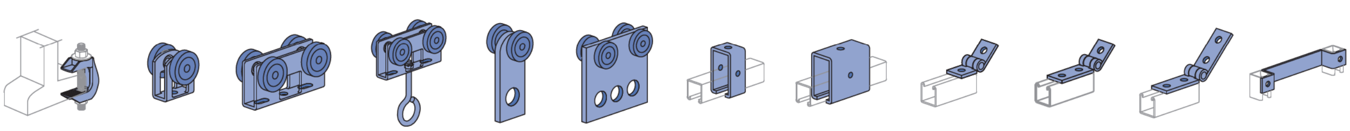
P2785-Pg 98	P2786-Pg 98	P2787-Pg 98	P2824-Pg 98	P2867-Pg 98	P2867A-Pg 98	P2867B-Pg 98	P2868-Pg 99	P2868A-Pg 99	P2868B-Pg 99	P2893-Pg 99



P2894-Pg 99	P2895-Pg 99	P2896-Pg 99	P1386-Pg 100	P1379S-Pg 100	P1272S-Pg 100	P3087-Pg 100	P3088-Pg 100	PLLC025-Pg 100	PFL037-Pg 101	PLF3037-Pg 101

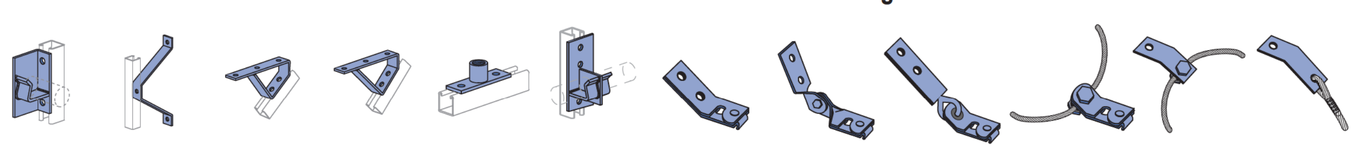
Trolley Assemblies

Special Applications Fittings



PLF9037-Pg 101	P2749-Pg 102	P2750-Pg 102	P2751-Pg 102	P2949-Pg 102	P2950-Pg 102	P1834-Pg 102	P1834A-Pg 102	P1843-Pg 104	P1354A-Pg 104	P1354-Pg 104	P1201-Pg 103

Seismic Retrofit Fittings

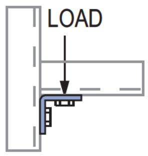


P2354-Pg 103	P1204-Pg 103	P2655-Pg 103	P1944-Pg 103	P2470-Pg 103	P2454-Pg 103	SPF 100-Pg 104	SPF 200-Pg 104	SPF 300-Pg 105	SPF 400-Pg 105	LS 410-Pg 106	LS500-Pg 106

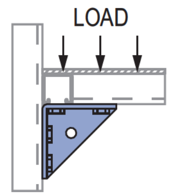
DESIGN LOAD DATA FOR TYPICAL UNISTRUT CHANNEL CONNECTIONS

90° Fittings (When used in position shown)

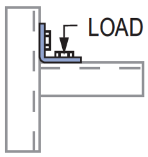
		Channel Thickness		
Load – P1026		12 ga.	14 ga.	16 ga.
	Lbs	1,500	1,000	750
	kN	6.67	4.45	3.34



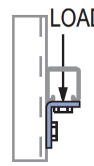
		Channel Thickness		
Load – P2484		12 ga.	14 ga.	16 ga.
	Lbs	3,000	2,000	1,500
	kN	13.34	8.90	6.67



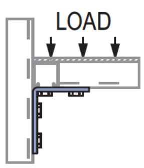
		Channel Thickness		
Load – P1026		12 ga.	14 ga.	16 ga.
	Lbs	1,000	650	500
	kN	4.45	2.89	2.22



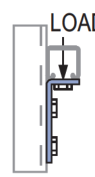
		Channel Thickness		
Load – P1068		12 ga.	14 ga.	16 ga.
	Lbs	500	500	500
	kN	2.22	2.22	2.22



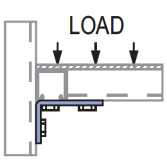
		Channel Thickness		
Load – P1325, P2235		12 ga.	14 ga.	16 ga.
	Lbs	2,000	2,000	1,500
	kN	8.90	8.90	6.67



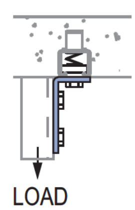
		Channel Thickness		
Load – P1326		12 ga.	14 ga.	16 ga.
	Lbs	500	500	500
	kN	2.22	2.22	2.22



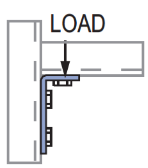
		Channel Thickness		
Load – P1458, P1579		12 ga.	14 ga.	16 ga.
	Lbs	1,500	1,000	1,000
	kN	6.67	4.45	4.45



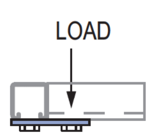
		Channel Thickness		
Load – P1346		12 ga.	14 ga.	16 ga.
	Lbs	1,200	1,200	1,000
	kN	5.34	5.34	4.45



		Channel Thickness		
Load – P1346		12 ga.	14 ga.	16 ga.
	Lbs	2,000	1,500	900
	kN	8.90	6.67	4.00

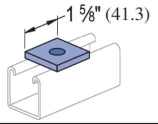


		Channel Thickness		
Load – P1065		12 ga.	14 ga.	16 ga.
	Lbs	1,000	800	600
	kN	4.45	3.56	2.67



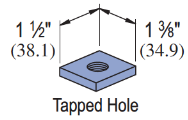
Note:
(1) Both ends of beams supported.
(2) Load data is based on P1010 nut and ½" bolt.
(3) Safety factor = 2½ based on ultimate strength of connection.

P1062, P1063, P1064, P1964, P2471, P2490 — EG, GR, HG



Part No.	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)

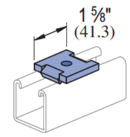
P1959, P1960, P1961 — EG, GR, HG



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)

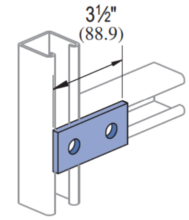
Material: 3/8" (9.5 mm) thick

P2862, 2863, 2864 — EG, GR, HG



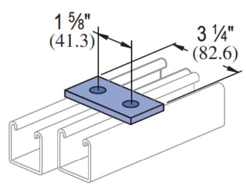
Part Number	Bolt Size	Hole Size	Wt/100 pcs Lbs (kg)
P2862	5/16"	11/32"	18 (8.2)
P2863	3/8"	7/16"	18 (8.2)
P2864	1/2"	9/16"	17 (7.7)

P1065 — EG, GR, HG



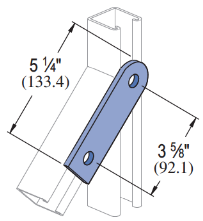
Wt/100 pcs: 38 Lbs (17.2 kg)

P1924 — EG, GR, HG



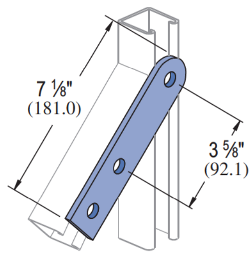
Wt/100 pcs: 35 Lbs (15.9 kg)

P2325 — EG, GR, HG



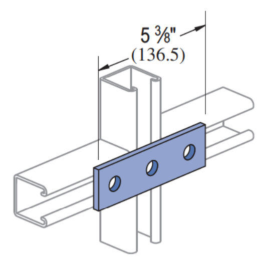
Wt/100 pcs: 55 Lbs (24.9 kg)

P2324 — EG, GR, HG



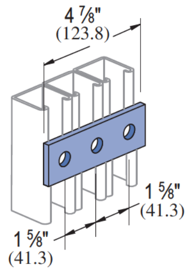
Wt/100 pcs: 75 Lbs (34.0 kg)

P1066 — EG, GR, HG



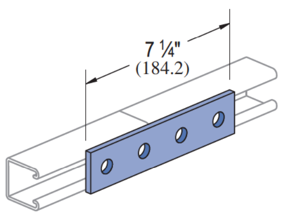
Wt/100 pcs: 56 Lbs (25.4 kg)

P1925 — EG, GR, HG



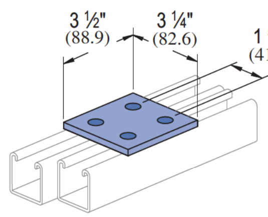
Wt/100 pcs: 50 Lbs (22.7 kg)

P1067 — EG, GR, HG



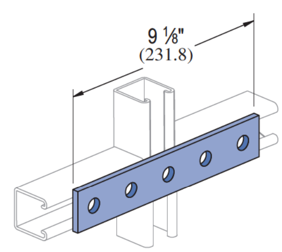
Wt/100 pcs: 78 Lbs (35.4 kg)

P2079 — EG, GR, HG



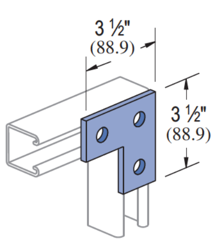
Wt/100 pcs: 73 Lbs (33.1 kg)

P1941 — EG, GR, HG



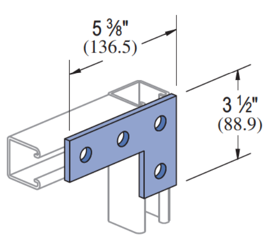
Wt/100 pcs: 94 Lbs (42.6 kg)

P1036 — EG, GR, HG



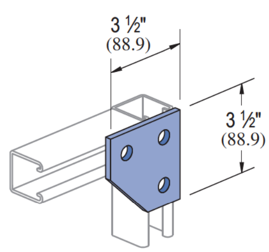
Wt/100 pcs: 58 Lbs (26.3 kg)

P1380 A — EG, GR, HG



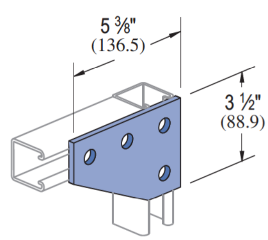
Wt/100 pcs: 80 Lbs (36.3 kg)

P1334 — EG, GR, HG



Wt/100 pcs: 70 Lbs (31.8 kg)

P1380 — EG, GR, HG



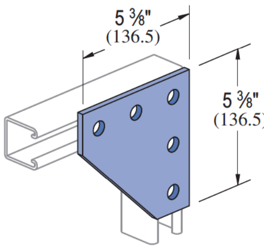
Wt/100 pcs: 105 Lbs (47.6 kg)

Standard Dimensions for 1 5/8" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1 7/8" (47.6mm); Width: 1 5/8"(41.3mm); Thickness: 1/4" (6.4mm)

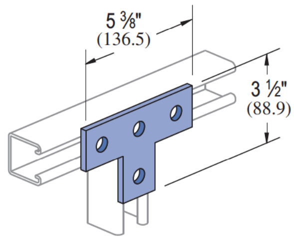
1 5/8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

P1873 EG, GR, HG



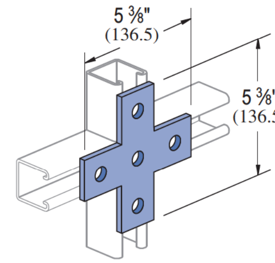
Wt/100 pcs: 150 Lbs (68.0 kg)

P1031 EG, GR, HG



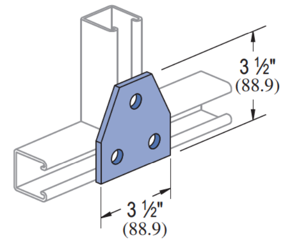
Wt/100 pcs: 80 Lbs (36.3 kg)

P1028 EG, GR, HG



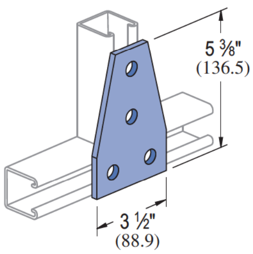
Wt/100 pcs: 105 Lbs (47.6 kg)

P1356 EG, GR, HG



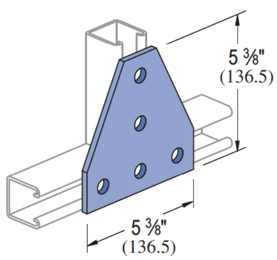
Wt/100 pcs: 70 Lbs (31.8 kg)

P1358 EG, GR, HG



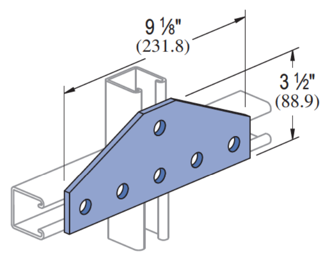
Wt/100 pcs: 105 Lbs (47.6 kg)

P1726 EG, GR, HG



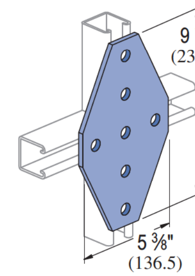
Wt/100 pcs: 148 Lbs (67.1 kg)

P1953 EG, GR, HG



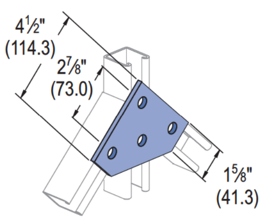
Wt/100 pcs: 176 Lbs (79.8 kg)

P1950 EG, GR, HG



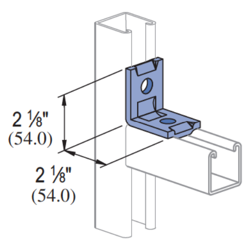
Wt/100 pcs: 240 Lbs (108.9 kg)

P1962 EG, GR, HG



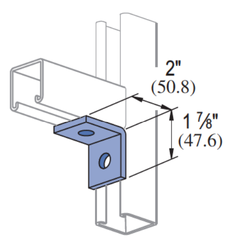
Wt/100 pcs: 112 Lbs (50.8 kg)

P2626 EG, GR, HG



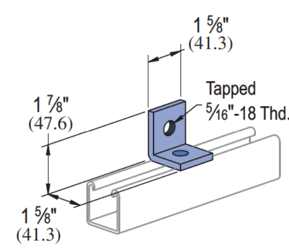
Wt/100 pcs: 40 Lbs (18.1 kg)

P1026 EG, GR, HG



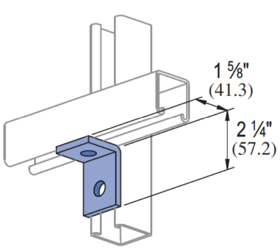
Wt/100 pcs: 38 Lbs (17.2 kg)

P1723 EG, GR, HG



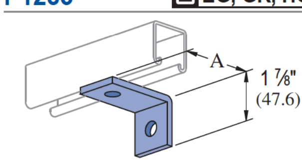
Wt/100 pcs: 34 Lbs (15.4 kg)

P1068 EG, GR, HG



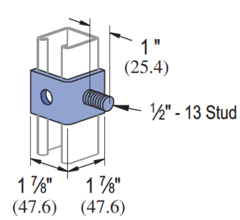
Wt/100 pcs: 38 Lbs (17.2 kg)

P1281, P1282, P1283 EG, GR, HG



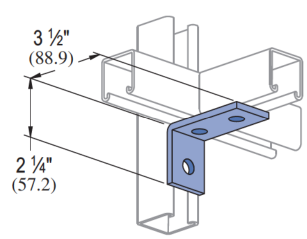
Part No.	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1281	3 *76.2*	49 *22.2*
P1282	3½ *88.9*	54 *24.5*
P1283	4 *101.6*	61 *27.7*

P1315 EG, GR, HG



Wt/100 pcs: 45 Lbs (20.4 kg)

P1458 EG, GR, HG

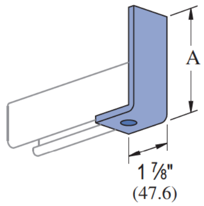


Wt/100 pcs: 58 Lbs (26.3 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

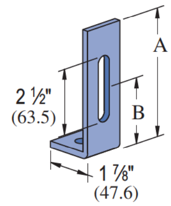
Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

P1538A THRU P1538D — EG, GR, HG



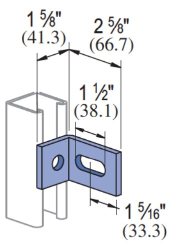
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1538A	3⅞ *98.4*	61 *27.7*
P1538B	5⅞ *149.2*	84 *38.1*
P1538C	7⅞ *200.0*	107 *48.5*
P1538D	9⅞ *250.8*	130 *59.0*

P1498, P1499 — EG, GR, HG



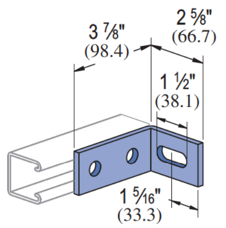
Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1498	4⅞ *123.8*	2½ *63.5*	65 *29.5*
P1499	6⅞ *174.6*	4½ *114.3*	85 *38.6*

P1750 — EG, GR, HG



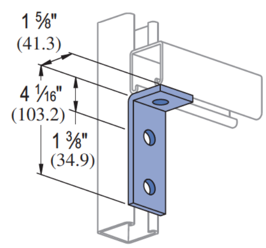
Wt/100 pcs: 38 Lbs (17.2 kg)

P1747 — EG, GR, HG



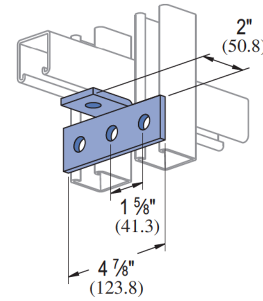
Wt/100 pcs: 66 Lbs (29.9 kg)

P1326 — EG, GR, HG



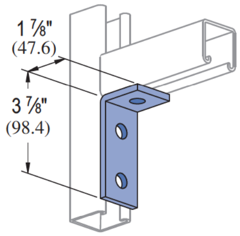
Wt/100 pcs: 58 Lbs (26.3 kg)

P1821 — EG, GR, HG



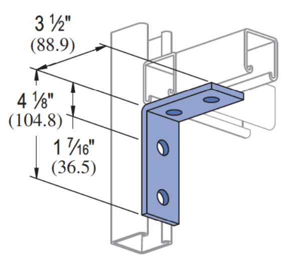
Wt/100 pcs: 71 Lbs (32.2 kg)

P1346 — EG, GR, HG



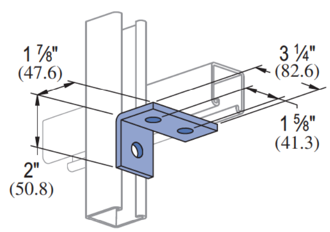
Wt/100 pcs: 58 Lbs (26.3 kg)

P1325 — EG, GR, HG



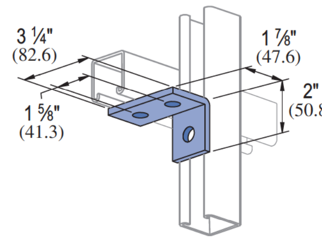
Wt/100 pcs: 78 Lbs (35.4 kg)

P1822 — EG, GR, HG



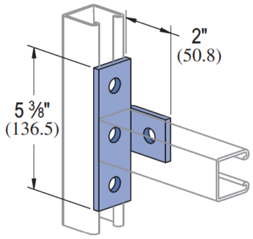
Wt/100 pcs: 55 Lbs (24.9 kg)

P1823 — EG, GR, HG



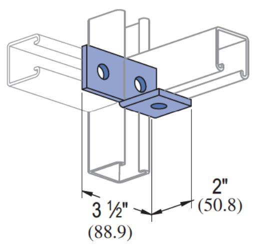
Wt/100 pcs: 55 Lbs (24.9 kg)

P1033 — EG, GR, HG



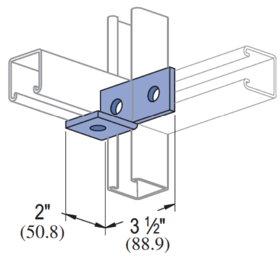
Wt/100 pcs: 80 Lbs (36.3 kg)

P1037 — EG, GR, HG



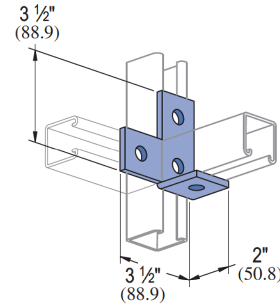
Wt/100 pcs: 58 Lbs (26.3 kg)

P1038 — EG, GR, HG



Wt/100 pcs: 58 Lbs (26.3 kg)

P1034 — EG, GR, HG

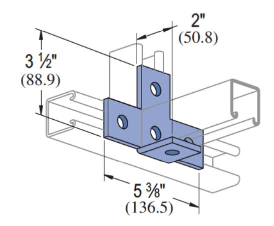


Wt/100 pcs: 80 Lbs (36.3 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

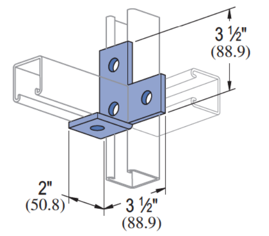
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

P1029 — EG, GR, HG



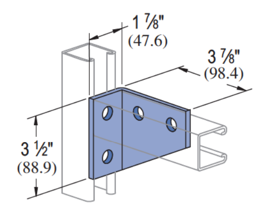
Wt/100 pcs: 105 Lbs (47.6 kg)

P1035 — EG, GR, HG



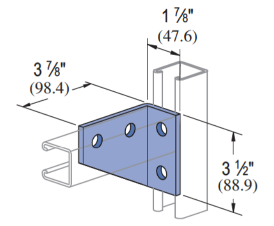
Wt/100 pcs: 80 Lbs (36.3 kg)

P1290 — EG, GR, HG



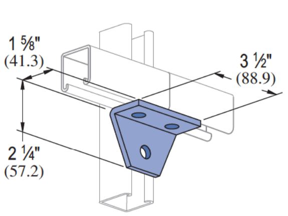
Wt/100 pcs: 101 Lbs (45.8 kg)

P1291 — EG, GR, HG



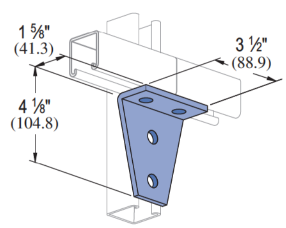
Wt/100 pcs: 101 Lbs (45.8 kg)

P1357 — EG, GR, HG



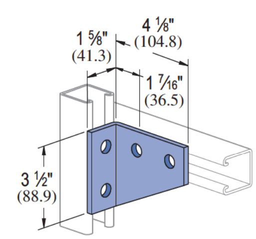
Wt/100 pcs: 70 Lbs (31.8 kg)

P1359 — EG, GR, HG



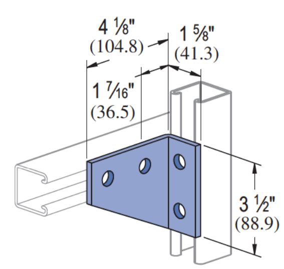
Wt/100 pcs: 105 Lbs (47.6 kg)

P1381 — EG, GR, HG



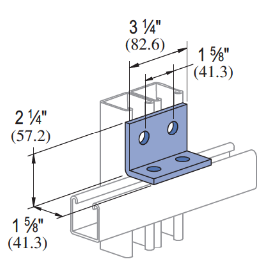
Wt/100 pcs: 105 Lbs (47.6 kg)

P1382 — EG, GR, HG



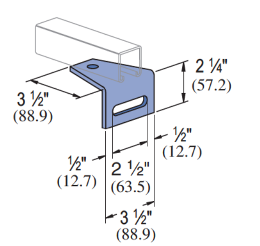
Wt/100 pcs: 105 Lbs (47.6 kg)

P1934



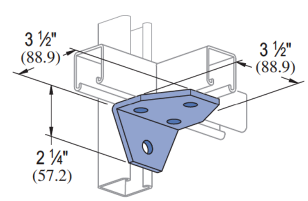
Wt/100 pcs: 75 Lbs (34.0 kg)

P1713



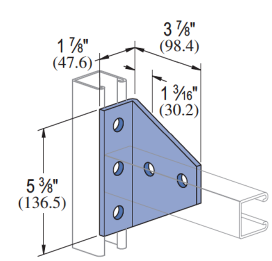
Wt/100 pcs: 97 Lbs (44.0 kg)

P1579



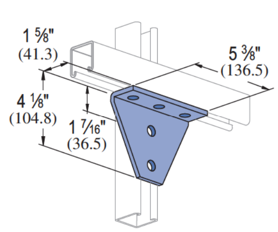
Wt/100 pcs: 103 Lbs (46.7 kg)

P1727



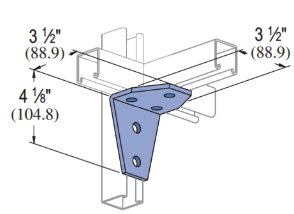
Wt/100 pcs: 154 Lbs (69.9 kg)

P1728



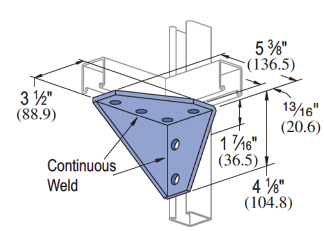
Wt/100 pcs: 154 Lbs (69.9 kg)

P2235



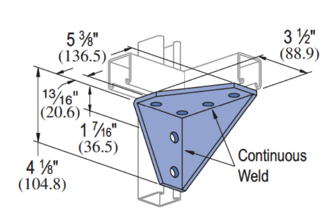
Wt/100 pcs: 135 Lbs (61.2 kg)

P1956



Wt/100 pcs: 230 Lbs (104.3 kg)

P1957 — EG, GR, HG

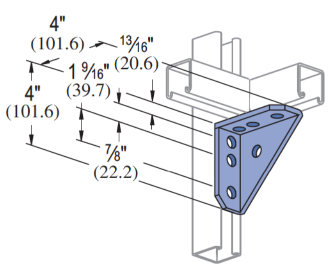


Wt/100 pcs: 230 Lbs (104.3 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

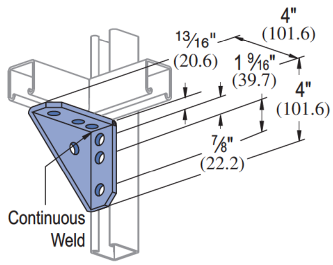
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

P2484 EG, GR, HG



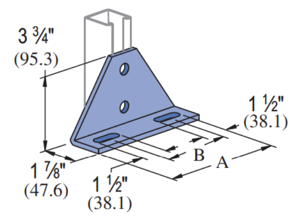
Wt/100 pcs: 134 Lbs (60.8 kg)

P2484W EG, GR, HG



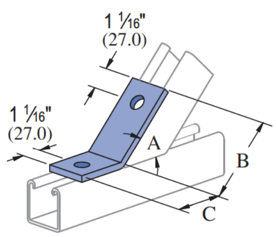
Wt/100 pcs: 134 Lbs (60.8 kg)

P1130, P1131 EG, GR, HG



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*

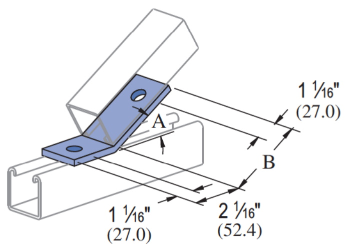
P1546, P2094 THRU P2100 EG, GR, HG



Part No.	"A" Degree *(rad)*	"B" In *(mm)*	"C" In *(mm)*
P2094	82½° *1.44*	3 9/16 *90.5*	1 11/16 *42.9*
P2095	75° *1.31*	3 9/16 *90.5*	1 11/16 *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*	2 1/16 *52.4*
P1546	45° *0.79*	3 *76.2*	2 5/16 *58.7*
P2099	37½° *0.65*	3½ *88.9*	1 13/16 *46.0*
P2100	37½° *0.65*	2 11/16 *68.3*	2⅝ *66.7*

Wt/100 pcs: 58 Lbs (26.3 kg)

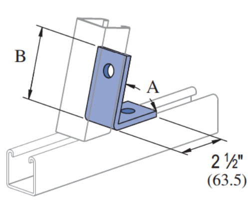
P2101 THRU P2104 EG, GR, HG



Part No.	"A" Degree *(rad)*	"B" In *(mm)*
P2101	30° *0.52*	3¼ *82.6*
P2102	22½° *0.39*	3 5/16 *84.1*
P2103	15° *0.26*	3 5/16 *84.1*
P2104	7½° *0.13*	3 5/16 *84.1*

Wt/100 pcs: 58 Lbs (26.3 kg)

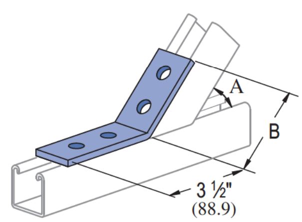
P1186, P2105 THRU P2110 EG, GR, HG



Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2105	82½° *1.44*	3¼ *82.6*
P2106	75° *1.31*	3¼ *82.6*
P2107	67½° *1.18*	3 3/16 *81.0*
P2108	60° *1.05*	3 3/16 *81.0*
P2109	52½° *0.92*	3⅛ *79.4*
P1186	45° *0.79*	3⅛ *79.4*
P2110	37½° *0.65*	3 1/16 *77.8*

Wt/100 pcs: 58 Lbs (26.3 kg)

P2260 THRU P2270 EG, GR, HG



Part Number	"A" Degree *(rad)*	"B" In *(mm)*
P2270	82½° *1.44*	3⅝ *92.1*
P2269	75° *1.31*	3⅝ *92.1*
P2268	67½° *1.18*	3⅝ *92.1*
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*
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*

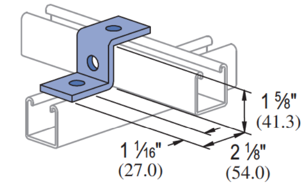
Wt/100 pcs: 78 Lbs (35.4 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

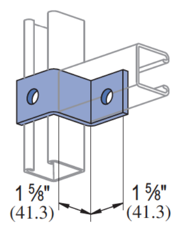
1 5/8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

P1045 — EG, GR, HG



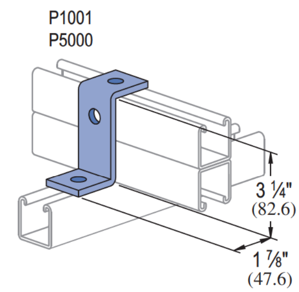
Wt/100 pcs: 55 Lbs (24.9 kg)

P1347 — EG, GR, HG



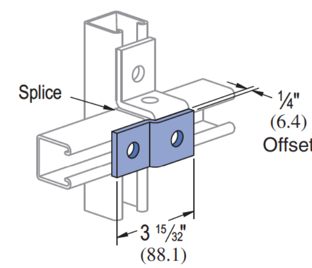
Wt/100 pcs: 55 Lbs (24.9 kg)

P1453 — EG, GR, HG



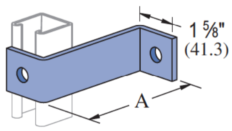
Wt/100 pcs: 70 Lbs (31.8 kg)

P1454 — EG, GR, HG



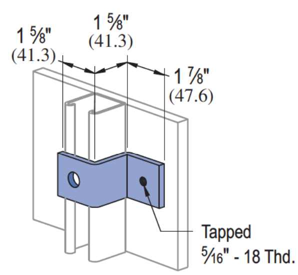
Wt/100 pcs: 38 Lbs (17.2 kg)

P1479A THRU P1479E



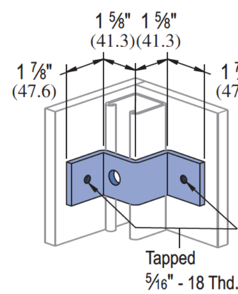
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1479A	4 *(101.6)*	81 *(36.7)*
P1479B	5 *(127.0)*	92 *(41.7)*
P1479C	6 *(152.4)*	104 *(47.2)*
P1479D	7 *(177.8)*	115 *(52.2)*
P1479E	8 *(203.2)*	127 *(57.6)*

P1730



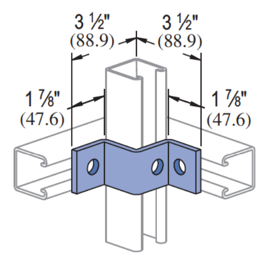
Wt/100 pcs: 54 Lbs (24.5 kg)

P1734



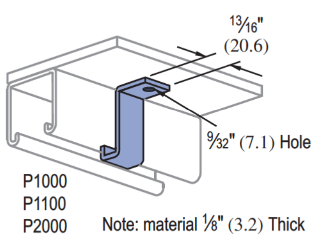
Wt/100 pcs: 70 Lbs (31.8 kg)

P1736



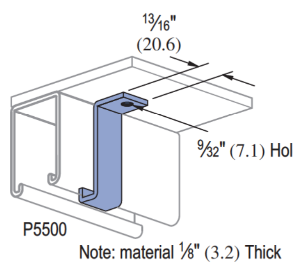
Wt/100 pcs: 70 Lbs (31.8 Kg)

P2360



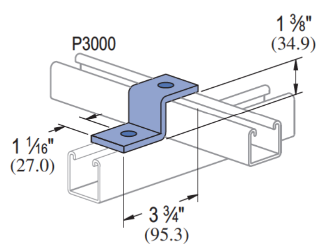
Wt/100 pcs: 9 Lbs (4.1 kg)

P5560



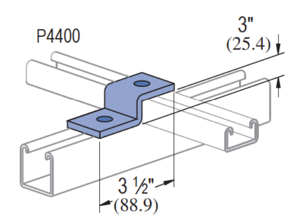
Wt/100 pcs: 11 Lbs (5.0 kg)

P3045 — EG, GR, HG



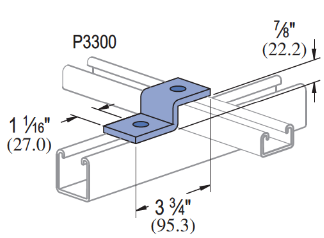
Wt/100 pcs: 53 Lbs (24.0 kg)

P612 — EG, GR, HG



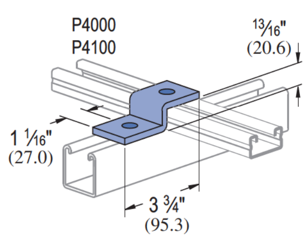
Wt/100 pcs: 47 Lbs (21.3 kg)

P3345 — EG, GR, HG



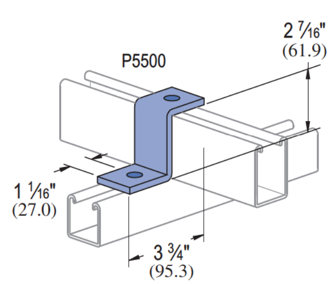
Wt/100 pcs: 47 Lbs (21.3 kg)

P4045 — EG, GR, HG



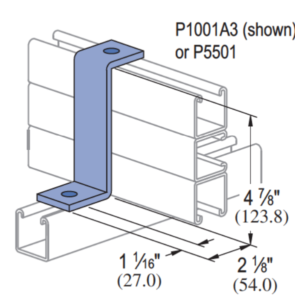
Wt/100 pcs: 47 Lbs (21.3 kg)

P5545 — EG, GR, HG



Wt/100 pcs: 67 Lbs (30.4 kg)

P2469

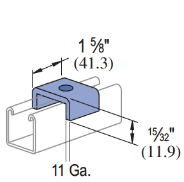


Wt/100 pcs: 93 Lbs (42.2 kg)

Standard Dimensions for 1 5/8" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

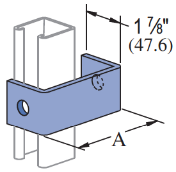
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1 7/8" (47.6mm); Width: 1 5/8"(41.3mm); Thickness: 1/4" (6.4mm)

P2800
EG, GR, HG



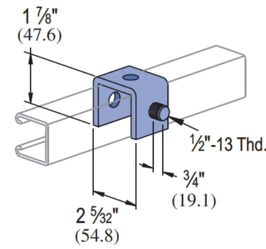
Part Number	Bolt Size (in)	Hole Size (in)	Wt/100 pcs Lbs *(kg)*
P2800-25	1/4"	9/32"	14 *6.4*
P2800-37	3/8"	7/16"	14 *6.4*
P2800-50	1/2"	9/16"	13 *5.9*
P2800-62	5/8"	11/16"	13 *5.9*
P2800-75	3/4"	13/16"	13 *5.9*

P1363A THRU P1363E



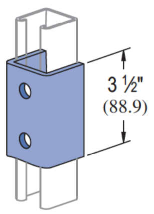
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1363A	4 *101.6*	78 *35.4*
P1363B	5 *127.0*	89 *40.4*
P1363C	6 *152.4*	101 *45.8*
P1363D	7 *177.8*	112 *50.8*
P1363E	8 *203.2*	124 *56.2*

P1320



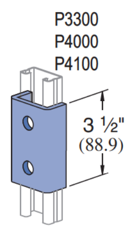
Wt/100 pcs: 63 Lbs (28.6 kg)

P1376
EG, GR, HG



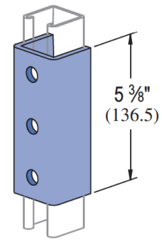
Wt/100 pcs: 128 Lbs (58.1 kg)

P4376
EG, GR, HG



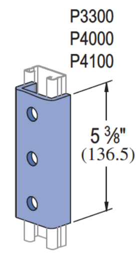
Wt/100 pcs: 85 Lbs (38.6 kg)

P1376A
EG, GR, HG



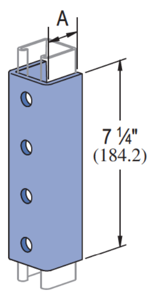
Wt/100 pcs: 197 Lbs (89.4 kg)

P4376A
EG, GR, HG



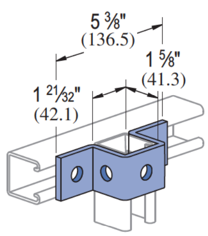
Wt/100 pcs: 130 Lbs (59.0 kg)

P1377, P4377, P5077, P5577
EG, GR, HG



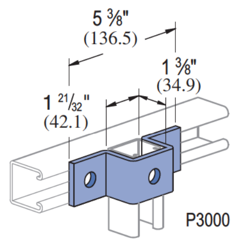
Part Number	For Use With	"A" in (mm)	Wt/100 pcs Lbs (kg)
P1377	P1000, P1100, P2000	1 9/16 *39.7*	265 *120*
P4377	P3300, P4000, P4100	15/16 *23.8*	176 *80*
P5077	P5000	3 3/16 *81.0*	390 *177*
P5577	P5500	2 3/8 *60.3*	310 *141*

P1047
EG, GR, HG



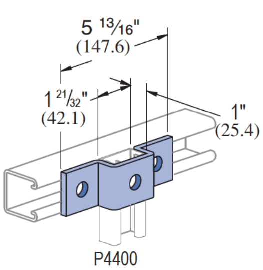
Wt/100 pcs: 88 Lbs (39.9 kg)

P3047
EG, GR, HG



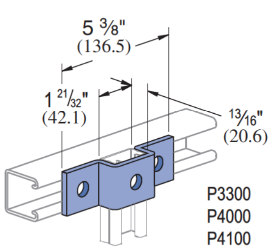
Wt/100 pcs: 84 Lbs (38.1 kg)

P976



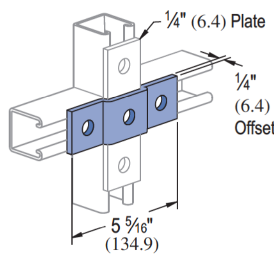
Wt/100 pcs: 71 Lbs (32.2 kg)

P4047
EG, GR, HG



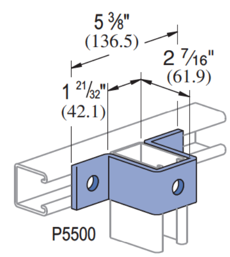
Wt/100 pcs: 71 Lbs (32.2 kg)

P1455
EG, GR, HG



Wt/100 pcs: 58 Lbs (26.3 kg)

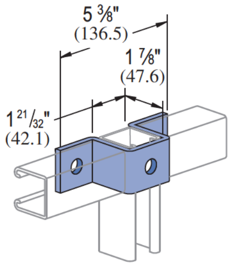
P5547
EG, GR, HG



Wt/100 pcs: 108 Lbs (49.0 kg)

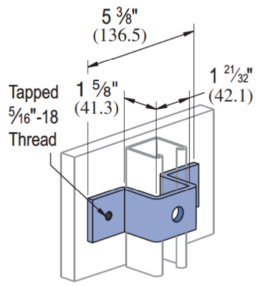
Standard Dimensions for 1 5/8" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1 7/8" (47.6mm); Width: 1 5/8"(41.3mm); Thickness: 1/4" (6.4mm)

P1383 — EG, GR, HG



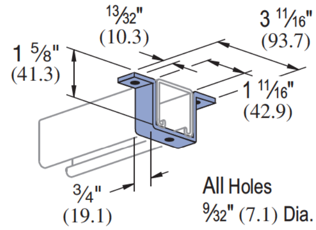
Wt/100 pcs: 95 Lbs (43.1 kg)

P1732 — EG, GR, HG



Wt/100 pcs: 88 Lbs (39.9 kg)

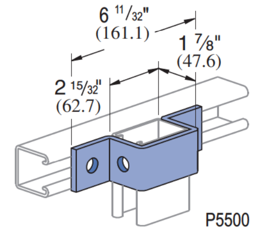
P2237 — EG, GR, HG



Material: ⅛" (3.2) thick.

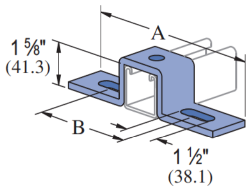
Wt/100 pcs: 18 Lbs (8.2 kg)

P5543 — EG, GR, HG



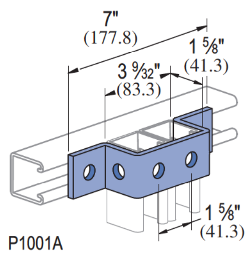
Wt/100 pcs: 97 Lbs (44.0 kg)

P1048, P1049, P1050 — EG, GR, HG



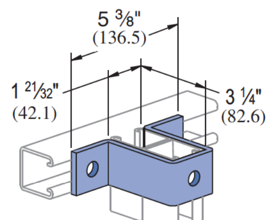
Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1048	7¼ *184.2*	4⅛ *104.8*	105 *47.6*
P1049	8½ *215.9*	5⅜ *136.5*	120 *54.4*
P1050	10⅜ *263.5*	7¼ *184.2*	130 *59.0*

P1043A — EG, GR, HG



Wt/100 pcs: 105 Lbs (47.6 kg)

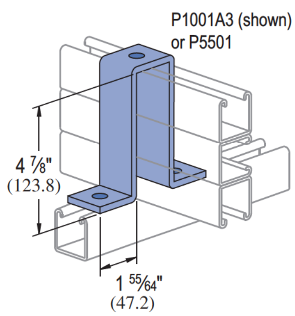
P1737 — EG, GR, HG



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

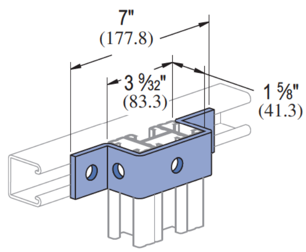
Wt/100 pcs: 128 Lbs (58.1 kg)

P2473 — EG, GR, HG



Wt/100 pcs: 197 Lbs (89.4 kg)

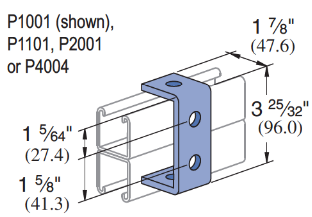
P4043 — EG, GR, HG



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

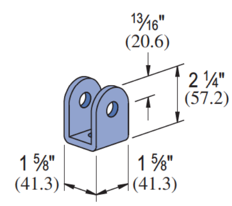
Wt/100 pcs: 106 Lbs (48.1 kg)

P1044 — EG, GR, HG



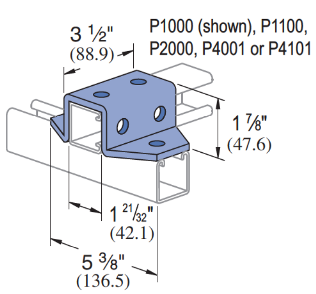
Wt/100 pcs: 70 Lbs (31.8 kg)

P1973 — EG, GR, HG



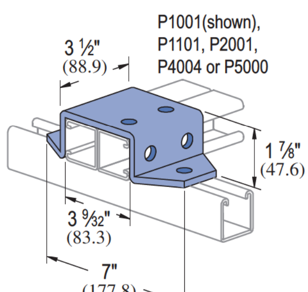
Wt/100 pcs: 53 Lbs (24.0 kg)

P2326 — EG, GR, HG



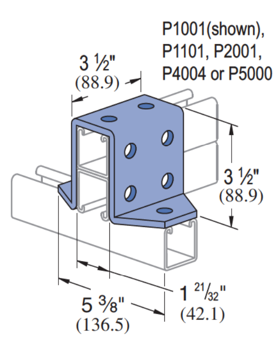
Wt/100 pcs: 171 Lbs (77.6 kg)

P2328



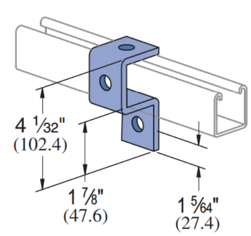
Wt/100 pcs: 209 Lbs (94.8 kg)

P2329



Wt/100 pcs: 257 Lbs (116.6 kg)

P1046A — EG, GR, HG

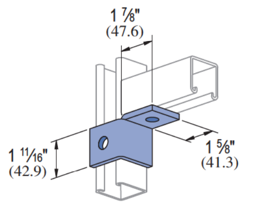


Wt/100 pcs: 76 Lbs (34.5 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

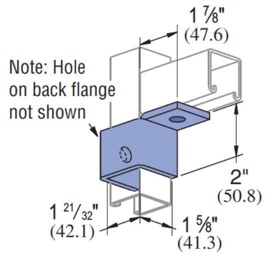
P2341 R-L
EG, GR, HG



R - As shown
L - Opposite hand

Wt/100 pcs: 60 Lbs (27.2 kg)

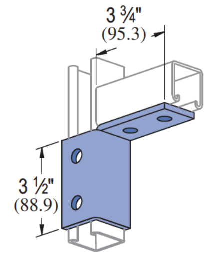
P2472 R-L
EG, GR, HG



R - As shown
L - Opposite hand

Wt/100 pcs: 75 Lbs (34.0 kg)

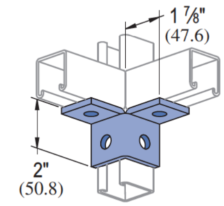
P2343 R-L



R - As shown
L - Opposite hand

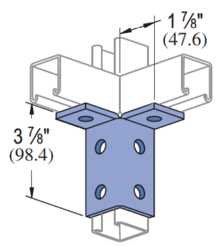
Wt/100 pcs: 119 Lbs (54.0 kg)

P2223
EG, GR, HG



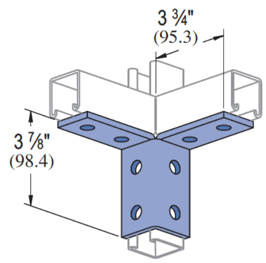
Wt/100 pcs: 76 Lbs (34.5 kg)

P2224
EG, GR, HG



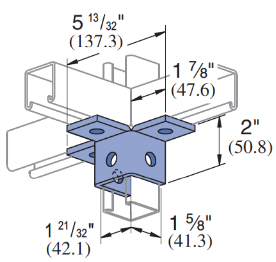
Wt/100 pcs: 115 Lbs (52.2 kg)

P2225
EG, GR, HG



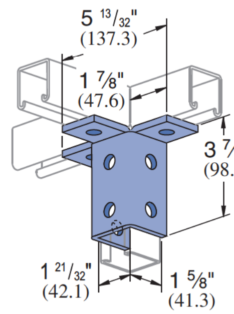
Wt/100 pcs: 155 Lbs (70.3 kg)

P2227
EG, GR, HG



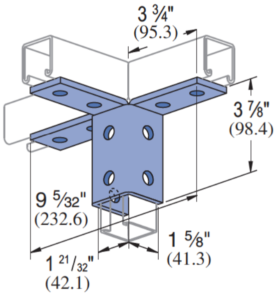
Wt/100 pcs: 113 Lbs (51.3 kg)

P2228
EG, GR, HG



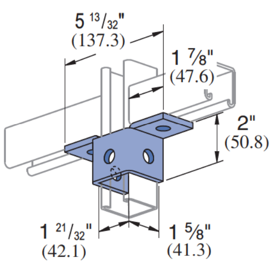
Wt/100 pcs: 177 Lbs (80.3 kg)

P2229
EG, GR, HG



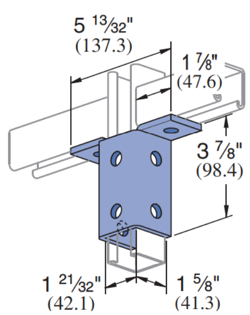
Wt/100 pcs: 230 Lbs (104.3 kg)

P2345
EG, GR, HG



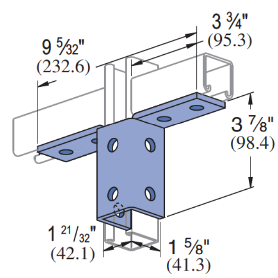
Wt/100 pcs: 93 Lbs (42.2 kg)

P2346
EG, GR, HG



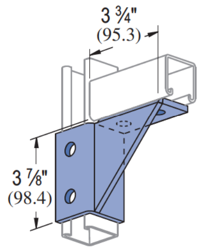
Wt/100 pcs: 150 Lbs (68.0 kg)

P2347
EG, GR, HG



Wt/100 pcs: 193 Lbs (87.5 kg)

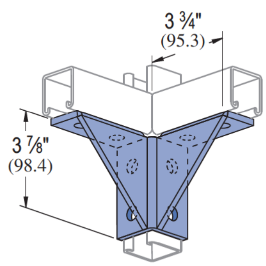
P2344 R-L
EG, GR, HG



R - As shown
L - Opposite hand

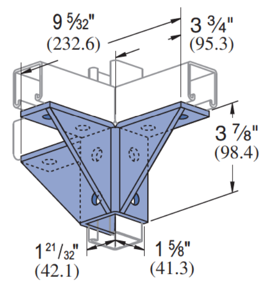
Wt/100 pcs: 176 Lbs (79.8 kg)

P2226
EG, GR, HG



Wt/100 pcs: 217 Lbs (98.4 kg)

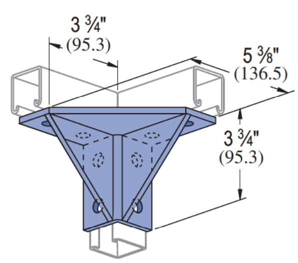
P2230
EG, GR, HG



Wt/100 pcs: 310 Lbs (140.6 kg)

P2245
EG, GR, HG

Fitting notched for
continuous vertical.

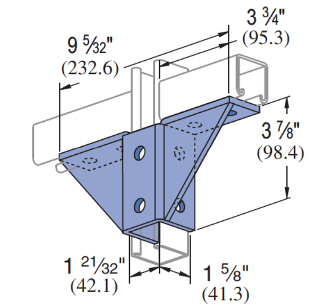


Wt/100 pcs: 315 Lbs (142.9 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

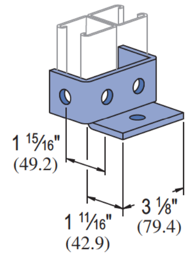
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

P2348 — EG, GR, HG



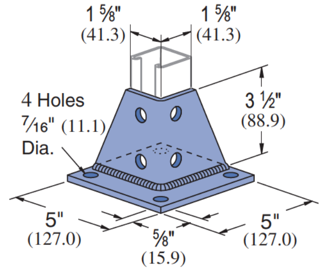
Wt/100 pcs: 274 Lbs (124.3 kg)

P2453 — EG, GR, HG



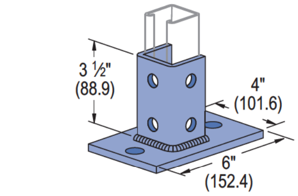
Wt/100 pcs: 116 Lbs (52.6 kg)

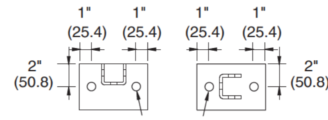
P1887 — EG, GR, HG



Wt/100 pcs: 297 Lbs (134.8 kg)

P2941, P2942 — EG, GR, HG

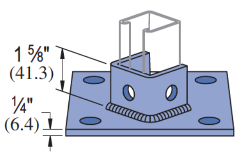


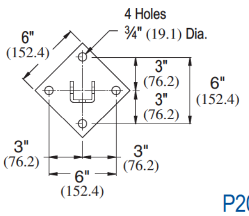


P2941 P2942

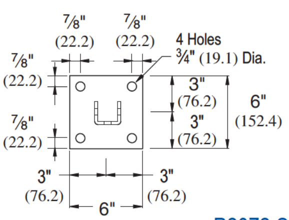
Wt/100 pcs: 358 Lbs (162.4 kg)

P2072, P2072 SQ — EG, GR, HG





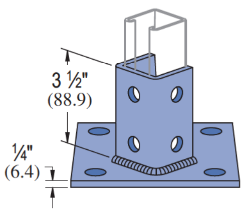
P2072

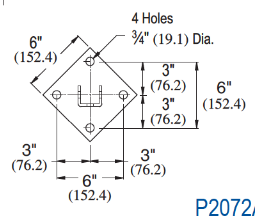


P2072 SQ

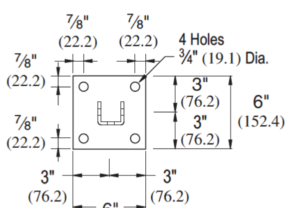
Wt/100 pcs: 307 Lbs (139.3 kg)

P2072A, P2072A SQ — EG, GR, HG





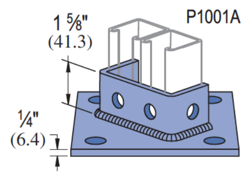
P2072A

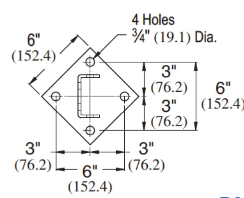


P2072A SQ

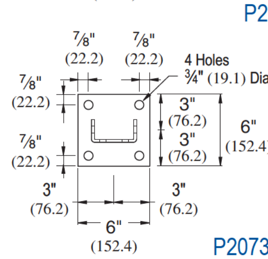
Wt/100 pcs: 373 Lbs (169.2 kg)

P2073, P2073 SQ — EG, GR, HG





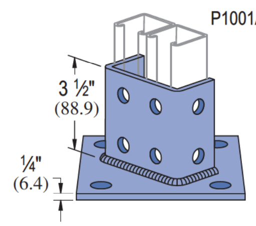
P2073

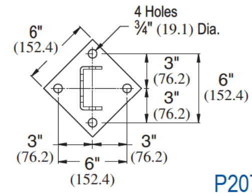


P2073 SQ

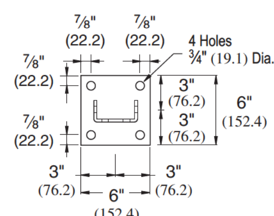
Wt/100 pcs: 325 Lbs (147.4 kg)

P2073A, P2073A SQ — EG, GR, HG





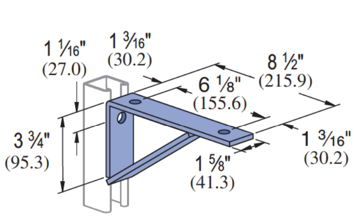
P2073A



P2073A SQ

Wt/100 pcs: 408 Lbs (185.1 kg)

P1769 — EG, GR



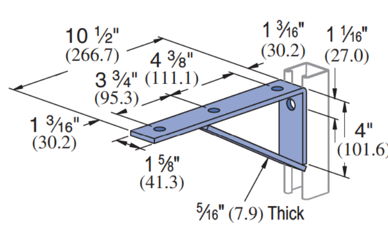
Material: ¼" (6.4) thick steel.

Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	800 *3.56*
P1100	14	600 *2.67*
P2000	16	400 *1.81*

Safety Factor 2½

Wt/100 pcs: 174 Lbs (78.9 kg)

P1771 — EG, GR



Material: ¼" (6.4) thick steel.

Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	800 *3.56*
P1100	14	600 *2.67*
P2000	16	400 *1.81*

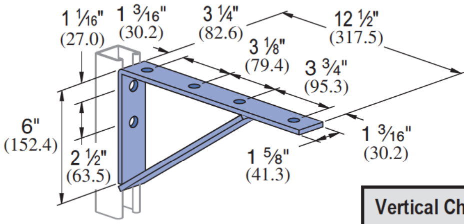
Safety Factor 2½

Wt/100 pcs: 206 Lbs (93.4 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)
Note : When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P1773

EG, GR



Material: ¼" (6.4) thick steel.

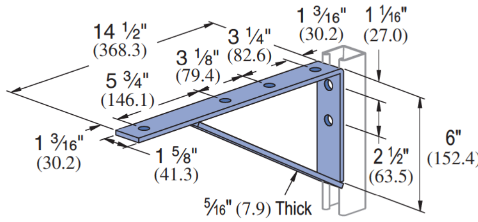
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	900 *(4.00)*
P1100	14	800 *(3.56)*
P2000	16	450 *(2.04)*

Safety Factor 2½

Wt/100 pcs: 264 Lbs (119.7 kg)

P1775

EG, GR



Material: ¼" (6.4) thick steel.

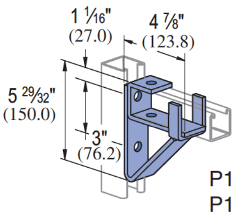
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	900 *(4.00)*
P1100	14	800 *(3.56)*
P2000	16	450 *(2.04)*

Safety Factor 2½

Wt/100 pcs: 295 Lbs (133.8 kg)

P1075

EG, GR



P1000
P1100
P2000
P4001

Material: ¼" (6.4) thick steel.

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)*

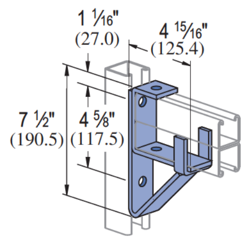
Safety Factor 2½

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

Wt/100 pcs: 229 Lbs (103.9 kg)

P1593

EG, GR



P1001
P1101
P5000
P2001

Material: ¼" (6.4) thick steel.

Wt/100 pcs: 272 Lbs (123.4 kg)

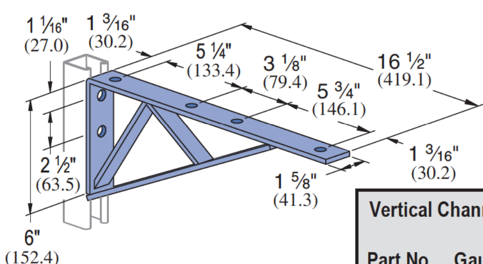
Vertical Channel Part No.	Gauge	Allowable Moment* In-Lbs *(N•M)*
P1000	12	13,000 *1,469*
P1100	14	9,100 *1,028*
P2000	16	6,500 *734*

Safety Factor 2½

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

P1777

EG, GR



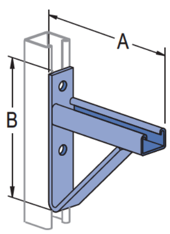
Material: ¼" (6.4) thick steel.

Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	1,200 *(5.44)*
P1100	14	900 *(4.00)*
P2000	16	600 *(2.67)*

Safety Factor 2½

Wt/100 pcs: 385 Lbs (174.6 kg)

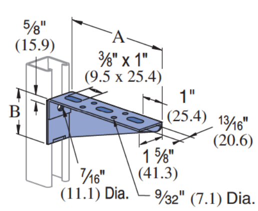
P2547 THRU P2551 CABLE TRAY BRACKET



Part Number	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Load* Lbs *(kN)*
P2547	15 *381.0*	8¾ *222*	420 *190.5*	1,000 *4.45*
P2548	21 *533.4*	8¾ *222*	628 *284.9*	1,000 *4.45*
P2549	27 *685.8*	11¼ *286*	860 *390.1*	900 *4.00*
P2550	33 *838.2*	11¼ *286*	1010 *458.1*	900 *4.00*
P2551	39 *990.6*	16 *406.4*	1257 *683.3*	800 *3.56*

P2491 R-L THRU P2493 R-L

EG, GR



R - As shown; L - Opposite hand
Material : 12 Gauge Steel.

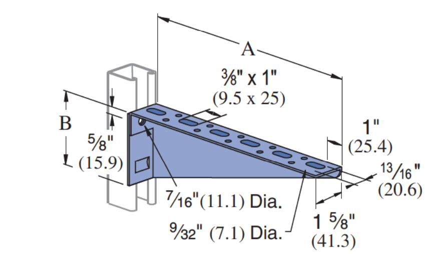
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	300 *(1.33)*
P1100	14	250 *(1.11)*
P2000	16	200 *(.89)*

Safety Factor - 2½

Part Number	Stamped Ident. No.	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2491 R-L	121892 R-L	6 *152.4*	1¹⁵⁄₁₆ *49.2*	67 *30.4*
P2492 R-L	121893 R-L	8 *203.2*	2⁷⁄₁₆ *61.9*	92 *41.7*
P2493 R-L	121894 R-L	10 *254.0*	2¹⁵⁄₁₆ *74.6*	120 *54.4*

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)
Note : When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2494 R-L THRU P2499 R-L



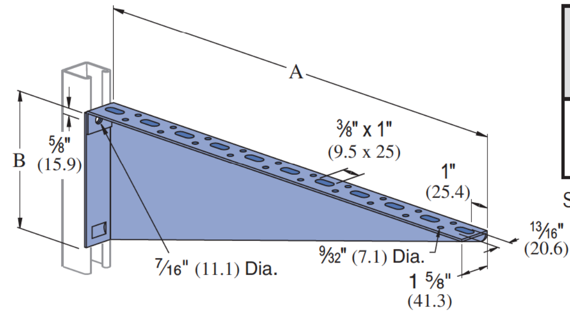
Material : 12 Gauge Steel.
R - As shown; L - Opposite hand

Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	300 *(1.33)*
P1100	14	250 *(1.11)*
P2000	16	200 *(.89)*

Safety Factor - 2½

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

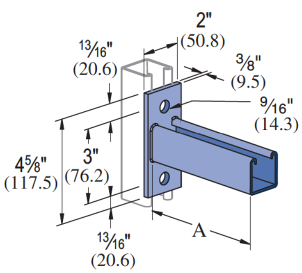
Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P1000	12	300 *(1.33)*
P1100	14	250 *(1.11)*
P2000	16	200 *(.89)*

Safety Factor - 2½

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 *164*	400 *181.4*
P2501 R-L	121902 R-L	26 *660*	6 15/16 *176*	445 *201.8*
P2502 R-L	121903 R-L	28 *711*	7 7/16 *189*	493 *223.6*
P2503 R-L	121904 R-L	30 *762.0*	7 15/16 *202*	545 *247.2*

P2944, P2945, P2946, P2947

EG, GR, HG

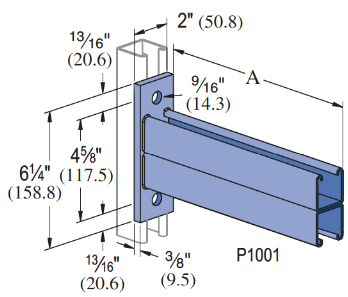


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Load* Lbs *(kN)*
P2944	6 *152.4*	185 *84*	1200 *5.34*
P2945	12 *304.8*	293 *133*	600 *2.67*
P2946	18 *457.2*	401 *182*	400 *1.78*
P2947	24 *609.6*	509 *231*	300 *1.33*

Safety Factor 2½
* Mounted on 12 Ga. Channel

P2542 THRU P2546

EG, GR, HG

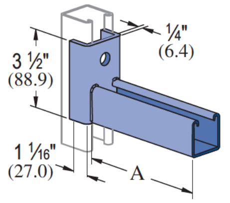


Safety Factor - 2½

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Gauge	Uniform Design Load Lbs *(kN)*
P2542	12 *304.8*	502 *228*	P1000	12	2,000 *(8.90)*
			P1100	14	1,400 *(6.23)*
			P2000	16	1,000 *(4.45)*
P2543	18 *457.2*	692 *314*	P1000	12	1,300 *(5.78)*
			P1100	14	900 *(4.00)*
			P2000	16	650 *(2.89)*
P2544	24 *609.6*	882 *400*	P1000	12	1,000 *(4.45)*
			P1100	14	700 *(3.11)*
			P2000	16	500 *(2.22)*
P2545	30 *762.0*	1,072 *486*	P1000	12	800 *(3.56)*
			P1100	14	560 *(2.49)*
			P2000	16	400 *(1.78)*
P2546	36 *914.4*	1,262 *572*	P1000	12	650 *(2.89)*
			P1100	14	450 *(2.00)*
			P2000	16	320 *(1.42)*

Standard Dimensions for 1 5/8" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1 7/8" (47.6mm); Width: 1 5/8"(41.3mm); Thickness: 1/4" (6.4mm)
Note : When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

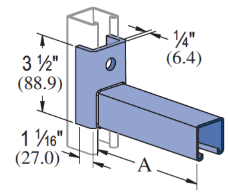
P2231, P2232



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P2231	6	191	P1000	12	1,600 *(7.12)*
	152.4	*86.6*	P1100	14	1,200 *(5.34)*
			P2000	16	800 *(3.56)*
P2232	12	292	P1000	12	800 *(3.56)*
	304.8	*132.4*	P1100	14	600 *(2.67)*
			P2000	16	400 *(1.78)*

Safety Factor - 2½

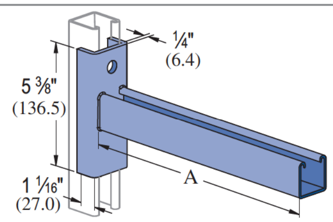
P2231A, P2232A



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P2231A	6	191	P1000	12	1,600 *(7.12)*
	152.4	*86.6*	P1100	14	1,200 *(5.34)*
			P2000	16	800 *(3.56)*
P2232A	12	292	P1000	12	800 *(3.56)*
	304.8	*132.4*	P1100	14	600 *(2.67)*
			P2000	16	400 *(1.78)*

Safety Factor - 2½

P2233, P2234

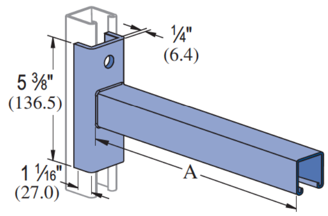


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P2233	18	436	P1000	12	600 *(2.67)*
	457.2	*197.8*	P1100	14	450 *(2.00)*
			P2000	16	300 *(1.33)*
P2234	24	536	P1000	12	450 *(2.00)*
	609.6	*243.1*	P1100	14	330 *(1.47)*
			P2000	16	220 *(.98)*

Safety Factor - 2½

P2233A, P2234A

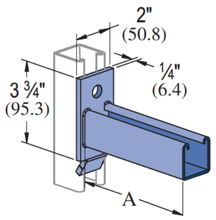
EG, GR, HG



Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P2233A	18	436	P1000	12	600 *(2.67)*
	457.2	*197.8*	P1100	14	450 *(2.00)*
			P2000	16	300 *(1.33)*
P2234A	24	536	P1000	12	450 *(2.00)*
	609.6	*243.1*	P1100	14	330 *(1.47)*
			P2000	16	220 *(.98)*

Safety Factor - 2½

P2513 THRU P2516

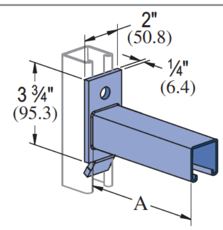


When installed in inverted position use 60% of loads shown.

Safety Factor 2½

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Load Lbs *(kN)*
P2513	6	161	P1000	12	1,200 *(5.34)*
	152.4	*73.0*	P1100	14	800 *(3.56)*
			P2000	16	600 *(2.67)*
P2514	12	261	P1000	12	600 *(2.67)*
	304.8	*118.4*	P1100	14	400 *(1.78)*
			P2000	16	300 *(1.33)*
P2515	18	361	P1000	12	400 *(1.78)*
	457.2	*163.7*	P1100	14	270 *(1.20)*
			P2000	16	200 *(.89)*
P2516	24	461	P1000	12	300 *(1.33)*
	609.6	*209.1*	P1100	14	200 *(.89)*
			P2000	16	150 *(.67)*

P2513A THRU P2516A



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

Safety Factor 2½

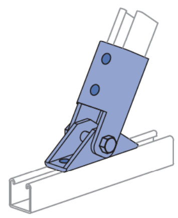
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Vertical Channel Part No.	Vertical Channel Gauge	Uniform Design Lbs *(kN)*
P2513A	6	161	P1000	12	1,200 *(5.34)*
	152.4	*73.0*	P1100	14	800 *(3.56)*
			P2000	16	600 *(2.67)*
P2514A	12	261	P1000	12	600 *(2.67)*
	304.8	*118.4*	P1100	14	400 *(1.78)*
			P2000	16	300 *(1.33)*
P2515A	18	361	P1000	12	400 *(1.78)*
	457.2	*163.7*	P1100	14	270 *(1.20)*
			P2000	16	200 *(.89)*
P2516A	24	461	P1000	12	300 *(1.33)*
	609.6	*209.1*	P1100	14	200 *(.89)*
			P2000	16	150 *(.67)*

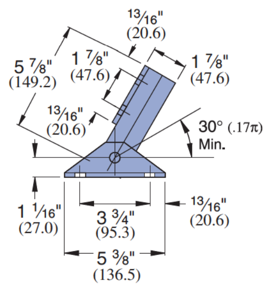
Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

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

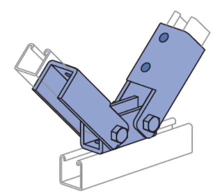
P2815 ADJUSTABLE BRACE FITTING EG HG

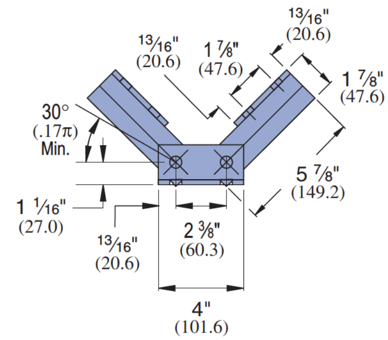




Wt/100 pcs: 307 Lbs (139.3 kg)

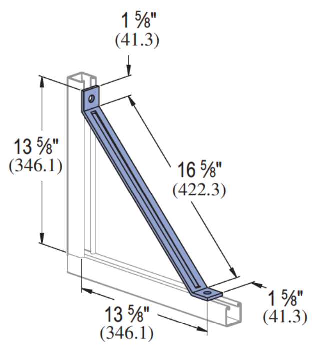
P2815D ADJUSTABLE BRACE FITTING





Wt/100 pcs: 497 Lbs (225.4 kg)

P2452 KNEE BRACE EG GR

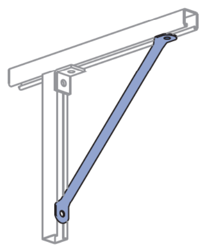


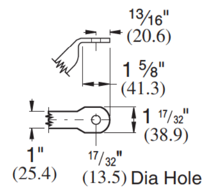
Design Axial Load
1200 Lbs (5.34 kN)

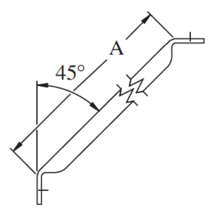
Material: ¼" (6.4) thick steel.

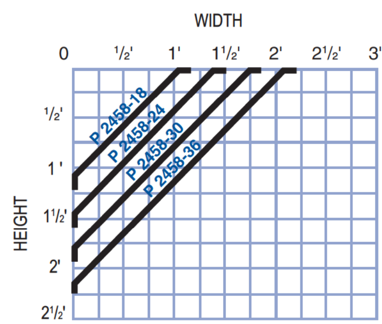
Wt/100 pcs: 277 Lbs (125.6 kg)

P2458-18 THRU P2458-36 TUBULAR KNEE BRACES





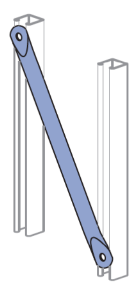


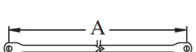


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2458-18	18 *457.2*	146 *66.2*
P2458-24	24 *609.6*	186 *84.4*
P2458-30	30 *762.0*	227 *103.0*
P2458-36	36 *914.4*	267 *121.1*

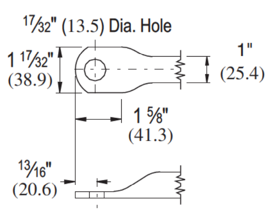
Design Loads
Compression = 1500 Lbs (6.67 kN)
Tension = 300 Lbs (1.33 kN)

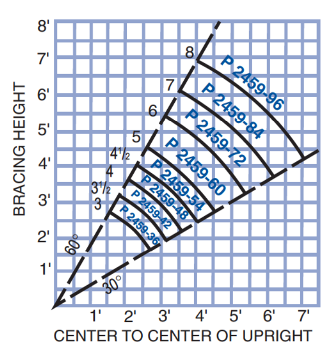
P2459-36 THRU P2459-96 TUBULAR BACK BRACES EG GR





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. 30° - 60° maximum, minimum brace angles are indicated for maximum effect.

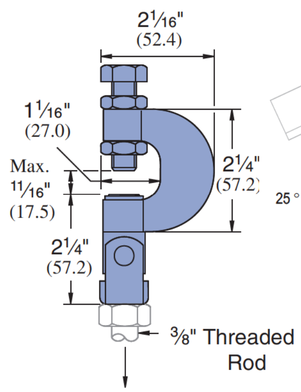


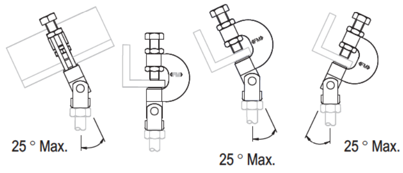


Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2459-36	36 *914.4*	255 *115.7*
P2459-42	42 *1,066.8*	296 *134.3*
P2459-48	48 *1,219.2*	336 *152.4*
P2459-54	54 *1,371.6*	377 *171.0*
P2459-60	60 *1,524.0*	418 *189.6*
P2459-72	72 *1,828.8*	499 *226.3*
P2459-84	84 *2,133.6*	580 *263.1*
P2459-96	96 *2,438.4*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

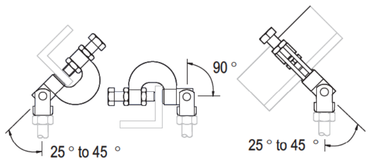
Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)
Note : When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P2897





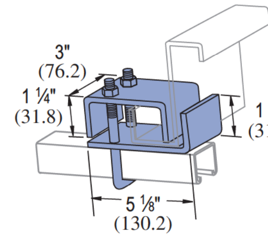
Design Load (Safety Factor of 4)
(angles ≤ 25°) - 550 Lbs (2.45 kN)
(angles > 25°) - 330 Lbs (1.47 kN)



Safety Factor 4
Torque: 13 Ft-Lbs *(18 N•m)*

Wt/100 pcs: 33 Lbs (15.0 kg)

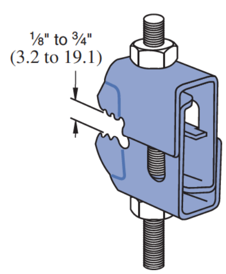
P2784



Part Number	For Use With	Load Lbs (kN)	Wt/100 pcs Lbs (kg)
P2784-1	P1000, P1100, P2000	1,200 *5.34*	175 *79.3*
P2784-2	P1001, P1101, P2001	1,200 *5.34*	179 *81.1*
P2784-3	P5001, P5501	1,200 *5.34*	180 *81.5*

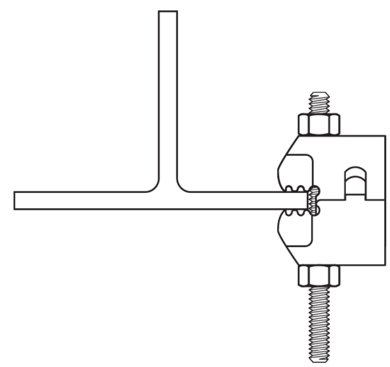
PFL2-37

SWIFTGRIP



Designed to significantly reduce installation time, while offering greater performance than cast beam clamps, the Swiftgrip enables connection of drop rod to beam in one simple operation.
Ideal for the suspension of building services equipment including heating, ventilating and air conditioning equipment; pipework; fire protection systems; electrical equipment and cable tray.

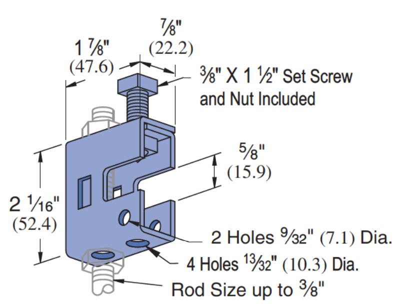
Available finish choices are Stainless Steel or Perma-Gold™
Industry Standard Yellow Dichromate.
Design Load is 540 Lbs (2.40 kN).
Safety Factor is 4
Torque is 8 Ft/Lbs (10.8 N•m)
Rod Size is 3⁄8" (9.5mm)

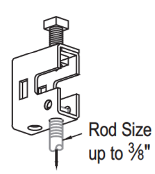


Wt/100 pcs: 26 Lbs (11.9 kg)

P2675

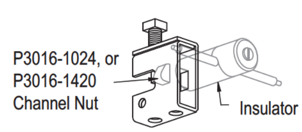
EG GR





Design Load
250 Lbs (1.11 kN)

Design Load
150 Lbs (.67 kN)



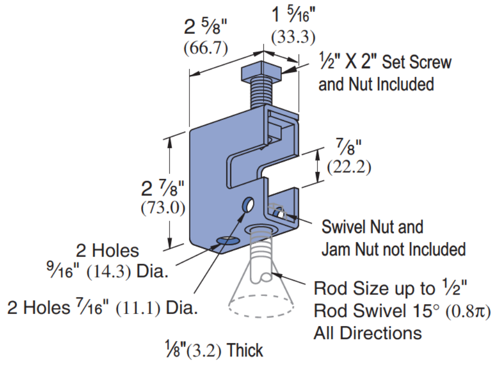
Clamp Materials: .105" (2.7) thick steel.
Clamp P2675 is designed for light duty rod suspension.
It also may be used with P3016-1024 or P3016-1420 nut as illustrated above for mounting insulators, etc.

Wt/100 pcs: 33 Lbs (15.0 kg)

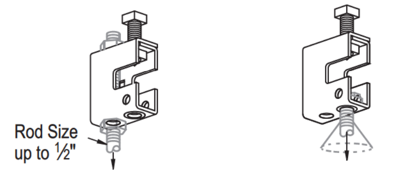
Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.
Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated.
For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

P2676

EG GR



Wt/100 pcs: 72 Lbs (32.7 kg)



Design Load
300 Lbs (1.33 kN)

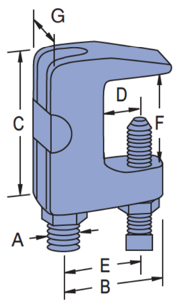
Design Load
500 Lbs (2.22 kN)

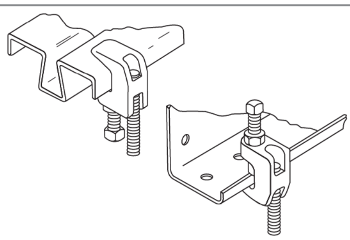
Clamp P2676 provides a means of rod suspension where a free swing of up to 15° (0.8π) is required. Clamp will accommodate ¼" (6.4), ⅜" (9.5), or ½" (12.7) rods. Order swivel nuts P2679-4,-6, or -8 as required. Clamp may also be used with P2677 as illustrated in application drawings.

Clamp Materials: ⅛" (3.2) thick steel. Not available in SS or ST.

P2898

UNIVERSAL BEAM CLAMP EG



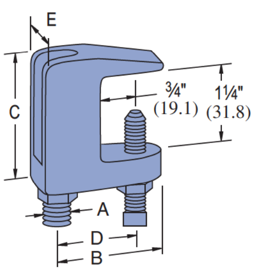


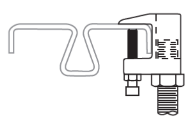
- Maximum temperature of 450˚ F (232° C)
- At least one full thread must be exposed

	A In	B In *(mm)*	C In *(mm)*	D In *(mm)*	E In *(mm)*	F In *(mm)*	G In *(mm)*	Max Load Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P2898-37	⅜	1 *25.4*	1½ *38.1*	½ *12.7*	1 *25.4*	¾ *19.1*	⅞ *22.2*	400 *1.78*	33 *15.0*
P2898-50	½	1 5/16 *25.4*	1½ *38.1*	½ *12.7*	1 *25.4*	¾ *19.1*	⅞ *22.2*	500 *2.22*	33 *15.0*
P2898-62	⅝	1½ *38.1*	1½ *38.1*	½ *12.7*	1 *25.4*	¾ *19.1*	1 *25.4*	600 *2.67*	22 *10.0*
P2898-75	¾	1⅞ *47.6*	1¾ *44.5*	⅝ *15.9*	1⅜ *34.9*	1 *25.4*	1¼ *31.8*	800 *3.56*	88 *40.0*
P2898-87	⅞	2 *50.8*	1¾ *44.5*	⅝ *15.9*	1½ *38.1*	1 *25.4*	1¼ *31.8*	1,200 *5.34*	79 *35.9*

P2899

WIDE THROAT BEAM CLAMP EG



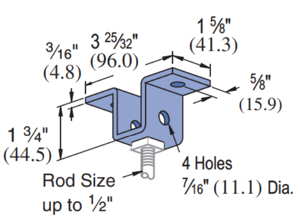


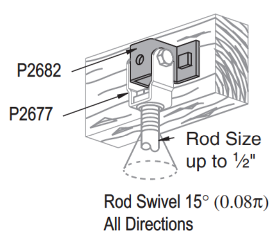
- Maximum temperature of 450˚ F (232° C)

	Rod Size A in	B In *(mm)*	C In *(mm)*	D In *(mm)*	E In *(mm)*	Max. Load Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P2899-37	⅜	1⅝ *41.3*	2 *50.8*	1 *25.4*	⅞ *22.2*	400 *1.78*	28 *12.7*
P2899-50	½	1⅝ *41.3*	2 *50.8*	1 *25.4*	⅞ *22.2*	500 *2.22*	34 *15.4*
P2899-62	⅝	1¾ *44.5*	2¼ *57.2*	1¼ *31.8*	1 *25.4*	600 *2.67*	66 *30.0*
P2899-75	¾	1⅞ *47.6*	2⅜ *60.3*	1⅜ *34.9*	1¼ *31.8*	800 *3.56*	83 *37.7*

P2682

EG



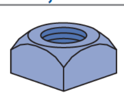


Hanger clevis for up to ½" (12.7) rod suspension from wood ceilings. May also be used with P2677 as illustrated in application drawings.

Wt/100 pcs: 55 Lbs (24.9 kg)

P2679-4, -6 & -8

SWIVEL NUT EG

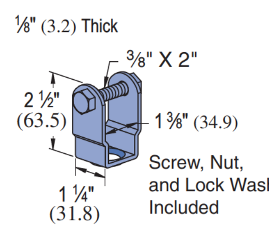


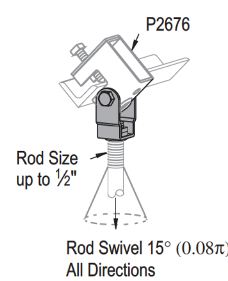
- Use w/P2676 and P2677.
- Order size as required.

Part No.	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)*

P2677

EG





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.

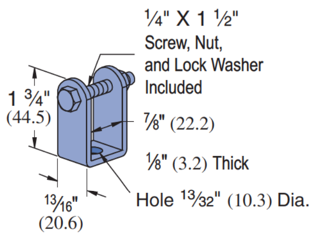
Design Load
500 Lbs (2.22 kN)

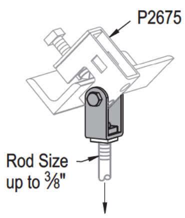
Wt/100 pcs: 30 Lbs (13.6 kg)

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.
Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated.
For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

P2674

EG GR





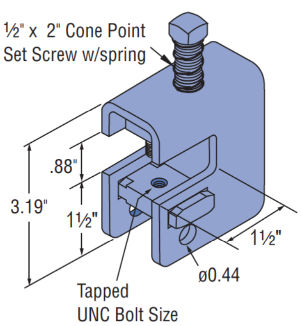
Clevis hanger to be used with P2675 to provide angle adjustment for up to ⅜" rod suspension as illustrated.

Design Load
250 Lbs (1.11 kN)

Wt/100 pcs: 17 Lbs (7.7 kg)

P1640

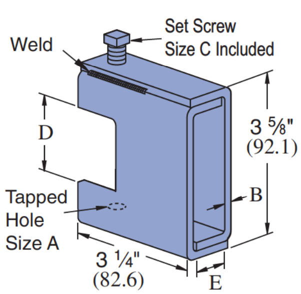
EG GR

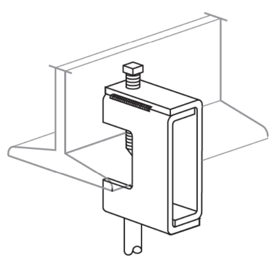


Part Number	Thread Size
P1640-025	¼"-20
P1640-037	⅜"-16
P1640-050	½"-13

P2398S, P2401S, P2403S, P2405S

EG GR





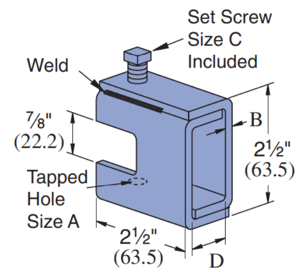
Weld is not continuous it is either 1¼" (31.8) - 1¾" (44) long or 2 spot welds. All welds are on the top and bottom.

For beams between ¾" (19.1) to 1⅝" (41.3) thick flanges.

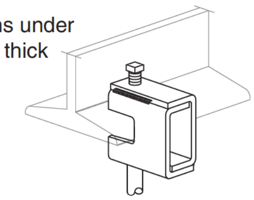
Part Number	"A" In	"B" In (mm)	"C" In	"D" In (mm)	"E" In (mm)	Wt/100 pcs Lbs (kg)	Design Load Lbs (kN)
P2398S	¼ - 20	⅛	⅜ x 2	1 21/32	⅞	109	800
		3.2		42.1	22.2	49.4	3.56
P2401S	⅜ - 16	3/16	½ x 2	1 11/16	29/32	156	1,300
		4.8		42.9	23.0	70.8	5.78
P2403S	½ - 13	¼	½ x 2	1 11/16	15/16	201	1,900
		6.4		42.9	23.8	91.2	8.45
P2405S	⅝ - 11	5/16	⅝ x 2	1 11/16	1 5/16	311	2,400
		7.9		42.9	33.3	141.1	10.68

P1648S THRU P1653S

EG GR



For beams under ⅞" (22.2) thick flange.

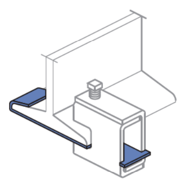


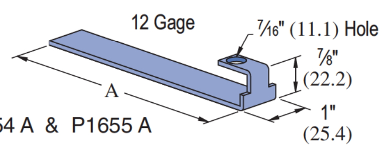
Weld is not continuous it is either 1¼" (31.8) - 1¾" (44.5) long or 2 spot welds. All welds are on the top and bottom.

Part Number	"A" In	"B" In (mm)	"C" In	"D" In (mm)	Wt/100 pcs Lbs (kg)	Design Load Lbs (kN)
P1648S	¼ - 20	⅛	⅜ x 1½	⅞	67	650
		3.2		22.2	30.4	2.89
P1649S	5/16 - 18	⅛	⅜ x 1½	⅞	67	650
		3.2		22.2	30.4	2.89
P1650S	⅜ - 16	3/16	½ x 1½	15/16	100	1,100
		4.8		23.8	45.4	4.89
P1651S	½ - 13	¼	½ x 1½	15/16	130	1,600
		6.4		23.8	59.0	7.12
P1652S	⅝ - 11	5/16	⅝ x 1½	1 5/16	160	2,400
		7.9		33.3	72.6	10.68
P1653S	¾ - 10	5/16	⅝ x 1½	1 5/16	160	2,400
		7.9		33.3	72.6	10.68

P1654A THRU P1661A

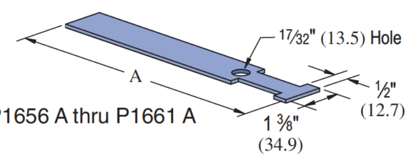
RETAINER STRAP EG GR





P1654 A & P1655 A

For beams under ⅞" (22.2) thick flange.

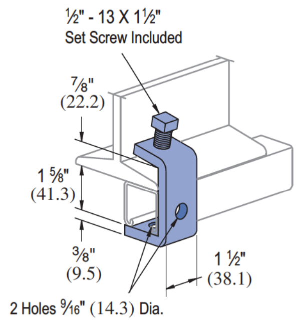


P1656 A thru P1661 A

Strap Part Number	Flange Width In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)	Beam Clamp Used With
P1654 A	6	7	25	P2675
	152.4	177.8	11.3	
P1655 A	9	10	34	P2675
	228.6	254.0	15.4	
P1656 A	6	9	35	P1648 S Thru P1651 S, P2398S, P2401S & P2403S
	152.4	228.6	15.9	
P1657 A	9	12	47	
	228.6	304.8	21.3	
P1658 A	12	15	59	
	304.8	381.0	26.8	
P1659 A	6	9	33	P2676
	152.4	228.6	15.0	
P1660 A	9	12	45	P2676
	228.6	304.8	20.4	
P1661 A	12	15	57	P2676
	304.8	381.0	25.9	

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping. Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

P1271S
EG GR HG

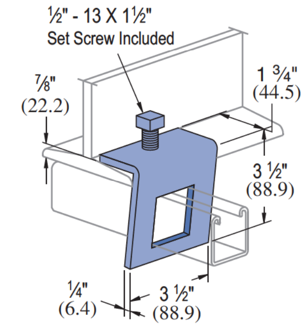


Note: Requires P1010 Channel Nut and bolt.

Design Load Each 500 Lbs (2.22 kN) Use in Pairs Only

Wt/100 pcs: 95 Lbs (43.1 kg)

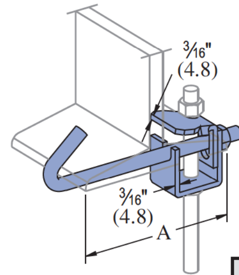
P1796S
EG GR HG



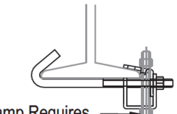
Design Load Each 500 Lbs (2.22 kN) Use in Pairs Only

Wt/100 pcs: 91 Lbs (41.3 kg)

P2824-6,-9,-12
EG GR HG



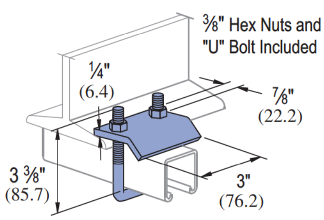
For use with Beams up to ¾" (19.1) max flange thickness



Clamp Requires ½" Diameter Rod and 2 Hex Nuts (Sold Seperately)

Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P2824-6	2½ - 6 *63.5 - 152.4*	125 *56.7*	500 *2.22*
P2824-9	5½ - 9 *139.7 - 228.6*	140 *63.5*	500 *2.22*
P2824-12	8½ - 12 *215.9- 304.8*	171 *77.6*	500 *2.22*

P2785
EG GR HG

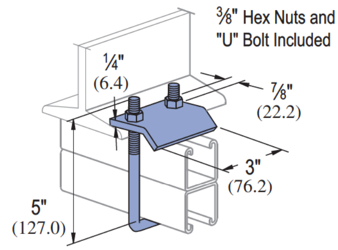


- For use with Beams up to ¾" (19.1) Flanges and with Channels P1000, P1100, P2000, P3000, P3300, P3301, P4000, P4001, P4100, and P4101.

Design Load Each 1000 Lbs (4.45 kN) Use in Pairs Only

Wt/100 pcs: 83 Lbs (37.6 kg)

P2786
EG GR HG

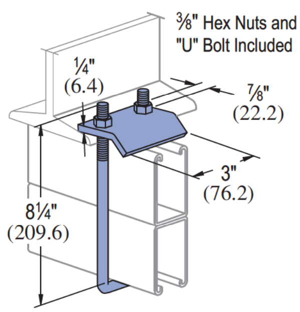


- For use with Beams up to ¾" (19.1) Flanges and with Channels P1001, P1101, P2001, P3001, P5000, and P5500.

Design Load Each 1000 Lbs (4.45 kN) Use in Pairs Only

Wt/100 pcs: 92 Lbs (41.7 kg)

P2787
EG GR HG

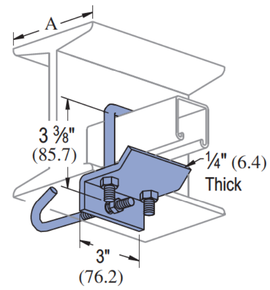


- For use with Beams up to ¾" (19.1) Flanges and with Channels P5001 and P5501.

Design Load Each 1000 Lbs (4.45 kN) Use in Pairs Only

Wt/100 pcs: 112 Lbs (50.8 kg)

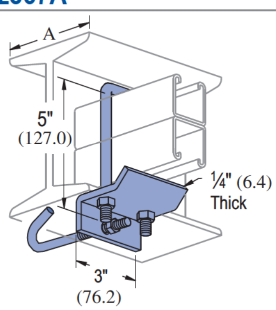
P2867
EG GR HG



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.

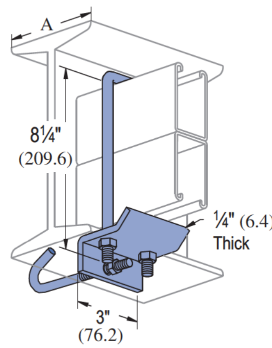
P2867A
EG GR HG



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.

P2867B
EG GR HG



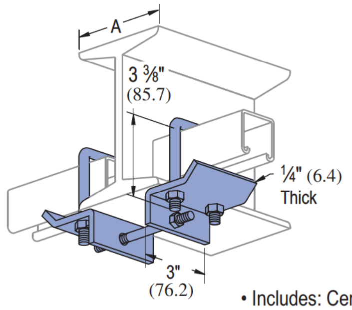
Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2867B	4"-6"	161 *(73.0)*
P2867B-9	6"-9"	167 *(75.7)*
P2867B-12	9"-12"	176 *(79.8)*
P2867B-15	12"-15"	186 *(84.4)*
P2867B-18	15"-18"	195 *(88.5)*

- Includes: "J" Bolt, "U" Bolt and Hex Nuts.
- For use with Channel P5001, and P5501.

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping. Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

P2868

EG GR HG

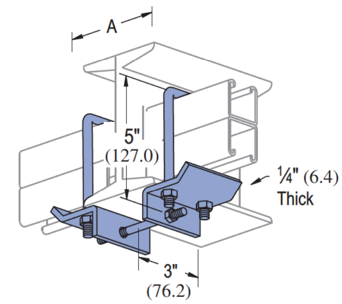


Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2868	4"-6"	282 *(127.9)*
P2868-9	6"-9"	289 *(131.1)*
P2868-12	9"-12"	296 *(134.3)*
P2868-15	12"-15"	304 *(137.9)*
P2868-18	15"-18"	311 *(141.1)*

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

P2868A

EG GR HG

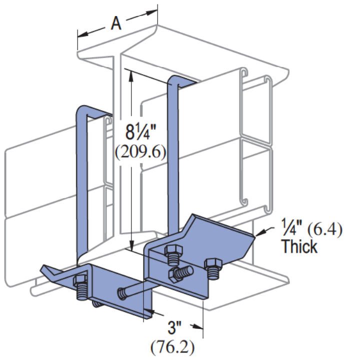


Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2868A	4"-6"	300 *(136.1)*
P2868A-9	6"-9"	307 *(139.3)*
P2868A-12	9"-12"	314 *(142.2)*
P2868A-15	12"-15"	322 *(146.1)*
P2868A-18	15"-18"	329 *(149.2)*

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

P2868B

EG GR HG

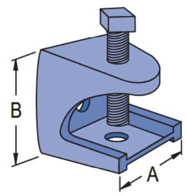


Part Number	Beam Size "A"	Wt/100 pcs Lbs (kg)
P2868B	4"-6"	320 *(145.1)*
P2868B-9	6"-9"	327 *(148.3)*
P2868B-12	9"-12"	334 *(151.5)*
P2868B-15	12"-15"	342 *(155.1)*
P2868B-18	15"-18"	349 *(153.3)*

- Includes: Center Rod, "U" Bolts and Hex Nuts.
- For use with Channels P5001, and P5501.

P2894

EG

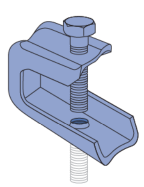


Material: Malleable Iron
⅞" Maximum Flange Thickness
Note: Tapped Hole on Top and Bottom

Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P2894-25	¼	1⅛ *28.6*	1¼ *31.8*	150 *.67*	23 *10.4*
P2894-37	⅜	2 *50.8*	2 *50.8*	350 *1.56*	95 *43.1*
P2894-50	½	2⅝ *66.7*	2½ *63.5*	400 *1.78*	195 *88.5*

P2893

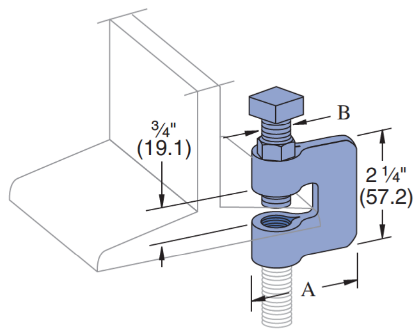
EG



Material: Steel
Use With: ¼" rod
Load Rating: 75 lbs. (.33 kN)

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

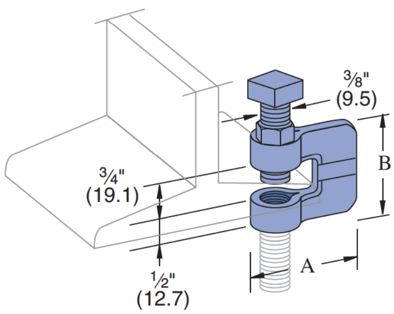
P2895



Material: Steel

Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P2895-37	⅜	2 5/16 *58.7*	⅜ *9.5*	330 *1.47*	35 *15.9*
P2895-50	½	2¼ *57.2*	½ *12.7*	380 *1.69*	41 *18.6*
P2895-62	⅝	2⅜ *60.3*	⅝ *15.9*	450 *2.00*	67 *30.4*
P2895-75	¾	2¼ *57.2*	½ *12.7*	500 *2.22*	72 *32.7*

P2896

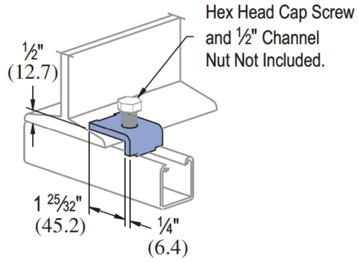


Material: Malleable Iron, Steel Set Screw

Part Number	Rod Size In	"A" In *(mm)*	"B" In *(mm)*	Load Ratings Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P2896-37	⅜	1 11/16 *42.9*	1¾ *44.5*	400 *1.78*	38 *17.2*
P2896-50	½	1 23/32 *43.7*	1¾ *44.5*	400 *1.78*	52 *23.6*
P2896-62	⅝	1 15/16 *49.2*	2 *50.8*	450 *2.00*	68 *30.8*
P2896-75	¾	2 1/32 *51.6*	2 *50.8*	600 *2.67*	128 *58.1*

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping. Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

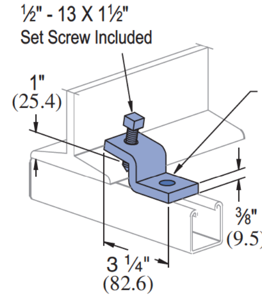
P1386 — EG GR HG



Channel Style	Design Load Each (Use in Pairs Only) Lbs (kN)
P1000	600 *2.67*
P1100	500 *2.22*
P2000	450 *2.00*

Wt/100 pcs: 27 Lbs (12.2 kg)

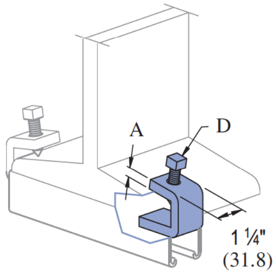
P1379S — EG GR HG



Channel Style	Design Load Each (Use in Pairs Only) Lbs (kN)
P1000	600 *2.67*
P1100	500 *2.22*
P2000	450 *2.00*

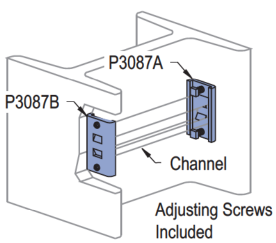
Wt/100 pcs: 75 Lbs (34.0kg)

P1272S, P1985S, P1986S — EG GR HG



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 *(kN)*
P1272S	¼ *6.4*	Up to ¾ *Up to 19.1*	⅜-16 x 1½	39 *17.7*	450 *2.00*
P1985S	⅜ *9.5*	Up to ¾ *Up to 19.1*	½-13 x 1½	62 *28.1*	1,000 *4.45*
P1986S	⅜ *9.5*	⅞ to 2 *22.2 - 50.8*	½-13 x 1½	74 *33.6*	900 *4.00*

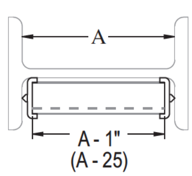
P3087 — Column Insert — EG



Channel Part Number	Design Pull Out Load Lbs *(kN)*	Design Slip Load Lbs *(kN)*
P1000	1,000 *4.45*	800 *3.56*
P1100	700 *3.34*	500 *2.22*
P2000	500 *2.22*	300 *1.33*

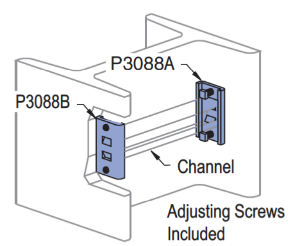
Safety factor of 3.

- Adjusting Screws Included.
- Unistrut channel not included.
- Part number P3087 consists of:
  (1) piece P3087A,
  (1) piece P3087B and
  (2) set screws, ⅜" Dia.



Wt/100 pcs: 136 Lbs (61.7 kg)

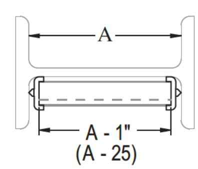
P3088 — Column Insert



Channel Part Number	Design Pull Out Load Lbs *(kN)*	Design Slip Load Lbs *(kN)*
P3300	1,000 *4.45*	800 *3.56*
P4100	700 *3.11*	500 *2.22*
P4000	500 *2.22*	300 *1.33*

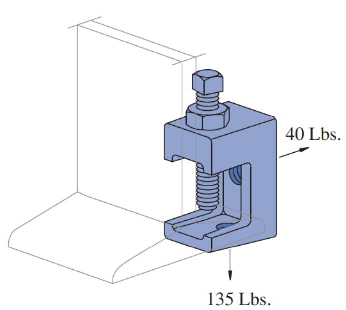
Safety factor of 3.

- Adjusting Screws Included.
- Unistrut channel not included.
- Part number P3088 consists of:
  (1) piece P3088A,
  (1) piece P3088B and
  (2) set screws, ⅜" Dia.



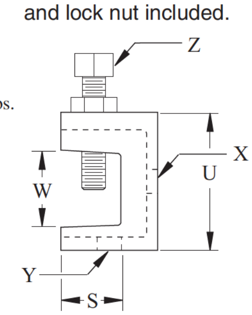
Wt/100 pcs: 120 Lbs (54.4 kg)

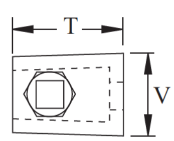
PLLC025 — Flange Clamp



Material: Malleable Iron.

Cup point set screw and lock nut included.





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

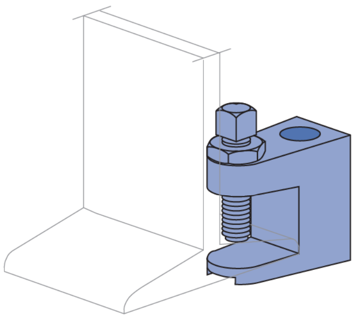
X, Y are threaded holes.

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

Dimensions					
Part Number	"S" In *(mm)*	"T" In *(mm)*	"U" In *(mm)*	"V","W" In *(mm)*	"X","Y" In
PLLC025	⅝ *15.9*	1 *25.4*	1⁷⁄₁₆ *36.5*	¾ *19.1*	¼ X 20

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping. Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

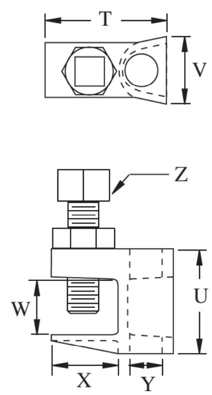
PFL037 THRU PFL050T — FLANGE CLAMP



Material: Malleable Iron.

Cup point set screw and lock nut included.

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

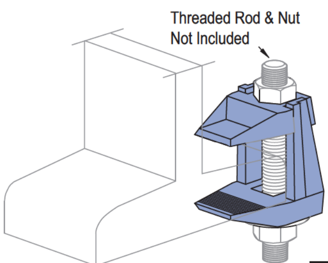


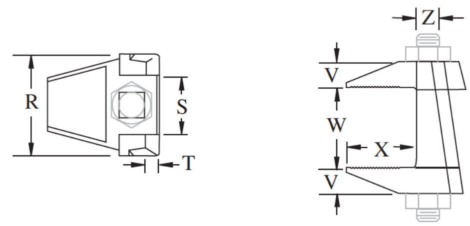
Safety Factor: 4

Part Number	Type of Hole	Rod Size	"Z" Set Screw Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kN)*
PFL037	Clear	⅜"	⅜"	28 *(12.7)*	540 *(2.40)*
PFL037T	Tapped	⅜"	⅜"	28 *(12.7)*	540 *(2.40)*
PFL050	Clear	½"	⅜"	40 *(18.1)*	700 *(3.11)*
PFL050T	Tapped	½"	⅜"	40 *(18.1)*	700 *(3.11)*

Part Number	"T" In *(mm)*	"U" In *(mm)*	"V" In *(mm)*	"W" In*(mm)*	"X" In *(mm)*	"Y" In *(mm)*	
	Dimensions						
PFL037	1 11/16 *42.9*	1 9/16 *39.7*	⅞ *22.2*	¾ *19.1*	1 *25.4*	7/16 *11.1*	
PFL037T	1 11/16 *42.9*	1 9/16 *39.7*	⅞ *22.2*	¾ *19.1*	1 *25.4*	⅜	Tapped Hole
PFL050	2 *50.8*	1 23/32 *43.7*	1 *25.4*	29/32 *23.0*	1 3/32 *27.8*	9/16 *14.3*	
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





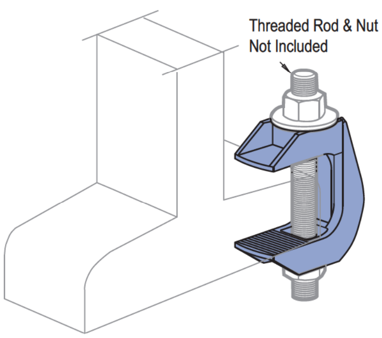
Material: Malleable Iron.

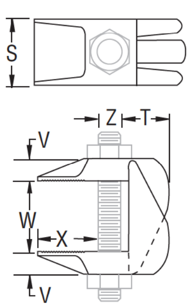
Safety Factor: 4

Part Number	Rod Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kN)*	Torque Ft-Lbs
PLF3037	⅜"	53 *24*	270 *1.20*	15
PLF3050	½"	91 *41*	450 *2.00*	29
PLF3062	⅝"	186 *84*	900 *4.00*	69
PLF3075	¾"	334 *152*	1,350 *6.01*	130

Part Number	"X" In *(mm)*	"W" In *(mm)*	"V" In *(mm)*	"T" In *(mm)*	"R" In *(mm)*	"S" In *(mm)*
	Dimensions					
PLF3037	1 *25.4*	0 - 1 3/16 *0 - 30.2*	⅜ *9.5*	9/32 *7.1*	1½ *38.1*	⅞ *22.2*
PLF3050	1⅜ *34.9*	0 - 1 9/16 *0 - 39.7*	½ *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*	⅝ *15.9*	½ *12.7*	2 11/32 *59.5*	1 7/16 *36.5*
PLF3075	2 3/16 *55.6*	0 - 1¾ *0 - 44.5*	¾ *19.1*	⅝ *15.9*	3 *76.2*	1¾ *44.5*

PLF9037 THRU PLF9100 — FLANGE CLAMP





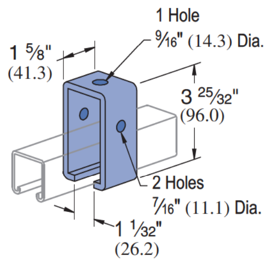
Part Number	Rod Size	Wt/100 pcs Lbs *(kg)*	Max. Allowable Load Lbs *(kN)*	Torque Ft-Lbs	"X" In *(mm)*	"W" In *(mm)*	"V" In *(mm)*	"T" In *(mm)*	"S" In *(mm)*
PLF9037	⅜"	55 *24.9*	440 *1.96*	15	1 *25.4*	¾ - 1 11/16 *19.1 - 42.9*	½ *12.7*	¾ *19.1*	1 *25.4*
PLF9050	½"	122 *55.3*	630 *2.80*	29	1⅜ *34.9*	1 - 2⅜ *25.4 - 60.3*	21/32 *16.7*	15/16 *23.8*	1 3/16 *30.2*
PLF9062	⅝"	200 *90.7*	1,260 *5.60*	69	1 11/16 *42.9*	1⅛ - 2¾ *28.6 - 69.9*	13/16 *20.6*	1⅛ *28.6*	1⅜ *34.9*
PLF9075	¾"	367 *166.5*	1,880 *8.36*	131	2 *50.8*	1¼ - 3¼ *31.8 - 82.6*	1 *25.4*	1⅜ *34.9*	1¾ *44.5*
PLF9100	1"	1,101 *499.4*	3,150 *14.01*	173	3 *76.2*	1¾ - 3¾ *44.9 - 95.3*	1½ *38.1*	2 3/16 *55.6*	2½ *63.5*

Material: Malleable Iron.

Safety Factor: 4

Note: When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.
Clamps are designed to be used with W, M, S & HP Shape beams, Standard C & Misc. MC Channels, Angles & Structural Tees. Clamps must be used in pairs where indicated.
For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.

P1834 — Channel Trolley Support — EG

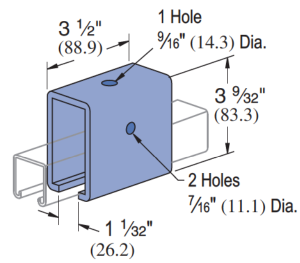


Requires 3/8" x 2½" Bolt and 3/8" Nut (not included)

Design Load
1200 Lbs (5.34 kN)

Wt/100 pcs: 102 Lbs (46.3 kg)

P1834A — Channel Trolley Support — EG

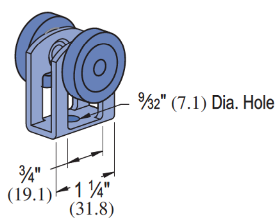


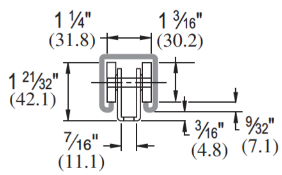
Requires 3/8" x 2½" Bolt and 3/8" Nut (not included)

Design Load
2500 Lbs (11.12 kN)

Wt/100 pcs: 220 Lbs (99.8 kg)

P2749, P2749N† — EG





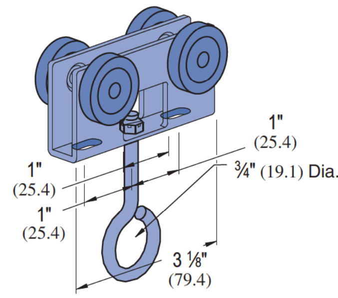
Clevis Material:
12 gauge.

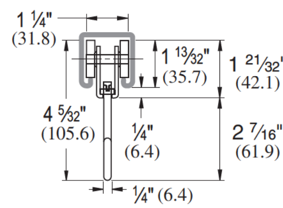
*Wheel bearings are stainless steel, and should not be lubricated.

† "N" indicates acetal wheels.

Part Number	Design Load Lbs (kN)	Wt/100 pcs Lbs (kg)
P2749	50 .22	21 9.5
P2749N	10 .04	13 5.9

P2751, P2751 N† — EG





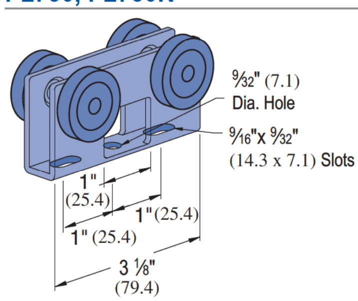
Part Number	Design Load Lbs (kN)	Wt/100 pcs Lbs (kg)
P2751	100 .44	63 28.6
P2751N	20 .09	40 18.1

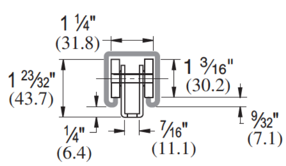
Clevis Material: 12 gauge.

*Wheel bearings are stainless steel, and should not be lubricated.

† "N" indicates acetal wheels.

P2750, P2750N† — EG





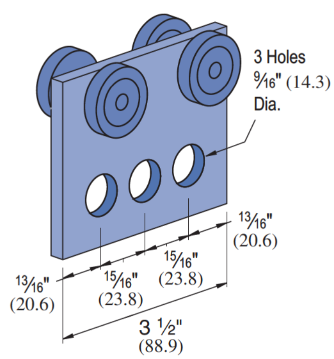
Clevis Material: 12 gauge.

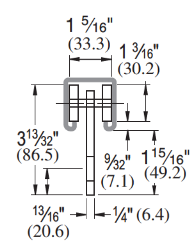
*Wheel bearings are stainless steel, and should not be lubricated.

† "N" indicates acetal wheels.

Part Number	Design Load Lbs (kN)	Wt/100 pcs Lbs (kg)
P2750	100 .44	55 24.9
P2750N	20 .09	32 14.5

P2950 — EG



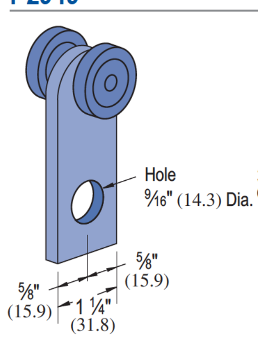


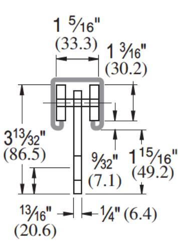
Wheel bearings are stainless steel. Do not lubricate.

FPM	RPM	Design Load In P1000 Lbs (kN)
180	600	300 1.33
90	300	450 2.00
30	100	600 2.67

Wt/100 pcs: 110 Lbs (49.9 kg)

P2949 — EG





FPM	RPM	Design Load In P1000 Lbs (kN)
180	600	150 .67
90	300	225 1.00
30	100	437 1.94

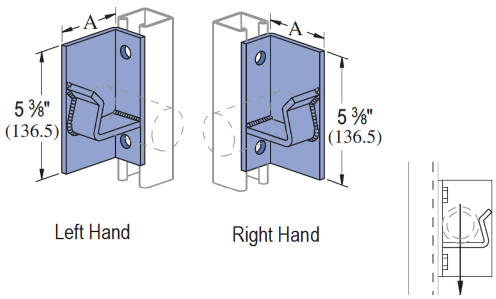
Wheel bearings are stainless steel. Do not lubricate.

Wt/100 pcs: 46 Lbs (20.9 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

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



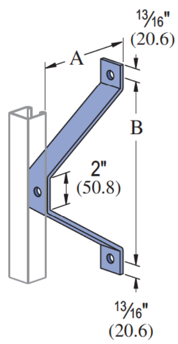
Left Hand

Right Hand

Vertical Channel Part No.	Gauge	Max. Allowable Load Lbs *(kN)*
P1000	12	3,000 *(13.34)*
P1100	14	2,000 *(8.90)*
P2000	16	2,000 *(8.90)*

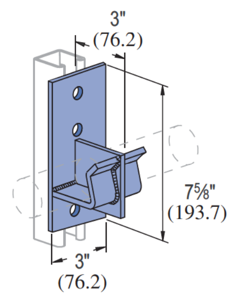
Part Number	"A" In *(mm)*	Std. Pipe Size In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2354 R-L	3 *76.2*	1¼ *31.8*	220 *99.8*
P2355 R-L	3⅝ *92.1*	2 *50.8*	252 *114.3*

P1204 thru P1208 — Wall Ladder Bracket EG



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*

P2454 — Double Pipe Axle Support

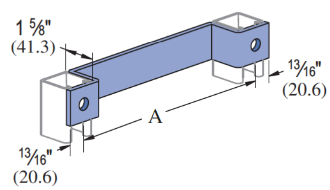


Load Rating 4,000 Lbs (17.79 kN)

For 1¼" (31.8) Standard Pipe

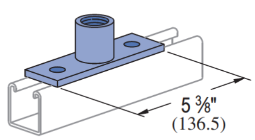
Wt/100 pcs: 310 Lbs (140.6 kg)

P1201, P1202, P1203 — Ladder Rung



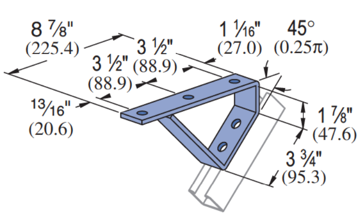
Part Number	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1201	12 *304.8*	186 *84.4*
P1202	15 *381.0*	221 *100.2*
P1203	18 *457.2*	254 *115.2*

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



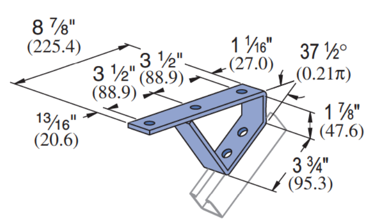
Part Number	Pipe Coupling Size In	Wt/100 pcs Lbs *(kg)*
P2470-50	½	77 *(34.9)*
P2470-75	¾	93 *(42.2)*
P2470-100	1	103 *(46.7)*

P1944 — 45° (.25π) Stair Tread Support



Wt/100 pcs: 220 Lbs (99.8 kg)

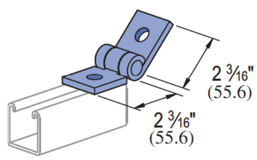
P2655 — 37½° (.21π) Stair Tread Support



Wt/100 pcs: 213 Lbs (96.6 kg)

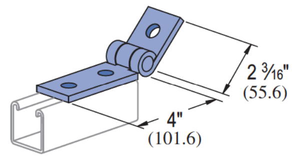
Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)
Note : When used for mechanical supports, load capacities of brackets and fittings should be in compliance with the American Standard Code for Pressure Piping.

P1843 Adj. Hinge Connection EG GR



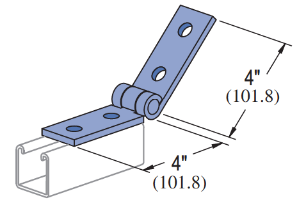
Wt/100 pcs: 68 Lbs (30.8 kg)

P1354A Adj. Hinge Connection EG GR



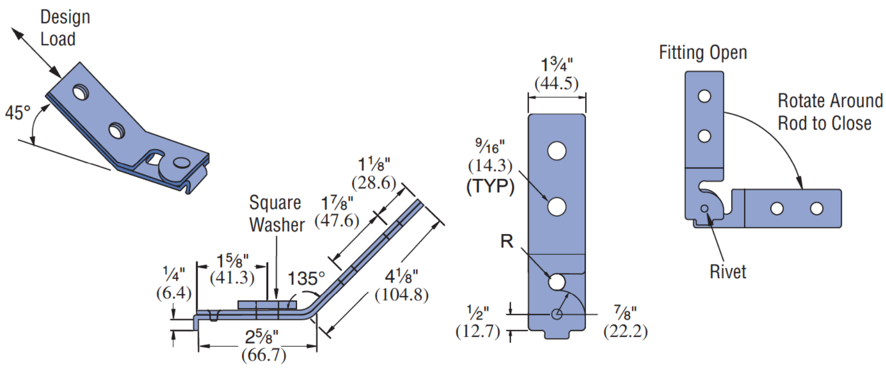
Wt/100 pcs: 89 Lbs (40.4 kg)

P1354 Adj. Hinge Connection EG GR



Wt/100 pcs: 109 Lbs (49.4 kg)

SPF® 100 — Seismic Pivot Fittings



Part Number	Rod Size In *(mm)*	"R" - Hole Diameter In *(mm)*	Design Load Lbs *(KN)*
SPF 100-037	⅜ *9.5*	7/16 *11.1*	1,400 *6.23*
SPF 100-050	½ *12.7*	9/16 *14.3*	2,100 *9.34*
SPF 100-062	⅝ *15.9*	11/16 *17.5*	2,100 *9.34*
SPF 100-075	¾ *19.1*	13/16 *20.6*	2,400 *10.68*

Safety Factor = 3

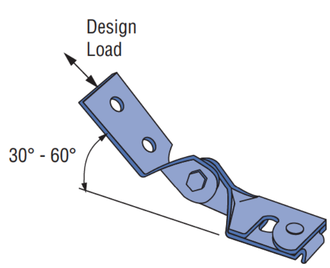
FINISH

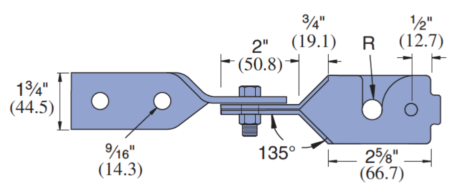
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.

Notes:

1. Design load is limited to slip capacity of a channel nut at hole "R".
2. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications.
3. For retrofit application, engineer of record must verify.
4. Square washer provided with fitting.
5. When a hanger rod is thru-bolted (in lieu of channel nut installation), higher transverse loads may be transmitted due to the higher allowed rod shear loads compared to channel nut slip values. This higher load may be used with verification through engineering calculations.

SPF® 200 — Adjustable Seismic Pivot Fittings





FINISH

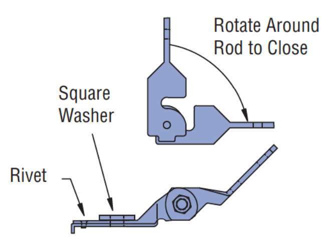
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.

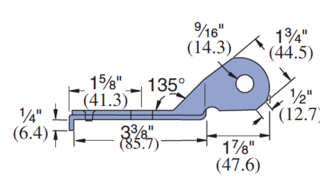
Part Number	Rod Size In *(mm)*	"R" - Hole Diameter In *(mm)*	Design Load Lbs *(KN)*
SPF 200-037	⅜ *9.5*	7/16 *11.1*	1,400 *6.23*
SPF 200-050	½ *12.7*	9/16 *14.3*	2,100 *9.34*
SPF 200-062	⅝ *15.9*	11/16 *17.5*	2,100 *9.34*
SPF 200-075	¾ *19.1*	13/16 *20.6*	2,400 *10.68*

Safety Factor = 3.0

Notes:

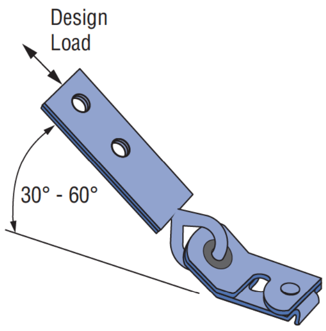
1. Design load is limited to slip capacity of a channel nut at hole "R"..
2. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications at 45° from horizontal.
3. For retrofit application, engineer of record must verify.
4. Square washer provided with fitting.
5. When a hanger rod is thru-bolted (in lieu of channel nut installation), higher transverse loads may be transmitted due to the higher allowed rod shear loads compared to channel nut slip values. This higher load may be used with verification through engineering calculations.

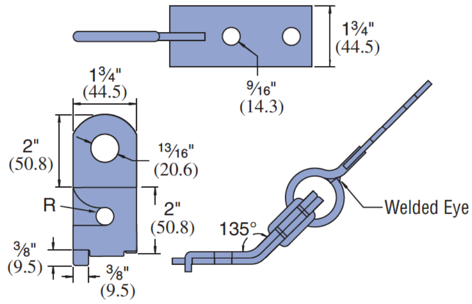




SPF® 300

Seismic Pivot Fittings





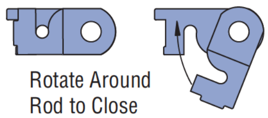
Part Number	Rod Size In *(mm)*	"R" - Hole Diameter In *(mm)*	Design Load Lbs *(KN)*
SPF 300-037	⅜ *9.5*	7/16 *11.1*	1,400 *6.23*
SPF 300-050	½ *12.7*	9/16 *14.3*	2,100 *9.34*
SPF 300-062	⅝ *15.9*	11/16 *17.5*	2,100 *9.34*
SPF 300-075	¾ *19.1*	13/16 *20.6*	2,400 *10.68*

Safety Factor = 3.0

FINISH

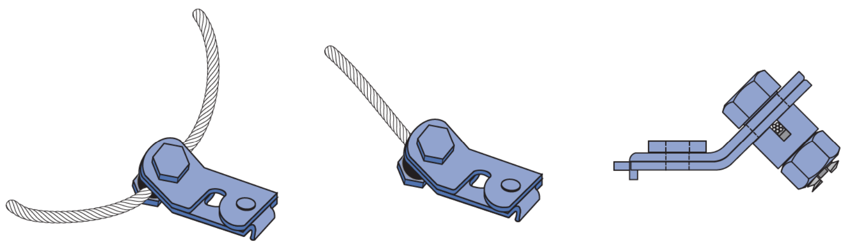
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.

Notes:
1. Design load is limited to slip capacity of a channel nut at hole "R".
2. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications at 45° from horizontal.
3. For retrofit application, engineer of record must verify.
4. Square washer provided with fitting.
5. When a hanger rod is thru-bolted (in lieu of channel nut installation), higher transverse loads may be transmitted due to the higher allowed rod shear loads compared to channel nut slip values. This higher load may be used with verification through engineering calculations.



SPF® 400

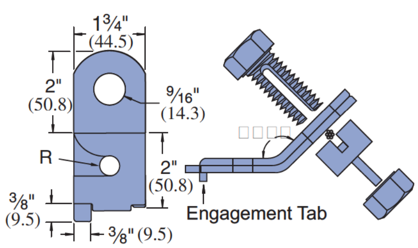
Seismic Pivot Fittings



Part Number	Rod Size In *(mm)*	"R" - Hole Diameter In *(mm)*
SPF 400-037	⅜ *9.5*	7/16 *11.1*
SPF 400-050	½ *12.7*	9/16 *14.3*
SPF 400-062	⅝ *15.9*	11/16 *17.5*
SPF 400-075	¾ *19.1*	13/16 *20.6*

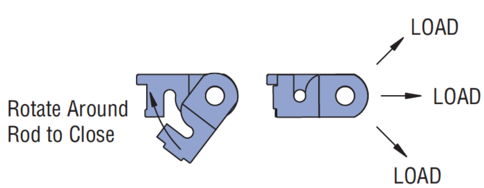
FINISH

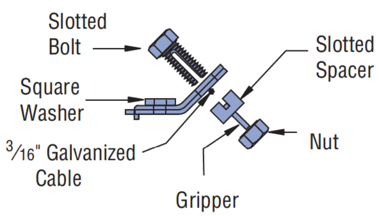
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.



Horizontal Design Load			
Wire Rope Diameter In *(mm)*	4-Way Splayed Transverse lbs *(kN)*	4-Way Splayed Longitudinal lbs *(kN)*	Single Cable Transverse lbs *(kN)*
3/16 *4.8*	1050 *4.67*	1116 *4.96*	650 *2.89*

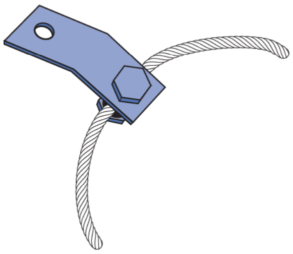
Notes:
1. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications.
2. Galvanized wire rope, 7 x 19 IWSC, RHRL (Prestretched).
3. Torque on nut/spacer: 50 ft-lbs.
4. Safety Factor of 3 for prestreched cable..

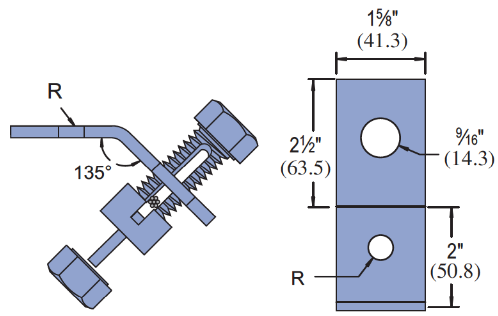




LS 410

Seismic Pivot Fittings





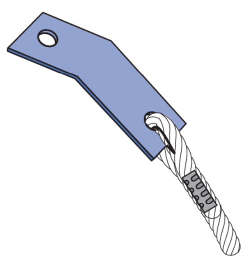
Part Number	Anchor Size In *(mm)*	"R" - Hole Diameter In *(mm)*
LS 410-037	⅜ *9.5*	⁷⁄₁₆ *11.1*
LS 410-050	½ *12.7*	⁹⁄₁₆ *14.3*
LS 410-062	⅝ *15.9*	¹¹⁄₁₆ *17.5*
LS 410-075	¾ *19.1*	¹³⁄₁₆ *20.6*

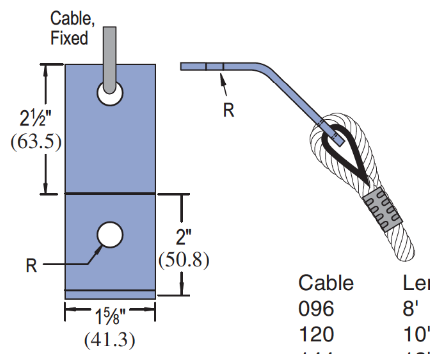
FINISH
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.

Note:
1. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications.
2. For retrofit application, engineer of record must verify.
3. Torque on nut/spacer: 50 ft-lbs.
4. Square washer provided with fitting.
5. Loads are the same as the SPF 400

LS 500

Seismic Pivot Fittings





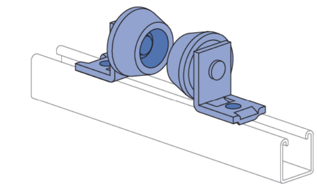
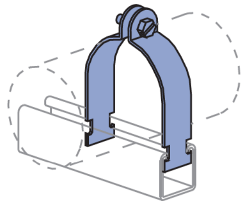
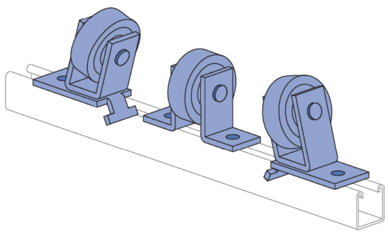
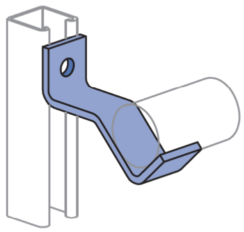
Example
LS500-037-096
Cable Length
Anchor Size
Fitting Number

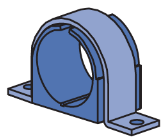
Cable	Length
096	8' *(2.4M)*
120	10' *(3.0M)*
144	12' *(3.6M)*
180	15' *(4.5M)*
240	20' *(6.1M)*
300	25' *(7.6M)*
360	30' *(9.1M)*
480	40' *(12.2M)*

Part Number	Anchor Size In *(mm)*	"R" - Hole Diameter In *(mm)*
LS 500-037	⅜ *9.5*	⁷⁄₁₆ *11.1*
LS 500-050	½ *12.7*	⁹⁄₁₆ *14.3*
LS 500-062	⅝ *15.9*	¹¹⁄₁₆ *17.5*
LS 500-075	¾ *19.1*	¹³⁄₁₆ *20.6*

FINISH
Electro-galvanized (EG), conforming to ASTM B633 Type III SC1.

Note:
1. Allowable loads have been determined by the manufacturers testing, analysis and technical specifications.
2. For retrofit application, engineer of record must verify.
3. Square washer provided with fitting.
4. Loads are the same as the SPF 400



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)
- Green Powder Coat (GR), conforming to commercial standards for Powder Coating, 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
Rec.Torque Ft/Lbs *(N•m)*	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs *(N•m)*	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

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

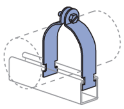
DESIGN LOAD

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

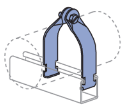
Pipe Clamps In Special Materials (P1109, P1211, P1425, P2024 Series)

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

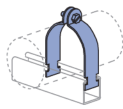
Pipe & Conduit Clamps



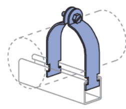
P1109 - Pg 108



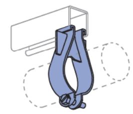
P1211 - Pg 109



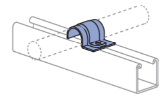
P1425 - Pg 109



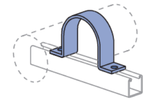
P2024 - Pg 110



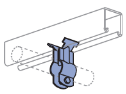
P1563 - Pg 109



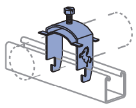
P2008 - Pg 109



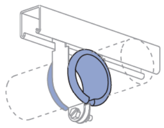
P2558 - Pg 110



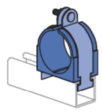
P3409 - Pg 111



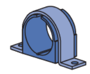
MU025 - Pg 111



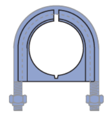
P2600 - Pg 112



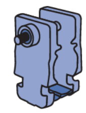
004T008 - Pg 113



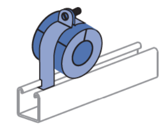
004M007 - Pg 114



UB½PA - Pg 115

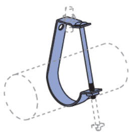


CG-10 - Pg 116

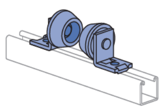


PUX3834 - Pg 116

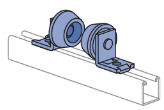
Pipe Rollers



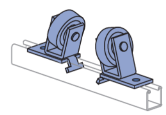
J1205 - Pg 117



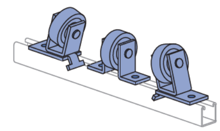
P2474 - Pg 117



P2474-1 - Pg 118

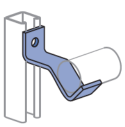


P2475 - Pg 118

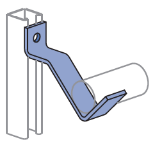


P2476 - Pg 119

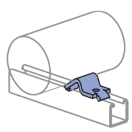
Pipe Brackets



P2481 - Pg 119



P2482 - Pg 119

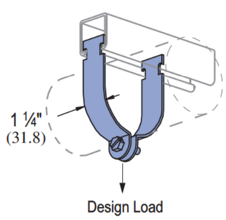


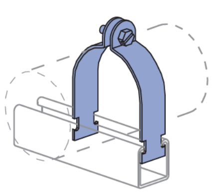
P2243 - Pg 119

P1109 THRU P1126

PIPE CLAMPS FOR RIGID STEEL CONDUIT

EG HG





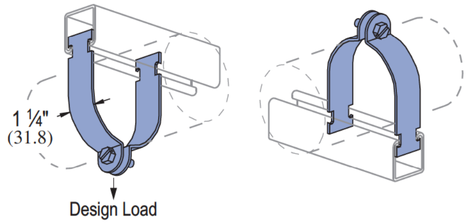
Part No.	Conduit Size In	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P1109	⅜	0.675 *17.1*	16 *1.5*	10 *4.5*	400 *1.78*
P1111	½	0.840 *21.3*	16 *1.5*	11 *5.0*	400 *1.78*
P1112	¾	1.050 *26.7*	14 *1.9*	15 *6.8*	600 *2.67*
P1113	1	1.315 *33.4*	14 *1.9*	17 *7.7*	600 *2.67*
P1114	1¼	1.660 *42.2*	14 *1.9*	19 *8.6*	600 *2.67*
P1115	1½	1.900 *48.3*	12 *2.7*	29 *13.2*	800 *3.56*
P1117	2	2.375 *60.3*	12 *2.7*	34 *15.4*	800 *3.56*

Part No.	Conduit Size In	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P1118	2½	2.875 *73.0*	12 *2.7*	40 *18.1*	800 *3.56*
P1119	3	3.500 *88.9*	12 *2.7*	47 *21.3*	800 *3.56*
P1120	3½	4.000 *101.6*	11 *3.0*	62 *28.1*	1,000 *4.45*
P1121	4	4.500 *114.3*	11 *3.0*	67 *30.4*	1,000 *4.45*
P1123	5	5.563 *141.3*	11 *3.0*	80 *36.3*	1,000 *4.45*
P1124	6	6.625 *168.3*	10 *3.4*	102 *46.3*	1,000 *4.45*
P1126	8	8.625 *219.1*	10 *3.4*	130 *59.0*	1,000 *4.45*

Slotted hex head screw and nut included with EG or HG Finish.

P1425 THRU P1431
PIPE CLAMPS FOR THIN WALL CONDUIT (E.M.T.)

EG HG

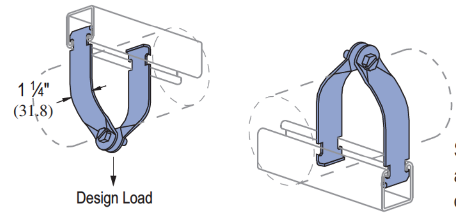


Slotted hex head screw and nut included with EG or HG Finish.

Part No.	Conduit Size In *(mm)*	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P1425	⅜ *9.5*	0.577 *14.7*	16 *1.5*	9 *4.1*	400 *1.78*
P1426	½ *12.7*	0.706 *17.9*	16 *1.5*	11 *5.0*	400 *1.78*
P1427	¾ *19.1*	0.922 *23.4*	16 *1.5*	12 *5.4*	400 *1.78*
P1428	1 *25.4*	1.163 *29.5*	14 *1.9*	15 *6.8*	600 *2.67*
P1429	1¼ *31.8*	1.510 *38.4*	14 *1.9*	18 *8.2*	600 *2.67*
P1430	1½ *38.1*	1.740 *44.2*	12 *2.7*	29 *13.2*	800 *3.56*
P1431	2 *50.8*	2.197 *55.8*	12 *2.7*	33 *15.0*	800 *3.56*
P1118	2½ *63.5*	2.875 *73.0*	12 *2.7*	40 *18.1*	800 *3.56*
P1119	3 *76.2*	3.500 *88.9*	12 *2.7*	47 *21.3*	800 *3.56*
P1120	3½ *88.9*	4.000 *101.6*	11 *3.0*	62 *28.1*	1,000 *4.45*
P1121	4 *101.6*	4.500 *114.3*	11 *3.0*	67 *30.4*	1,000 *4.45*

P1211 THRU P1217
UNIVERSAL CLAMPS FOR RIGID OR THINWALL CONDUIT

EG HG

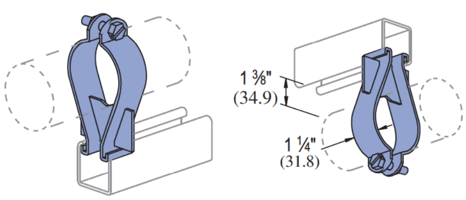


Slotted hex head screw and nut included with EG or HG Finish.

Part No.	Conduit Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P1211	½ *12.7*	16 *1.5*	10 *4.5*	400 *1.78*
P1212	¾ *19.1*	16 *1.5*	11 *5.0*	400 *1.78*
P1213	1 *25.4*	16 *1.5*	12 *5.4*	400 *1.78*
P1214	1¼ *31.8*	14 *1.9*	18 *8.2*	600 *2.67*
P1215	1½ *38.1*	14 *1.9*	20 *9.1*	600 *2.67*
P1217	2 *50.8*	14 *1.9*	22 *10.0*	600 *2.67*

P1563 THRU P1573
PARALLEL CLAMPS FOR RIGID CONDUIT AND PIPE

EG



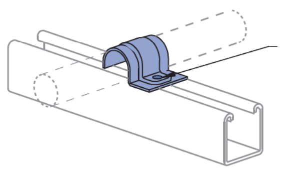
Slotted hex head screw and nut included.

Finish: Electro-galvanized.

Part No.	Pipe Size In *(mm)*	O.D. Size In *(mm)*	Thickness Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
P1563	⅜ *9.5*	0.675 *17.1*	14 *1.9*	27 *12.2*
P1564	½ *12.7*	0.840 *21.3*	14 *1.9*	29 *13.2*
P1565	¾ *19.1*	1.050 *26.7*	14 *1.9*	30 *13.6*
P1566	1 *25.4*	1.315 *33.4*	14 *1.9*	31 *14.1*
P1567	1¼ *31.8*	1.660 *42.2*	14 *1.9*	38 *17.2*
P1568	1½ *38.1*	1.900 *48.3*	12 *2.7*	40 *18.1*
P1569	2 *50.8*	2.375 *60.3*	12 *2.7*	47 *21.3*
P1570	2½ *63.5*	2.875 *73.0*	12 *2.7*	66 *29.9*
P1571	3 *76.2*	3.500 *88.9*	12 *2.7*	78 *35.4*
P1572	3½ *88.9*	4.000 *101.6*	12 *2.7*	87 *39.5*
P1573	4 *101.6*	4.500 *114.3*	12 *2.7*	90 *40.8*

P2008 THRU P2020 ONE HOLE CLAMP FOR O.D. TUBING

EG HG



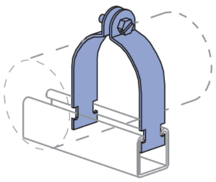
¼" X ¾" Round Head Machine Screw and Channel Nut Not Included

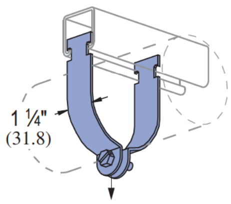
Finish: Electro-galvanized and Aluminum

Part No.	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*

1 ⅝" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

P2024 THRU P2070-84 — Pipe Clamps for O.D. Tubing — EG HG





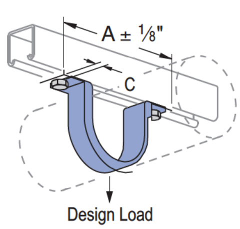
Slotted hex head screw and nut included with EG or HG Finish.

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 *(kN)*
P2024	¼ *(6.4)*	8 *(3.6)*	400 *(1.78)*
P2025	⅜ *(9.5)*	8 *(3.6)*	
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)*	600 *(2.67)*
P2031	1⅛ *(28.6)*	15 *(6.8)*	
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)*	800 *(3.56)*
P2037	1⅞ *(47.6)*	28 *(12.7)*	
P2038	2 *(50.8)*	31 *(14.1)*	
P2039	2⅛ *(54.0)*	32 *(14.5)*	
P2040	2¼ *(57.2)*	33 *(15)*	
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)*	
P2047	3⅛ *(79.4)*	43 *(19.5)*	
P2048	3¼ *(82.6)*	45 *(20.4)*	
P2049	3⅜ *(85.7)*	46 *(20.9)*	
P1119	3½ *(88.9)*	47 *(21.3)*	
P2051	3⅝ *(92.1)*	56 *(25.4)*	1000 *(4.45)*
P2052	3¾ *(95.3)*	58 *(26.3)*	
P2053	3⅞ *(98.4)*	60 *(27.2)*	
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)*	

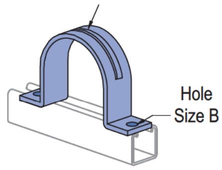
Part Number	O.D. Size In *(mm)*	Wt/100 pcs Lbs *(kg)*	Design Load Lbs *(kN)*
P2061	4⅞ *(123.8)*	73 *(33.1)*	1000 *(4.45)*
P2062	5 *(127.0)*	74 *(33.6)*	
P2063	5⅛ *(130.2)*	76 *(34.5)*	
P2064	5¼ *(133.4)*	77 *(34.9)*	
P2065	5⅜ *(136.5)*	78 *(35.4)*	
P2066	5½ *(140.0)*	79 *(35.8)*	
P2067	5⅝ *(142.9)*	88 *(39.9)*	
P2068	5¾ *(146.1)*	90 *(40.8)*	
P2069	5⅞ *(149.2)*	92 *(41.7)*	
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)*	
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)*	

P2558-5 THRU P2558-60 — Single Piece Pipe Strap — EG GR HG



Hardware sold separately.

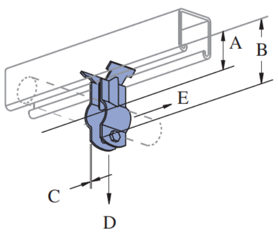
Supporting Rib on P2558-60



Part No.	Nom. 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*	⁹⁄₃₂ *7.1*	⁷⁄₁₆ *11.1*	⅛ *3.2*	23 *10.4*	500 *2.22*
P2558-07	¾	3⅛ *79.4*				26 *11.8*	
P2558-10	1	3⅜ *85.7*				31 *14.1*	
P2558-12	1¼	3¾ *95.3*				35 *15.9*	
P2558-15	1½	3⅞ *98.4*				39 *17.7*	
P2558-20	2	5¾ *146.1*	⁷⁄₁₆ *11.1*	¹¹⁄₁₆ *17.5*	¼ *6.4*	94 *42.6*	1,000 *4.45*
P2558-25	2½	6¼ *158.8*				114 *51.7*	
P2558-30	3	6⅞ *174.6*				133 *60.3*	
P2558-35	3½	7⅜ *187.3*				152 *68.9*	
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*	

P3409 THRU P3417 — STAND-OFF PIPE CLAMPS

C EG HG



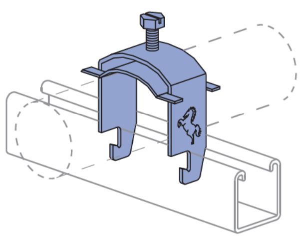
Hardware included.
Finish: Electro-galvanized.
Pipe Clamp 1¼" Wide

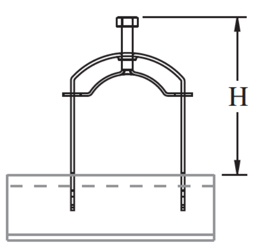
Part No.	Pipe Size In *(mm)*	O.D. Size In *(mm)*	Load "D" Lbs *(kN)*	Load "E" Lbs *(kN)*	A In *(mm)*	B In *(mm)*	C Gauge *(mm)*	Wt/100 pcs Lbs *(kg)*
P3409	⅜ *9.5*	0.675 *17.1*	100 *0.44*	25 *0.11*	1⅛ *28.6*	2⅛ *54.0*	14 *1.9*	14 *6.4*
P3411	½ *12.7*	0.840 *21.3*	150 *0.67*	35 *0.16*	1¼ *31.8*	2 5/16 *58.7*	14 *1.9*	15 *6.8*
P3412	¾ *19.1*	1.050 *26.7*	175 *0.78*	40 *0.18*	1 5/16 *33.3*	2½ *63.5*	14 *1.9*	19 *8.6*
P3413	1 *25.4*	1.315 *33.4*	200 *0.89*	50 *0.22*	1½ *38.1*	2¾ *69.9*	14 *1.9*	22 *10.0*
P3414	1¼ *31.8*	1.660 *42.2*	300 *1.33*	70 *0.31*	1 11/16 *42.9*	3¼ *82.6*	12 *2.7*	34 *15.4*
P3415	1½ *38.1*	1.900 *48.3*	400 *1.78*	80 *0.36*	1¾ *44.5*	3½ *88.9*	11 *3.0*	49 *22.2*
P3417	2 *50.8*	2.375 *60.3*	500 *2.22*	120 *0.53*	2 *50.8*	4 *101.6*	10 *3.4*	55 *24.9*

Safety factor of 5

MU025 THRU MU400 — MUSTANG UNIVERSAL ONE-PIECE PIPE, CONDUIT (GRC, EMT & IMC) AND TUBING CLAMPS

C EG

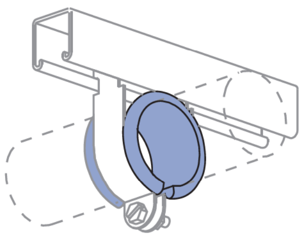


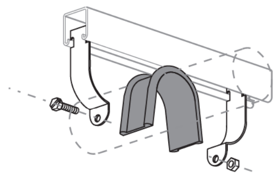


Finish: Electro-galvanized.
Clamps are 14 ga.

Part No.	Nominal Trade Size In *(mm)*	Trade Size O.D. Min In *(mm)*	Trade Size O.D. Max In *(mm)*	Height Above Channel "H" Min In *(mm)*	Height Above Channel "H" Max. In *(mm)*
MU025	¼ *6.4*	0.375 *9.5*	0.5 *13.7*	1¾ *44.5*	2 *50.8*
MU037	⅜ *9.5*	0.5 *12.7*	0.7 *17.1*	1⅞ *47.6*	2⅛ *54.0*
MU050	½ *12.7*	0.63 *15.9*	0.84 *21.3*	2 *50.8*	2¼ *57.2*
MU075	¾ *19.1*	0.88 *22.2*	1.05 *26.7*	2¼ *57.2*	2½ *63.5*
MU100	1 *25.4*	1.13 *28.6*	1.32 *33.4*	2⅜ *60.3*	2¾ *69.9*
MU125	1¼ *31.8*	1.38 *34.9*	1.66 *42.2*	2¾ *69.9*	3⅛ *79.4*
MU150	1½ *38.1*	1.63 *41.3*	1.90 *48.3*	3 *76.2*	3⅜ *85.7*
MU200	2 *50.8*	2.13 *54.0*	2.38 *60.3*	3⅜ *85.7*	3⅞ *98.4*
MU250	2½ *63.5*	2.63 *66.7*	2.88 *73.0*	4¼ *108.0*	4⅝ *117.5*
MU300	3 *76.2*	3.13 *79.4*	3.50 *88.9*	4⅞ *123.8*	5⅜ *136.5*
MU350	3½ *88.9*	3.63 *92.1*	4.00 *101.6*	5¼ *133.4*	5⅞ *149.2*
MU400	4 *101.6*	4.13 *104.8*	4.50 *114.3*	5¾ *146.1*	6⅜ *161.9*

P2600 UNICUSHION®: Isolation Material





- 25 feet per carton.
- Cut to length as shown in chart below.

Wt/Carton: 2.5 Lbs (1.1 kg)

UNICUSHION FEATURES

- Shock absorption
- Protection from corrosion and abrasion
- Allowance for expansion and contraction in pipe diameter
- Sound and vibration isolation
- Stability in use from - 50° F (-47° C) to + 350°F (+177° C)
- Flexible elastomer material
- Will not support combustion

UNICUSHION® Clamp Selection Guide

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)*

UNICUSHION® Clamp Cutting Guide

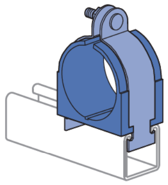
O. D. Size In *(mm)*	Use With Clamp	UNICUSHION Length In *(mm)*
¼ *(6.4)*	P2025	⅞ *(22.2)*
⅜ *(9.5)*	P2026	1 1/16 *(27.0)*
½ *(12.7)*	P2027	1½ *(38.1)*
⅝ *(15.9)*	P2028	2⅛ *(54.0)*
¾ *(19.1)*	P2029	2¼ *(57.2)*
⅞ *(22.2)*	P2030	3 *(76.2)*
1 *(25.4)*	P2031	3¼ *(82.6)*
1⅛ *(28.6)*	P2032	3⅝ *(92.1)*
1¼ *(31.8)*	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 .3*(241.3)*

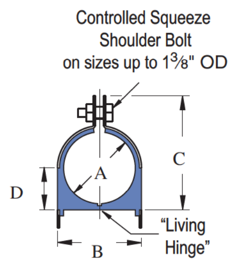
O. D. Size In *(mm)*	Use With Clamp	UNICUSHION Length In *(mm)*
3⅛ *(79.4)*	P2048	10 *(254.0)*
3¼ *(82.6)*	P2049	10½ *(266.7)*
3⅜ *(85.7)*	P1119	10¾ *(273.1)*
3½ *(88.9)*	P2051	11 *(279.4)*
3⅝ *(92.1)*	P2052	11¼ *(285.8)*
3¾ *(95.3)*	P2053	11½ *(292.1)*
3⅞ *(98.4)*	P1120	11¾ *(298.5)*
4 *(101.6)*	P2055	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 EG





Materials:
Clamp: Electro-galvanized or stainless steel.
Cushion: Thermoplastic elastomer. (UV Resistant)

Includes cushion, clamp and hardware.

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

Insert Width: 1.56" (39.6)

Part Numbers are "coded" to designate cushion size and clamp size. Examples:

004T008 004 - Cushion Size 4⁄16" (6.4)
T - With Controlled Squeeze Shoulder Bolt Available on sizes up to 1 ⅜"
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

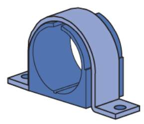
Part No.	Nominal Pipe Size	Dimensions "A" In(*mm*)	"B" In(*mm*)	"C" In(*mm*)	"D" In(*mm*)	Wt/100 pcs Lbs(*kg*)
009N012	¼	0.54 *13.7*	0.98 *24.9*	1.34 *34.0*	0.43 *10.9*	13 *5.9*
011N014	⅜	0.67 *17.0*	1.13 *28.7*	1.54 *39.1*	0.49 *12.4*	14 *6.4*
014N018	½	0.84 *21.3*	1.29 *32.8*	1.82 *46.2*	0.58 *14.7*	15 *6.8*
017N022	¾	1.05 *26.7*	1.5 *38.1*	1.95 *49.5*	0.7 *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	1.9 *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	3.5 *88.9*	3.95 *100.3*	4.79 *121.7*	1.97 *50.0*	55 *24.9*
064N072	3½	4 *101.6*	4.45 *113.0*	5.42 *137.7*	2.28 *57.9*	88 *39.9*
072N080	4	4.5 *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*

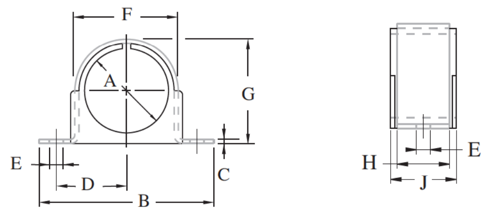
Tube Series Assembly

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	0.5 *12.7*	0.94 *23.9*	1.34 *34.0*	0.4 *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*	1.2 *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 *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*	0.7 *17.8*	18 *8.2*
020T024	1¼		1.25 *31.8*	1.7 *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		1.5 *38.1*	1.95 *49.5*	2.47 *62.7*	0.9 *22.9*	33 *15.0*
026N030	1⅝	1½	1.62 *41.1*	2.07 *52.6*	2.6 *66.0*	0.96 *24.4*	35 *15.9*
028N032	1¾		1.75 *44.5*	2.2 *55.9*	2.73 *69.3*	1.02 *25.9*	37 *16.8*
030N034	1⅞		1.9 *48.3*	2.35 *59.7*	2.86 *72.6*	1.09 *27.7*	39 *17.7*
032N036	2		2 *50.8*	2.45 *62.2*	3.04 *77.2*	1.15 *29.2*	46 *20.9*
034N040	2⅛	2	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		2.5 *63.5*	2.94 *74.7*	3.79 *96.3*	1.46 *37.1*	51 *23.1*
042N048	2⅝		2.62 *66.5*	3.1 *78.0*	3.92 *99.6*	1.53 *38.9*	55 *24.9*
046N052	2⅞		2.87 *72.9*	3.3 *84.3*	4.17 *105.9*	1.66 *42.2*	57 *25.9*
050N054	3		3 *76.2*	3.6 *90.7*	4.42 *112.3*	1.78 *45.2*	60 *27.2*
050N056	3⅛		3.12 *79.2*	3.6 *90.7*	4.42 *112.3*	1.78 *45.2*	60 *27.2*
053N060	3 5⁄16		3.31 *84.1*	4.0 *100.6*	4.75 *120.7*	1.9 *48.3*	62 *28.1*
056N062	3½		3.5 *88.9*	4.0 *100.3*	4.79 *121.7*	1.97 *50.0*	55 *24.9*
058N064	3⅝		3.62 *91.9*	4.2 *106.7*	4.99 *126.7*	2.03 *51.6*	70 *31.8*
064N072	4		4 *101.6*	4.5 *113.0*	5.42 *137.7*	2.28 *57.9*	88 *39.9*
066N074	4⅛		4.12 *104.6*	4.6 *116.1*	5.54 *140.7*	2.34 *59.4*	94 *42.6*
069N076	4 5⁄16		4.34 *110.2*	5.0 *126.0*	5.84 *148.3*	2.4 *61.0*	100 *45.4*
072N080	4½		4.5 *114.3*	5.0 *125.7*	5.92 *150.4*	2.53 *64.3*	110 *49.9*
082N090	5⅛		5.12 *130.0*	5.6 *141.5*	6.54 *166.1*	2.84 *72.1*	125 *56.7*
098N106	6⅛		6.12 *155.4*	6.6 *166.9*	7.54 *191.5*	3.34 *84.8*	130 *59.0*

004M007 THRU 034M040

CUSH–A–CLAMP® Assembly Omega Series™ EG





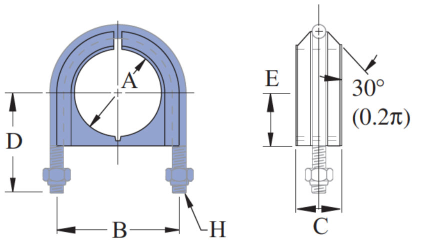
Includes clamp and cushion.
Materials: Clamp: ZD or stainless steel.
Cushion: Thermoplastic elastomer.

Note: Not to be used with Unistrut Channel.
Can be mounted to any flat surface.

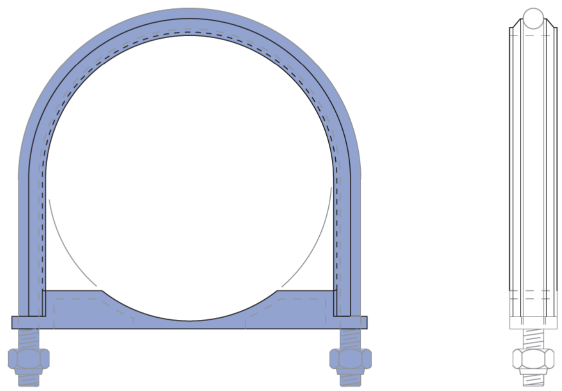
Part Number	Copper & Steel Tubing O. D. In	Copper Water Pipe (Nominal) In	Pipe Size (Nominal) In	Dimensions "A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	"D" In *(mm)*	"E" In *(mm)*	"F" In *(mm)*	"G" In *(mm)*	"H" In *(mm)*	"J" In *(mm)*	Wt/100 pcs Lbs *(kg)*
004M007	¼			0.25	1.8	0.06	0.6	0	0.53	0.48	0.62	0.78	3.4
				6.4	*46.0*	*1.5*	*15.2*	*5.1*	*13.5*	*12.2*	*15.7*	*19.8*	*1.5*
006M008	⅜	¼		0.37	1.9	0.06	0.65	0	0.62	0.62	0.62	0.81	4.0
				9.4	*48.3*	*1.5*	*16.5*	*5.1*	*15.7*	*15.7*	*15.7*	*20.6*	*1.8*
008M011	½	⅜	¼	0.5	2.2	0.06	0.8	0	0.82	0.75	0.75	0.98	5.5
				12.7	*55.9*	*1.5*	*20.3*	*6.6*	*20.8*	*19.1*	*19.1*	*24.9*	*2.5*
010M013	⅝	½	⅜	0.62	2.3	0.06	0.86	0	0.94	0.87	0.75	0.98	6.0
				15.7	*58.9*	*1.5*	*21.8*	*6.6*	*23.9*	*22.1*	*19.1*	*24.9*	*2.7*
012M015	¾	⅝		0.75	2.4	0.06	0.9	0	1.03	1.01	0.75	0.98	6.5
				19.1	*61.2*	*1.5*	*22.9*	*6.6*	*26.2*	*25.7*	*19.1*	*24.9*	*2.9*
014M017	⅞	¾	½	0.87	2.6	0.06	0.98	0	1.18	1.03	0.75	0.98	7.1
				22.1	*65.0*	*1.5*	*24.9*	*6.6*	*30.0*	*26.2*	*19.1*	*24.9*	*3.2*
016M019	1			1	2.7	0.06	1.04	0	1.31	1.25	0.75	0.98	7.8
				25.4	*68.1*	*1.5*	*26.4*	*6.6*	*33.3*	*31.8*	*19.1*	*24.9*	*3.5*
018M020			¾	1.05	2.7	0.06	1.04	0	1.31	1.25	0.75	0.98	8.1
				26.7	*68.1*	*1.5*	*26.4*	*6.6*	*33.3*	*31.8*	*19.1*	*24.9*	*3.7*
018M021	1⅛	1		1.12	2.8	0.06	1.11	0	1.44	1.33	0.75	0.98	8.4
				28.4	*71.6*	*1.5*	*28.2*	*6.6*	*36.6*	*33.8*	*19.1*	*24.9*	*3.8*
020M024	1¼			1.25	3.0	0.08	1.2	0	1.65	1.47	1.25	1.56	17
				31.8	*76.2*	*2.0*	*30.5*	*6.6*	*41.9*	*37.3*	*31.8*	*39.6*	*7.7*
021M026			1	1.31	3.1	0.08	1.26	0	1.76	1.71	1.25	1.56	20
				33.3	*79.2*	*2.0*	*32.0*	*6.6*	*44.7*	*43.4*	*31.8*	*39.6*	*9.1*
022M026	1⅜	1¼		1.37	3.1	0.08	1.26	0	1.76	1.71	1.25	1.56	19
				34.8	*79.2*	*2.0*	*32.0*	*6.6*	*44.7*	*43.4*	*31.8*	*39.6*	*8.6*
024M028	1½			1.5	3.7	0.08	1.42	0	1.93	1.88	1.25	1.56	20
				38.1	*92.7*	*2.0*	*36.1*	*6.6*	*49.0*	*47.8*	*31.8*	*39.6*	*9.1*
026M030	1⅝	1½		1.62	3.8	0.08	1.48	0	2.07	2	1.25	1.56	23
				41.1	*95.8*	*2.0*	*37.6*	*6.6*	*52.6*	*50.8*	*31.8*	*39.6*	*10.4*
027M032			1¼	1.66	3.9	0.1	1.55	0	2.21	2.12	1.25	1.56	32
				42.2	*99.1*	*2.5*	*39.4*	*8.4*	*56.1*	*53.8*	*31.8*	*39.6*	*14.5*
028M032	1¾			1.75	3.9	0.1	1.55	0	2.21	2.12	1.25	1.56	32
				44.5	*99.1*	*2.5*	*39.4*	*8.4*	*56.1*	*53.8*	*31.8*	*39.6*	*14.5*
030M034	1⅞		1½	1.87	4.0	0.1	1.61	0	2.33	2.25	1.25	1.56	34
				47.5	*102.1*	*2.5*	*40.9*	*8.4*	*59.2*	*57.2*	*31.8*	*39.6*	*15.4*
032M036	2			2	4.2	0.1	1.67	0	2.46	2.38	1.25	1.56	36
				50.8	*105.4*	*2.5*	*42.4*	*8.4*	*62.5*	*60.5*	*31.8*	*39.6*	*16.3*
034M040	2⅛			2.12	4.4	0.1	1.8	0	2.71	2.62	1.25	1.56	41
				53.8	*111.8*	*2.5*	*45.7*	*8.4*	*68.8*	*66.5*	*31.8*	*39.6*	*18.6*
038M044			2	2.37	4.7	0.1	1.94	0	2.96	2.88	1.25	1.56	44
				60.2	*119.6*	*2.5*	*49.3*	*8.4*	*75.2*	*73.2*	*31.8*	*39.6*	*20.0*
082M090	5⅛			5.12	7.6	0.1	3.41	0	5.83	6.75	1.25	1.56	120
				130.0	*194.1*	*2.5*	*86.6*	*10.2*	*148.1*	*171.5*	*31.8*	*39.6*	*54.4*

UB½PA THRU UB12PA

CUSH–A–CLAMP® ASSEMBLY U-BOLT SERIES EG



½" thru 6" assembly.



8" thru 12" assembly.

Includes U bolt, cushion, and hardware.

Materials:

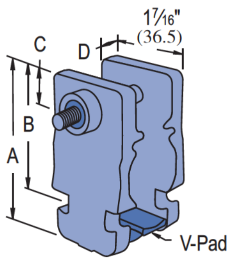
U Bolt: Electro-galvanized finish or Type 316SS

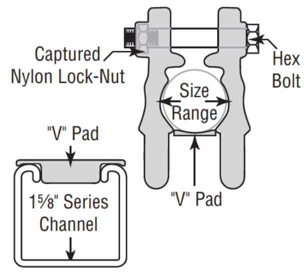
Cushion: Thermoplastic elastomer.

Note: Not intended for use with metal framing components due to the length of the thread.

Part Number	Pipe Size (Nominal) In *(mm)*	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)*
UB1/2PA	½ *12.7*	0.84 *21.3*	1.6 *40.6*	0.68 *17.3*	1.5 *38.1*	1 *17.0*	¼ *6.4*	¼-20 UNC-2B	9 *4.1*
UB3/4PA	¾ *19.1*	1.1 *26.7*	1.8 *45.7*	0.7 *17.3*	1.6 *40.6*	0.8 *19.8*	¼ *6.4*	¼-20 UNC-2B	10 *4.5*
UB1PA	1 *25.4*	1.3 *33.3*	2.1 *52.1*	0.7 *17.3*	1.7 *43.2*	0.9 *23.1*	¼ *6.4*	¼-20 UNC-2B	12 *5.4*
UB11/4PA	1¼ *31.8*	1.7 *42.2*	2.5 *64.5*	1.2 *31.5*	2.1 *53.3*	1.1 *27.4*	⅜ *9.5*	⅜-16 UNC-2B	36 *16.3*
UB11/2PA	1½ *38.1*	1.9 *48.3*	2.8 *70.6*	1.2 *31.5*	2.2 *55.9*	1.2 *30.2*	⅜ *9.5*	⅜-16 UNC-2B	32 *14.5*
UB2PA	2 *50.8*	2.4 *60.2*	3.3 *84.3*	1.2 *31.5*	2.5 *63.5*	1.5 *36.8*	⅜ *9.5*	⅜-16 UNC-2B	42 *19.1*
UB21/2PA	2½ *63.5*	2.9 *72.9*	3.9 *98.6*	1.2 *31.5*	3.0 *76.2*	1.7 *42.9*	½ *12.7*	½-13 UNC-2B	72 *32.7*
UB3PA	3 *76.2*	3.5 *88.9*	4.5 *114.3*	1.2 *31.5*	3.3 *83.8*	2.0 *50.8*	½ *12.7*	½-13 UNC-2B	84 *38.1*
UB31/2PA	3½ *88.9*	4.0 *101.6*	5.0 *127.0*	1.2 *31.5*	3.7 *94.0*	2.3 *57.2*	½ *12.7*	½-13 UNC-2B	93 *42.2*
UB4PA	4 *101.6*	4.5 *114.3*	5.5 *139.7*	1.2 *31.5*	3.9 *99.1*	2.5 *63.5*	½ *12.7*	½-13 UNC-2B	102 *46.3*
UB5PA	5 *127.0*	5.6 *141.2*	6.6 *167.4*	1.2 *31.5*	4.5 *114.3*	3.0 *77.0*	½ *12.7*	½-13 UNC-2B	123 *55.8*
UB6PA	6 *152.4*	6.6 *168.1*	7.8 *198.4*	1.4 *36.6*	5.4 *137.2*	3.6 *90.4*	⅝ *15.9*	⅝-11 UNC-2B	123 *55.8*
UB8PA	8 *203.2*	8.6 *218.9*	9.8 *249.9*	1.4 *36.6*	6.4 *162.6*	4.6 *115.8*	⅝ *15.9*	⅝-11 UNC-2B	243 *110.2*
UB10PA	10 *254.0*	10.8 *273.1*	12.3 *311.2*	1.7 *41.9*	7.7 *195.6*	5.7 *144.3*	¾ *19.1*	¾-10 UNC-2B	492 *223.2*
UB12PA	12 *304.8*	12.8 *323.9*	14.3 *362.0*	1.7 *41.9*	8.7 *221.0*	6.7 *169.7*	¾ *19.1*	¾-10 UNC-2B	563 *255.4*

CG-10 THRU CG-40 — CUSH–A–GRIP®





Part Number	O.D. Tube Sizes In(mm)			Nominal Pipe Sizes In(mm)		Diameters In(mm)	PullOut Load Lbs(kN)	Slip Load Lbs(kN)
CG-10	¼ 6.4	⅜ 9.5	½ 12.7	¼ 6.4		0.25 - 0.54 6.4 - 13.7	500 2.22	40 0.18
CG-20	⅝ 15.9	¾ 19.1	⅞ 22.2	⅜ 9.5	½ 12.7	0.62 - 0.87 15.7 - 22.1	500 2.22	40 0.18
CG-30	⅞ 22.2	1 25.4	1⅛ 28.6	¾ 19.1		0.87 - 1.12 22.1 - 28.4	500 2.22	40 0.18
CG-40	1 25.4	1⅛ 28.6	1¼ 31.8	¾ 19.1	1 25.4	1.00 - 1.31 25.4 - 33.3	500 2.22	40 0.18

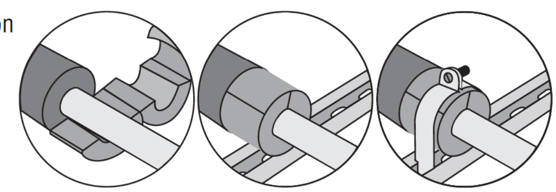
Includes Cushion, V-pad, and Hardware.
Materials: Cushion: Thermoplastic elastomer.
Hardware: Stainless Steel with Captured Nylon Locknut
Temperature Rating:
-40°F to +275°F (-40°C to 135°C)

Part Number	Nominal Pipe Size	Dimensions "A" In(mm)	"B" In(mm)	"C" In(mm)	"D" In(mm)	Hex Head Cap Screw & Lock Nut	Wt/100 pcs Lbs(kg)
CG-10	¼	1 15/16 49.2	1⅜ 34.9	⅜ 9.5	3/16 4.8	¼-20 x 1½"	4 1.8
CG-20	⅜	2⅜ 60.3	1⅝ 41.3	7/16 11	¼ 6.4	¼-20 x 2"	6 2.7
CG-30	½	2 9/16 65.1	1 13/16 46.0	7/16 11	5/16 7.9	¼-20 x 2"	8 3.6
CG-40	¾	2 11/16 68.3	1 15/16 49.2	7/16 11	5/16 7.9	¼-20 x 2"	8 3.6

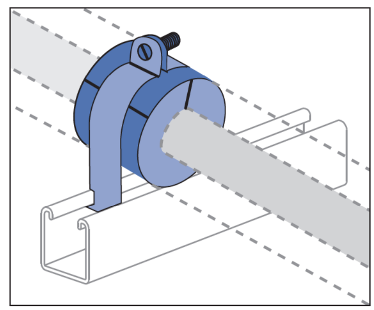
PUX1234 THRU PUX41810 — CUSH–A–THERM™

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

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



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



Nominal ¾" Wall

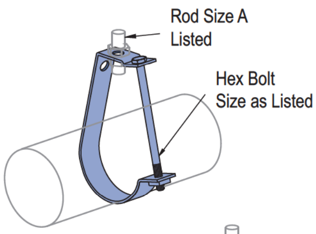
Part Number	Hole Size In(mm)	Copper Nom. I.D. In(mm)	O.D. In(mm)	IPS In(mm)	O.D. In(mm)	Length In(mm)
PUX3834	⅜ ID 9.5	¼ 6.4	⅜ 9.5	- -	1.81 46.0	2.17 55.1
PUX1234	½ ID 12.7	⅜ 9.5	½ 12.7	¼ 6.4	1.89 48.0	2.17 55.1
PUX5834	⅝ ID 15.9	½ 12.7	⅝ 15.9	⅜ 9.5	2.05 52.1	2.17 55.1
PUX3434	¾ ID 19.1	⅝ 15.9	¾ 19.1	- -	2.22 56.4	2.17 55.1
PUX7834	⅞ ID 22.2	¾ 19.1	⅞ 22.2	½ 12.7	2.44 62.0	2.17 55.1
PUX11834	1⅛ ID 28.6	1 25.4	1⅛ 28.6	¾ 19.1	2.76 70.1	2.17 55.1
PUX13834	1⅜ ID 34.9	1¼ 31.8	1⅜ 34.9	1 25.4	3.19 81.0	2.56 65.0
PUX15834	1⅝ ID 41.3	1½ 38.1	1⅝ 41.3	1¼ 31.8	3.35 85.1	2.58 65.5
PUX21834	2⅛ ID 54.0	2 50.8	2⅛ 54.0	- -	3.86 98.0	2.56 65.0
PUX23834	2⅜ ID 60.3	2¼ 57.2	2⅜ 60.3	2 50.8	4.29 109.0	2.96 75.2
PUX25834	2⅝ ID 66.7	2½ 63.5	2⅝ 66.7	- -	4.87 123.7	2.96 75.2
PUX31834	3⅛ ID 79.4	3 76.2	3⅛ 79.4	- -	5 127.0	3.35 85.1
PUX35834	3⅝ ID 92.1	3½ 88.9	3⅝ 92.1	- -	5.94 150.9	3.94 100.1
PUX41834	4⅛ ID 104.8	4 101.6	4⅛ 104.8	3½ 88.9	6.14 156.0	3.94 100.1

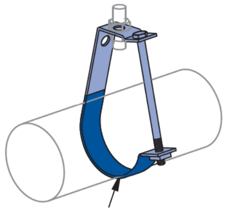
Nominal 1" Wall

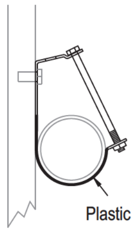
Part Number	Hole Size In(mm)	Copper Nom. I.D. In(mm)	O.D. In(mm)	IPS In(mm)	O.D. In(mm)	Length In(mm)
PUX5810	⅝ ID 15.9	½ 12.7	⅝ 15.9	⅜ 9.5	2.54 64.5	2.2 55.1
PUX3410	¾ ID 19.1	⅝ 15.9	¾ 19.1	- -	2.82 71.6	2.2 55.1
PUX7810	⅞ ID 22.2	¾ 19.1	⅞ 22.2	½ 12.7	2.82 71.6	2.2 55.1
PUX11810	1⅛ ID 28.6	1 25.4	1⅛ 28.6	¾ 19.1	3.06 77.7	2.2 55.1
PUX13810	1⅜ ID 34.9	1¼ 31.8	1⅜ 34.9	1 25.4	3.33 84.6	2.6 65.0
PUX15810	1⅝ ID 41.3	1½ 38.1	1⅝ 41.3	1¼ 31.8	3.65 92.7	2.6 65.0
PUX21810	2⅛ ID 54.0	2 50.8	2⅛ 54.0	- -	4.16 105.7	2.6 65.0
PUX23810	2⅜ ID 60.3	2¼ 57.2	2⅜ 60.3	2 50.8	3.92 99.6	2.6 65.0
PUX25810	2⅝ ID 66.7	2½ 63.5	2⅝ 66.7	- -	4.87 123.7	3.0 75.2
PUX31810	3⅛ ID 79.4	3 76.2	3⅛ 79.4	- -	5.14 130.6	3.4 85.1
PUX35810	3⅝ ID 92.1	3½ 88.9	3⅝ 92.1	- -	6.48 164.6	3.9 100.1
PUX41810	4⅛ ID 104.8	4 101.6	4⅛ 104.8	3½ 88.9	6.48 164.6	3.9 100.1

J1205 THRU J1280, J1205 N THRU J 1280 N (PLASTIC COATED)

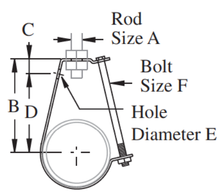
"J" CONDUIT & PIPE HANGER — EG







"T" Bolt and Nut Included



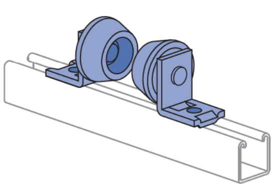
Hanger Rod Suspended

Part No.	Wt/100 pcs Lbs (kg)	Part No.	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 (kN)
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 1.78
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 1.78
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 1.78
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 1.78
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 1.78
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 1.78
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 3.56
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 3.56
J1235	85 38.6	J1235N	88 39.9	3½	½ 12.7	5⅛ 130.2	1⅛ 28.6	4¼ 108.0	9/16 14.3	⅜ x 6 9.5 x 152.4	800 3.56
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 3.56
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 3.56
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 4.45
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 5.34

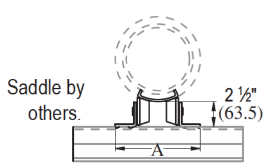
*Standard glass drainline and glass process pipe sizes. Minimum safety factor of five (5) on ultimate load.

P2474

PIPE ROLLER FOR ½" - 4" PIPE — EG GR



Sold in pairs.



Cast iron rollers.

Requires 2 each ½" x 15/16" bolts and ½" channel nuts per assembly. Sold separately.

Design Load
500 Lbs (2.22kN)

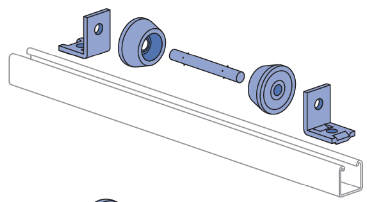
Wt/100 pcs: 268 Lbs (121.6 kg)

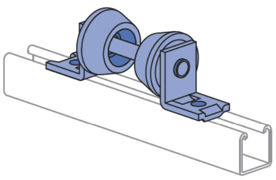
Chart for Dimension A

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)
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

P2474-1 THRU P2474-4 — PIPE ROLLER FOR 1" - 8" PIPE

EG GR

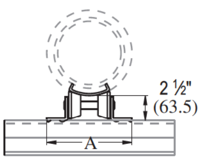




Parts are shipped loose and are easily assembled during installation.

Design Load
750 Lbs *(3.34 kN)*

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	9 9/16 *242.9*	319 *144.7*



Saddle by others.

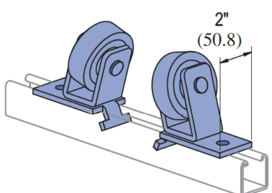
- Pipe roller will fit standard saddles.
- Select proper roller from chart.
- Requires 2 each ½" x 15/16" bolts and ½" channel nuts per assembly. Sold separately.

Chart for Roller Part Number Selection

Pipe Size In	No Insulation	Insulation Thickness 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

P2475 — PIPE ROLLER FOR 6" - 16" PIPE

EG GR

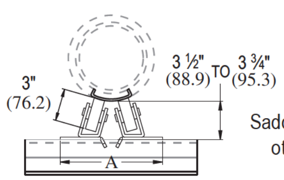


Sold in pairs.

Material: Cast iron rollers.
- Requires 2 each ½" x 15/16" bolts and ½" channel nuts per assembly.

Sold separately.

Design Load
1500 Lbs *(6.67 kN)*



Saddle by others.

Wt/100 pcs: 680 Lbs (308.4 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*	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*

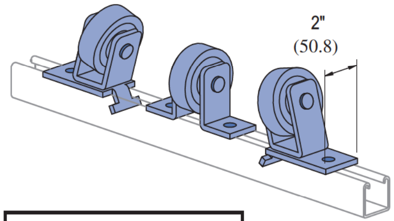
(*Not used for this size)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9/16" (14.3mm); Hole Spacing - From End: 13/16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

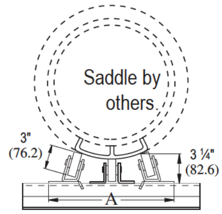
P2476 — Pipe Roller for 16" - 24" Pipe

EG GR



Design Load
2000 Lbs *(8.90 kN)*

- Requires 4 each ½" x 15⁄16" bolts and ½" channel nuts per assembly.
  Sold separately.



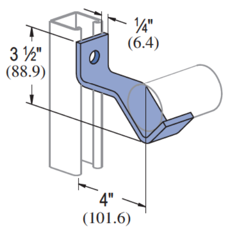
Material: Cast iron rollers.

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*

Wt/100 pcs: 1046 Lbs (474.5 kg)

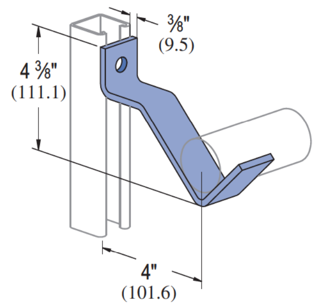
P2481 — Pipe Support Bracket



For ½" pipe to 1½" pipe.

Wt/100 pcs Lbs *(kg)*	Design Load (Upright Channel) P1000 Lbs *(kN)*	P1100 Lbs *(kN)*	P2000 Lbs *(kN)*
90 / *40.8*	85 / *0.38*	85 / *0.38*	85 / *0.38*

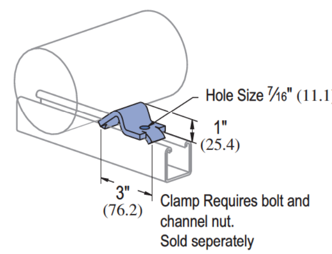
P2482 — Pipe Support Bracket



For 2" pipe to 3" pipe.

Wt/100 pcs Lbs *(kg)*	Design Load (Upright Channel) P1000 Lbs *(kN)*	P1100 Lbs *(kN)*	P2000 Lbs *(kN)*
139 / *63.0*	185 / *0.82*	120 / *0.53*	95 / *0.42*

P2243 — Pipe Block



For 2" (50.8) to 8" (203.2) Pipes

Wt/100 pcs: 40 Lbs (18.1 kg)

Standard Dimensions for 1⅝" (41.3mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*

Hole Diameter: 9⁄16" (14.3mm); Hole Spacing - From End: 13⁄16" (20.6mm); Hole Spacing - On Center: 1⅞" (47.6mm); Width: 1⅝"(41.3mm); Thickness: ¼" (6.4mm)

Nominal Pipe Dia.		¾" (19.1mm) T	¾" (19.1mm) S	1" (25.4mm) T	1" (25.4mm) F	1" (25.4mm) S	1¼" (31.8mm) T	1¼" (31.8mm) F	1¼" (31.8mm) S	1½" (38.1mm) T	1½" (38.1mm) F	1½" (38.1mm) S	2" (50.8mm) T	2" (50.8mm) F	2" (50.8mm) S	2½" (63.5mm) T	2½" (63.5mm) F	2½" (63.5mm) S
		Centerline to Centerline (In/mm)																
¾" 19.1mm	T	4¾ 120.7	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4½ 114.3	4¾ 120.7	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
1" 25.4mm	T	5 127.0	4¾ 120.7	5¼ 133.4	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	F	6 152.4	5¾ 146.1	6¼ 158.8	7¼ 184.2	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4¾ 120.7	4½ 114.3	5 127.0	6 152.4	4½ 114.3	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
1¼" 31.8mm	T	5¼ 133.4	5 127.0	5½ 139.7	6½ 165.1	5 127.0	5½ 139.7	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	F	6¼ 158.8	6 152.4	6½ 165.1	7½ 190.5	6¼ 158.8	6¾ 171.5	7¾ 196.9	– –	– –	– –	– –	– –	– –	– –	– –	– –	– –
	S	4¾ 120.7	4½ 114.3	5 127.0	6 152.4	4½ 114.3	5¼ 133.4	6¼ 158.8	4¾ 120.7	– –	– –	– –	– –	– –	– –	– –	– –	– –
1½" 38.1mm	T	5¼ 133.4	5 127.0	5½ 139.7	6½ 165.1	5¼ 133.4	5¾ 146.1	6¾ 171.5	5¼ 133.4	5¾ 146.1	– –	– –	– –	– –	– –	– –	– –	– –
	F	6½ 165.1	6¼ 158.8	6¾ 171.5	7¾ 196.9	6¼ 158.8	6¾ 171.5	8 203.2	6½ 165.1	7 177.8	8 203.2	– –	– –	– –	– –	– –	– –	– –
	S	5 127.0	4¾ 120.7	5¼ 133.4	6¼ 158.8	4¾ 120.7	5¼ 133.4	6 152.4	5 127.0	5½ 139.7	6½ 165.1	5 127.0	– –	– –	– –	– –	– –	– –
2" 50.8mm	T	5¾ 146.1	5½ 139.7	6 152.4	7 177.8	5½ 139.7	6 152.4	7¼ 184.2	5¾ 146.1	6¼ 158.8	7¼ 184.2	5¾ 146.1	6½ 165.1	– –	– –	– –	– –	– –
	F	7 177.8	6¾ 171.5	7¼ 184.2	8¼ 209.6	6¾ 171.5	7¼ 184.2	8½ 215.9	7 177.8	7½ 190.5	8½ 215.9	7 177.8	7¾ 196.9	9 228.6	– –	– –	– –	– –
	S	5¼ 133.4	5 127.0	5½ 139.7	6½ 165.1	5 127.0	5½ 139.7	6¾ 171.5	5¼ 133.4	5¾ 146.1	6¾ 171.5	5¼ 133.4	6 152.4	7¼ 184.2	5½ 139.7	– –	– –	– –
2½" 63.5mm	T	6 152.4	5¾ 146.1	6¼ 158.8	7¼ 184.2	6 152.4	6½ 165.1	7½ 190.5	6 152.4	6½ 165.1	7¾ 196.9	6¼ 158.8	7 177.8	8¼ 209.6	6½ 165.1	7¼ 184.2	– –	– –
	F	7½ 190.5	7¼ 184.2	7¾ 196.9	8¾ 222.3	7¼ 184.2	7¾ 196.9	9 228.6	7½ 190.5	8 203.2	9 228.6	7½ 190.5	8¼ 209.6	9½ 241.3	7¾ 196.9	8¾ 222.3	10 254.0	– –
	S	5½ 139.7	5¼ 133.4	5¾ 146.1	6¾ 171.5	5¼ 133.4	5¾ 146.1	7 177.8	5½ 139.7	6 152.4	7 177.8	5½ 139.7	6¼ 158.8	7½ 190.5	5¾ 146.1	6¾ 171.5	8 203.2	6 152.4
3" 76.2mm	T	6¼ 158.8	6 152.4	6½ 165.1	7½ 190.5	6¼ 158.8	6¾ 171.5	7¾ 196.9	6¼ 158.8	6¾ 171.5	8 203.2	6½ 165.1	7¼ 184.2	8½ 215.9	6¾ 171.5	7½ 190.5	9 228.6	7 177.8
	F	7¾ 196.9	7½ 190.5	8 203.2	9 228.6	7½ 190.5	8 203.2	9¼ 235.0	7¾ 196.9	8¼ 209.6	9¼ 235.0	7¾ 196.9	8½ 215.9	9¾ 247.7	8 203.2	9 228.6	10¼ 260.4	8¼ 209.6
	S	5¾ 146.1	5½ 139.7	6 152.4	7 177.8	5½ 139.7	6 152.4	7¼ 184.2	5¾ 146.1	6¼ 158.8	7¼ 184.2	5¾ 146.1	6½ 165.1	7¾ 196.9	6 152.4	7 177.8	8¼ 209.6	6¼ 158.8
4" 101.6mm	T	7½ 190.5	7¼ 184.2	7¾ 196.9	8¾ 222.3	7¼ 184.2	7¾ 196.9	9 228.6	7½ 190.5	8 203.2	9 228.6	7½ 190.5	8¼ 209.6	9½ 241.3	7¾ 196.9	8¾ 222.3	10 254.0	8 203.2
	F	9 228.6	8¾ 222.3	9¼ 235.0	10¼ 260.4	8¾ 222.3	9¼ 235.0	10½ 266.7	9 228.6	9½ 241.3	10½ 266.7	9 228.6	9¾ 247.7	11 279.4	9¼ 235.0	10¼ 260.4	11½ 292.1	9½ 241.3
	S	6¾ 171.5	6½ 165.1	7 177.8	8 203.2	6½ 165.1	7 177.8	8¼ 209.6	6¾ 171.5	7¼ 184.2	8¼ 209.6	6¾ 171.5	7½ 190.5	8¾ 222.3	7 177.8	8 203.2	9¼ 235.0	7¼ 184.2
5" 127.0mm	T	8 203.2	7¾ 196.9	8¼ 209.6	9¼ 235.0	7¾ 196.9	8¼ 209.6	9½ 241.3	8 203.2	8½ 215.9	9½ 241.3	8 203.2	8¾ 222.3	10 254.0	8¼ 209.6	9¼ 235.0	10½ 266.7	8½ 215.9
	F	9½ 241.3	9¼ 235.0	9¾ 247.7	10¾ 273.1	9¼ 235.0	9¾ 247.7	11 279.4	9½ 241.3	10 254.0	11 279.4	9½ 241.3	10¼ 260.4	11½ 292.1	9¾ 247.7	10¾ 273.1	12 304.8	10 254.0
	S	7¼ 184.2	7 177.8	7½ 190.5	8¼ 209.6	7 177.8	7½ 190.5	8¾ 222.3	7¼ 184.2	7¾ 196.9	8¾ 222.3	7¼ 184.2	8 203.2	9¼ 235.0	7½ 190.5	8½ 215.9	9¾ 247.7	7¾ 196.9
6" 152.4mm	T	8¾ 222.3	8½ 215.9	9 228.6	10 254.0	8½ 215.9	9 228.6	10¼ 260.4	8¾ 222.3	9¼ 235.0	10¼ 260.4	8¾ 222.3	9½ 241.3	10¾ 273.1	9 228.6	10 254.0	11¼ 285.8	9¼ 235.0
	F	10 254.0	9¾ 247.7	10¼ 260.4	11¼ 285.8	9¾ 247.7	10¼ 260.4	11½ 292.1	10 254.0	10½ 266.7	11½ 292.1	10 254.0	10¾ 273.1	12 304.8	10¼ 260.4	11¼ 285.8	12½ 317.5	10½ 266.7
	S	7¾ 196.9	7½ 190.5	8 203.2	9 228.6	7½ 190.5	8 203.2	9¼ 235.0	7¾ 196.9	8¼ 209.6	9¼ 235.0	7¾ 196.9	8½ 215.9	9¾ 247.7	8 203.2	9 228.6	10¼ 260.4	8¼ 209.6
8" 203.2mm	T	8¾ 222.3	9½ 241.3	10 254.0	11 279.4	9¾ 247.7	10½ 266.7	11¼ 285.8	9¾ 247.7	10¼ 260.4	11½ 292.1	10 254.0	10¾ 273.1	12 304.8	10½ 266.7	11 279.4	12½ 317.5	10½ 266.7
	F	11¼ 285.8	11 279.4	11½ 292.1	12½ 317.5	11 279.4	11½ 292.1	12¾ 323.9	11¼ 285.8	11¾ 298.5	12¾ 323.9	11¼ 285.8	12 304.8	13¼ 336.6	11½ 292.1	12½ 317.5	13¾ 349.3	11¾ 298.5
10" 254.0mm	T	11¼ 285.8	11 279.4	11½ 292.1	12½ 317.5	11 279.4	11½ 292.1	12¾ 323.9	11¼ 285.8	11¾ 298.5	12¾ 323.9	11¼ 285.8	12 304.8	13¼ 336.6	11½ 292.1	12½ 317.5	13¾ 349.3	11¾ 298.5
	F	12½ 317.5	12¼ 311.2	12¾ 323.9	13¾ 349.3	12¼ 311.2	12¾ 323.9	14 355.6	12½ 317.5	13 330.2	14 355.6	12½ 317.5	13¼ 336.6	14½ 368.3	12¾ 323.9	13¾ 349.3	15 381.0	13 330.2
12" 304.8mm	T	12¼ 311.2	12 304.8	12½ 317.5	13½ 342.9	12 304.8	12½ 317.5	13¾ 349.3	12¼ 311.2	12¾ 323.9	13¾ 349.3	12¼ 311.2	13 330.2	14¼ 362.0	12½ 317.5	13½ 342.9	14¾ 374.7	12¾ 323.9
	F	14 355.6	13¾ 349.3	14¼ 362.0	15¼ 387.4	13¾ 349.3	14¼ 362.0	15½ 393.7	14 355.6	14½ 368.3	15½ 393.7	14 355.6	14¾ 374.7	16 406.4	14¼ 362.0	15¼ 387.4	16½ 419.1	14½ 368.3

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)																				
3" *(76.2mm)*			4" *(101.6mm)*			5" *(127.0mm)*			6" *(152.4mm)*			8" *(203.2mm)*		10" *(254.0mm)*		12" *(304.8mm)*			Nominal Pipe Dia.
T	F	S	T	F	S	T	F	S	T	F	S	T	F	T	F	T	F		
7¾ *196.9*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T	3" *76.2mm*
9¼ *235.0*	10½ *266.7*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	F	
7¼ *184.2*	8½ *215.9*	6½ *165.1*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	S	
9 *228.6*	10¼ *260.4*	8¼ *209.6*	10 *254.0*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	T	4" *101.6mm*
10½ *266.7*	11¾ *298.5*	9¾ *247.7*	11½ *292.1*	13 *330.2*	–	–	–	–	–	–	–	–	–	–	–	–	–	F	
8¼ *209.6*	9½ *241.3*	7½ *190.5*	9¼ *235.0*	10¾ *273.1*	8½ *215.9*	–	–	–	–	–	–	–	–	–	–	–	–	S	
9½ *241.3*	10¾ *273.1*	8¾ *222.3*	10¼ *260.4*	12 *304.8*	9¾ *247.7*	11 *279.4*	–	–	–	–	–	–	–	–	–	–	–	T	5" *127.0mm*
11 *279.4*	12¼ *311.2*	10¼ *260.4*	12 *304.8*	13½ *342.9*	11¼ *285.8*	12½ *317.5*	14 *355.6*	–	–	–	–	–	–	–	–	–	–	F	
8¾ *222.3*	10 *254.0*	8 *203.2*	9¾ *247.7*	11¼ *285.8*	9 *228.6*	10¼ *260.4*	11¾ *298.5*	9½ *241.3*	–	–	–	–	–	–	–	–	–	S	
10¼ *260.4*	11½ *292.1*	9½ *241.3*	11¼ *285.8*	12¾ *323.9*	10½ *266.7*	11¾ *298.5*	13¼ *336.6*	11 *279.4*	12½ *317.5*	–	–	–	–	–	–	–	–	T	6" *152.4mm*
11½ *292.1*	12¼ *311.2*	10¾ *273.1*	12½ *317.5*	14 *355.6*	11¾ *298.5*	13 *330.2*	14½ *368.3*	12¼ *311.2*	13¼ *336.6*	15 *381.0*	–	–	–	–	–	–	–	F	
9¼ *235.0*	10½ *266.7*	8½ *215.9*	10¼ *260.4*	11¾ *298.5*	9½ *241.3*	10¾ *273.1*	12¼ *311.2*	10 *254.0*	11½ *292.1*	12¾ *323.9*	10½ *266.7*	–	–	–	–	–	–	S	
11¼ *285.8*	12¾ *323.9*	10¾ *273.1*	12½ *317.5*	14 *355.6*	11¾ *298.5*	13 *330.2*	14½ *368.3*	12¼ *311.2*	13¾ *349.3*	15 *381.0*	12¾ *323.9*	14¾ *374.7*	–	–	–	–	–	T	8" *203.2mm*
12¾ *323.9*	14 *355.6*	12 *304.8*	13¾ *349.3*	15¼ *387.4*	13 *330.2*	14¼ *362.0*	15¾ *400.1*	13½ *342.9*	15 *381.0*	16¼ *412.8*	14 *355.6*	16¼ *412.8*	17 .5 *17 .5*	–	–	–	–	F	
12¾ *323.9*	14 *355.6*	12 *304.8*	13¾ *349.3*	15¼ *387.4*	13 *330.2*	14¼ *362.0*	15¾ *400.1*	13½ *342.9*	15 *381.0*	16¼ *412.8*	14 *355.6*	16¼ *412.8*	17½ *444.5*	17½ *444.5*	–	–	–	T	10" *254.0mm*
14 *355.6*	15¼ *387.4*	13¼ *336.6*	15 *381.0*	16½ *419.1*	14¼ *362.0*	15½ *393.7*	17 *431.8*	14¾ *374.7*	16¼ *412.8*	17½ *444.5*	15¼ *387.4*	17½ *444.5*	18¾ *476.3*	18¾ *476.3*	20 *508.0*	–	–	F	
13¾ *349.3*	15 *381.0*	13 *330.2*	14¾ *374.7*	16¼ *412.8*	14 *355.6*	15¼ *387.4*	16¾ *425.5*	14½ *368.3*	16 *406.4*	17¼ *438.2*	15 *381.0*	17¼ *438.2*	18½ *469.9*	18½ *469.9*	19¾ *501.7*	19½ *495.3*	–	T	12" *304.8mm*
15½ *393.7*	16¾ *425.5*	14¾ *374.7*	16½ *419.1*	18 *457.2*	15¾ *400.1*	17 *431.8*	18¼ *463.6*	16¼ *412.8*	17¾ *450.9*	19 *482.6*	16¾ *425.5*	14 *355.6*	20¼ *514.4*	20¼ *514.4*	21½ *546.1*	21¼ *539.8*	29 *736.6*	F	

Channel Selection for Schedule 10 Sprinkler Pipe Trapeze Hangers

Note: Based on NFPA-13-2013-Table 9.1.1.7.1(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 "N/A" 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.

Unistrut Channel	Section Modulus in³ *(cm³)*
P3000	0.154 *2.52*
P1000	0.202 *3.31*
P5500	0.391 *6.41*
P5000	0.628 *10.29*

Unistrut Channel	Section Modulus in³ *(cm³)*
P3001	0.431 *7.06*
P1001	0.572 *9.37*
P5501	1.153 *18.89*
P5001	1.916 *31.40*

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	Pipe Diameter											
Span	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.26	0.34
2' - 0"	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.2	0.24	0.34	0.45
2' - 6"	0.14	0.14	0.15	0.16	0.18	0.21	0.23	0.25	0.3	0.36	0.5	0.69
3' - 0"	0.16	0.17	0.18	0.19	0.2	0.22	0.24	0.26	0.31	0.36	0.51	0.67
4' - 0"	0.22	0.22	0.24	0.25	0.27	0.30	0.32	0.34	0.41	0.48	0.68	0.89
5' - 0"	0.27	0.28	0.3	0.31	0.34	0.37	0.40	0.43	0.51	0.60	0.85	1.12
6' - 0"	0.33	0.34	0.35	0.38	0.41	0.44	0.48	0.51	0.61	0.71	1.02	1.34
7' - 0"	0.38	0.39	0.41	0.44	0.47	0.52	0.56	0.6	0.71	0.83	1.19	1.56
8' - 0"	0.43	0.45	0.47	0.5	0.54	0.59	0.63	0.68	0.82	0.95	1.36	1.79
9' - 0"	0.49	0.50	0.53	0.56	0.61	0.66	0.71	0.77	0.92	1.07	1.53	2.01
10' - 0"	0.54	0.56	0.59	0.63	0.68	0.74	0.79	0.85	1.02	1.19	1.7	2.23

Values taken from NFPA 13 (2013 Edition), Table 9.1.1.7.1(a)

Single Channel Trapeze for Sch 10 Pipe												
Trapeze	Pipe Diameter											
Span	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	P5500	P5500	P5500	P5500	P5500	P5000	N/A
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	P5500	P5000	P5000	P5000	P5000	P5000	P5000	N/A	N/A	N/A	N/A
8' - 0"	P5000	P5000	P5000	P5000	P5000	P5000	P5000	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	P5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Double Channel Trapeze for Sch 10 Pipe												
Trapeze	Pipe Diameter											
Span	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	P3001
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	P1001	P5501
4' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501	P5501
5' - 0"	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P3001	P1001	P5501	P5501	P5501
6' - 0"	P3001	P3001	P3001	P3001	P3001	P1001	P1001	P1001	P5501	P5501	P5501	P5001
7' - 0"	P3001	P3001	P3001	P1001	P1001	P1001	P1001	P5501	P5501	P5501	P5001	P5001
8' - 0"	P3001	P1001	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5001	P5001
9' - 0"	P1001	P1001	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5001	N/A
10' - 0"	P1001	P1001	P5501	P5501	P5501	P5501	P5501	P5501	P5501	P5501	P5001	N/A

Channel Selection for Schedule 40 Sprinkler Pipe Trapeze Hangers

Note: Based on NFPA-13-2013-Table 9.1.1.7.1(a). Each of the following tables indicate the allowable span of the trapeze and the nominal pipe size for the specified channel . An entry of "N/A" 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.

Unistrut Channel	Section Modulus in³ *(cm³)*
P3000	0.154 *2.52*
P1000	0.202 *3.31*
P5500	0.391 *6.41*
P5000	0.628 *10.29*

Unistrut Channel	Section Modulus in³ *(cm³)*
P3001	0.431 *7.06*
P1001	0.572 *9.37*
P5501	1.153 *18.89*
P5001	1.916 *31.40*

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

Trapeze Span	NFPA 13 Required Trapeze Section Modulus for Sch 40 Pipe — Pipe Diameter 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1' - 6"	0.08	0.09	0.09	0.1	0.11	0.12	0.14	0.15	0.18	0.22	0.3	0.41
2' - 0"	0.11	0.11	0.12	0.13	0.15	0.16	0.18	0.2	0.24	0.29	0.4	0.55
2' - 6"	0.14	0.14	0.15	0.16	0.17	0.18	0.2	0.21	0.25	0.3	0.43	0.56
3' - 0"	0.16	0.17	0.18	0.2	0.22	0.25	0.27	0.3	0.36	0.43	0.6	0.82
4' - 0"	0.22	0.23	0.24	0.26	0.29	0.33	0.36	0.4	0.48	0.58	0.8	1.1
5' - 0"	0.27	0.29	0.3	0.33	0.37	0.41	0.45	0.49	0.6	0.72	1	1.37
6' - 0"	0.33	0.34	0.36	0.39	0.44	0.49	0.54	0.59	0.72	0.87	1.2	1.64
7' - 0"	0.38	0.4	0.43	0.46	0.52	0.58	0.63	0.69	0.84	1.01	1.41	1.92
8' - 0"	0.44	0.46	0.49	0.52	0.59	0.66	0.72	0.79	0.96	1.16	1.61	2.19
9' - 0"	0.49	0.51	0.55	0.59	0.66	0.74	0.81	0.89	1.08	1.3	1.81	2.47
10' - 0"	0.55	0.57	0.61	0.65	0.74	0.82	0.9	0.99	1.2	1.45	2.01	2.74

Values taken from NFPA 13 (2013 Edition), Table 9.1.1.7.1(a)

Trapeze Span	Single Channel Trapeze for Sch 40 Pipe — 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	P1000	P1000	P1000	P5500	P5500	P5000	P5000
3' - 0"	P1000	P1000	P1000	P1000	P5500	P5500	P5500	P5500	P5500	P5000	P5000	N/A
4' - 0"	P5500	P5500	P5500	P5500	P5500	P5500	P5000	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	P5000	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

Trapeze Span	Double Channel Trapeze for Sch 40 Pipe — 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	P3001	P1001
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	P5001
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	P5001	N/A
10' - 0"	P1001	P1001	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)*	Weight Lbs/Ft *(kg/m))*	Weight Water Lbs/Ft *(kg/m)*
¼"	⅜ *9.5*	0.375 *9.5*	0.030 *0.8*	0.126 *0.19*	0.034 *0.05*
⅜"	½ *12.7*	0.500 *12.7*	0.035 *0.9*	0.198 *0.29*	0.062 *0.09*
½"	⅝ *15.9*	0.625 *15.9*	0.040 *1.0*	0.285 *0.42*	0.100 *0.15*
⅝"	¾ *19.1*	0.750 *19.1*	0.042 *1.1*	0.362 *0.54*	0.151 *0.22*
¾"	⅞ *22.2*	0.875 *22.2*	0.045 *1.1*	0.455 *0.68*	0.209 *0.31*
1"	1⅛ *28.6*	1.125 *28.6*	0.050 *1.3*	0.655 *0.97*	0.357 *0.53*
1¼"	1⅜ *34.9*	1.375 *34.9*	0.055 *1.4*	0.884 *1.32*	0.546 *0.81*
1½"	1⅝ *41.3*	1.625 *41.3*	0.060 *1.5*	1.140 *1.70*	0.767 *1.14*
2"	2⅛ *54.0*	2.125 *54.0*	0.070 *1.8*	1.750 *2.60*	1.341 *2.00*
2½"	2⅝ *66.7*	2.625 *66.7*	0.080 *2.0*	2.480 *3.69*	2.064 *3.07*
3"	3⅛ *79.4*	3.125 *79.4*	0.090 *2.3*	3.330 *4.96*	2.949 *4.39*
3½"	3⅝ *92.1*	3.625 *92.1*	0.100 *2.5*	4.290 *6.38*	3.989 *5.94*
4"	4⅛ *104.8*	4.125 *104.8*	0.110 *2.8*	5.380 *8.01*	5.188 *7.72*
5"	5⅛ *130.2*	5.125 *130.2*	0.125 *3.2*	7.610 *11.32*	8.081 *12.03*
6"	6⅛ *155.6*	6.125 *155.6*	0.140 *3.6*	10.200 *15.18*	11.616 *17.29*
8"	8⅛ *206.4*	8.125 *206.4*	0.200 *5.1*	19.290 *28.71*	20.289 *30.19*
10"	10⅛ *257.2*	10.125 *257.2*	0.250 *6.4*	30.100 *44.79*	31.590 *47.01*
12"	12⅛ *308.0*	12.125 *308.0*	0.280 *7.1*	40.400 *60.12*	45.426 *67.60*

Copper Tube (Type K)

Nom. Tube Size	O.D. Tubing In *(mm)*	O.D. In *(mm)*	Wall Thick. In *(mm)*	Weight Lbs/Ft *(kg/m))*	Weight Water Lbs/Ft *(kg/m)*
¼"	⅜ *9.5*	0.375 *9.53*	0.035 *0.89*	0.145 *0.22*	0.032 *0.05*
⅜"	½ *12.7*	0.500 *12.70*	0.005 *0.13*	0.269 *0.40*	0.055 *0.08*
½"	⅝ *15.9*	0.625 *15.88*	0.049 *1.24*	0.344 *0.51*	0.094 *0.14*
⅝"	¾ *19.1*	0.750 *19.05*	0.049 *1.24*	0.418 *0.62*	0.144 *0.21*
¾"	⅞ *22.2*	0.875 *22.23*	0.065 *1.65*	0.641 *0.95*	0.188 *0.28*
1"	1⅛ *28.6*	1.125 *28.58*	0.065 *1.65*	0.839 *1.25*	0.337 *0.50*
1¼"	1⅜ *34.9*	1.375 *34.93*	0.065 *1.65*	1.040 *1.55*	0.527 *0.78*
1½"	1⅝ *41.3*	1.625 *41.28*	0.072 *1.83*	1.360 *2.02*	0.743 *1.11*
2"	2⅛ *54.0*	2.125 *53.98*	0.083 *2.11*	2.060 *3.07*	1.310 *1.95*
2½"	2⅝ *66.7*	2.625 *66.68*	0.095 *2.41*	2.920 *4.35*	2.000 *2.98*
3"	3⅛ *79.4*	3.125 *79.38*	0.109 *2.77*	4.000 *5.95*	2.960 *4.40*
3½"	3⅝ *92.1*	3.625 *92.08*	0.120 *3.05*	5.120 *7.62*	3.900 *5.80*
4"	4⅛ *104.8*	4.125 *104.78*	0.134 *3.40*	6.510 *9.69*	5.060 *7.53*
5"	5⅛ *130.2*	5.125 *130.18*	0.160 *4.06*	9.670 *14.39*	8.000 *11.91*
6"	6⅛ *155.6*	6.125 *155.58*	0.192 *4.88*	13.870 *20.64*	11.200 *16.67*
8"	8⅛ *206.4*	8.125 *206.38*	0.271 *6.88*	25.900 *38.54*	19.500 *29.02*
10"	10⅛ *257.2*	10.125 *257.18*	0.338 *8.59*	40.300 *59.97*	30.423 *45.27*
12"	12⅛ *308.0*	12.125 *307.98*	0.405 *10.29*	57.800 *86.02*	43.675 *65.00*

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.)

Water Filled Pipe Support Spacing

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 Support Spacing

346-12. Supports. Rigid metal conduit shall be installed as a complete system as provided in Article 344 and shall be securely fastened in place. Conduit shall be firmly fastened within 3 feet (914.4 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 344.30 (B)(2), provided such supports prevent transmission of stresses to termination where conduit is deflected between supports.

Table 344.30 (B)(2)
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*

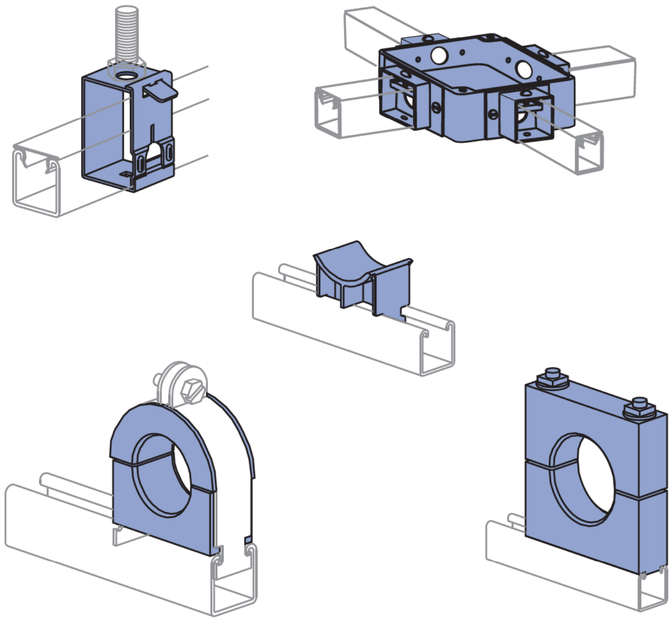
Schedule 40: PVC Plastic Pipe

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 *0.36*	0.27 *0.40*
	80	0.405 *10.3*	0.215 *5.5*	0.31 *0.46*	0.33 *0.49*
¼	40	0.540 *13.7*	0.364 *9.2*	0.42 *0.63*	0.47 *0.70*
	80	0.540 *13.7*	0.302 *7.7*	0.53 *0.79*	0.57 *0.85*
⅜	40	0.675 *17.1*	0.493 *12.5*	0.57 *0.85*	0.65 *0.97*
	80	0.675 *17.1*	0.423 *10.7*	0.74 *1.10*	0.80 *1.19*
½	40	0.840 *21.3*	0.622 *15.8*	0.85 *1.26*	0.98 *1.46*
	80	0.840 *21.3*	0.546 *13.9*	1.09 *1.62*	1.19 *1.77*
	160	0.840 *21.3*	0.464 *11.8*	1.31 *1.95*	1.38 *2.05*
¾	40	1.050 *26.7*	0.824 *20.9*	1.13 *1.68*	1.36 *2.02*
	80	1.050 *26.7*	0.742 *18.8*	1.47 *2.19*	1.66 *2.47*
	160	1.050 *26.7*	0.612 *15.5*	1.94 *2.89*	2.07 *3.08*
1	40	1.315 *33.4*	1.049 *26.6*	1.68 *2.50*	2.05 *3.05*
	80	1.315 *33.4*	0.957 *24.3*	2.17 *3.23*	2.48 *3.69*
	160	1.315 *33.4*	0.815 *20.7*	2.84 *4.23*	3.07 *4.57*
1¼	40	1.660 *42.2*	1.380 *35.1*	2.27 *3.38*	2.92 *4.35*
	80	1.660 *42.2*	1.278 *32.5*	2.99 *4.45*	3.55 *5.28*
	160	1.660 *42.2*	1.160 *29.5*	3.76 *5.60*	4.22 *6.28*
1½	40	1.900 *48.3*	1.610 *40.9*	2.71 *4.03*	3.60 *5.36*
	80	1.900 *48.3*	1.500 *38.1*	3.63 *5.40*	4.39 *6.53*
	160	1.900 *48.3*	1.338 *34.0*	4.85 *7.22*	5.46 *8.13*
2	40	2.375 *60.3*	2.067 *52.5*	3.65 *5.43*	5.10 *7.59*
	80	2.375 *60.3*	1.939 *49.3*	5.02 *7.47*	6.30 *9.38*
	160	2.375 *60.3*	1.687 *42.8*	7.45 *11.09*	8.42 *12.53*
2½	40	2.875 *73.0*	2.469 *62.7*	5.79 *8.62*	7.86 *11.70*
	80	2.875 *73.0*	2.323 *59.0*	7.65 *11.38*	9.49 *14.12*
	160	2.875 *73.0*	2.125 *54.0*	10.00 *14.88*	11.54 *17.17*
3	40	3.500 *88.9*	3.068 *77.9*	7.57 *11.27*	10.77 *16.03*
	80	3.500 *88.9*	2.900 *73.7*	10.24 *15.24*	13.11 *19.51*
	160	3.500 *88.9*	2.624 *66.6*	14.31 *21.30*	16.65 *24.78*
3½	40	4.000 *101.6*	3.548 *90.1*	9.10 *13.54*	13.39 *19.93*
	80	4.000 *101.6*	3.364 *85.4*	12.49 *18.59*	16.35 *24.33*

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*)
4	40	4.500 *114.3*	4.026 *102.3*	10.78 *16.04*	16.30 *24.26*
	80	4.500 *114.3*	3.826 *97.2*	14.97 *22.28*	19.95 *29.69*
	120	4.500 *114.3*	3.624 *92.0*	18.98 *28.25*	23.45 *34.90*
	160	4.500 *114.3*	3.438 *87.3*	22.48 *33.45*	26.51 *39.45*
5	40	5.563 *141.3*	5.047 *128.2*	14.60 *21.73*	23.27 *34.63*
	80	5.563 *141.3*	4.813 *122.2*	20.75 *30.88*	28.64 *42.62*
	120	5.563 *141.3*	4.563 *115.9*	27.01 *40.20*	34.09 *50.73*
	160	5.563 *141.3*	4.313 *109.5*	32.92 *48.99*	39.26 *58.43*
6	40	6.625 *168.3*	6.065 *154.1*	18.95 *28.20*	31.48 *46.85*
	80	6.625 *168.3*	5.761 *146.3*	28.54 *42.47*	39.84 *59.29*
	120	6.625 *168.3*	5.501 *139.7*	36.35 *54.09*	46.66 *69.44*
	160	6.625 *168.3*	5.187 *131.7*	45.30 *67.41*	54.47 *81.06*
8	20	8.625 *219.1*	8.125 *206.4*	22.34 *33.25*	44.82 *66.70*
	30	8.625 *219.1*	8.071 *205.0*	24.67 *36.71*	46.85 *69.72*
	40	8.625 *219.1*	7.981 *202.7*	28.52 *42.44*	50.21 *74.72*
	60	8.625 *219.1*	7.813 *198.5*	35.60 *52.98*	56.39 *83.92*
	80	8.625 *219.1*	7.625 *193.7*	43.34 *64.50*	63.14 *93.96*
	100	8.625 *219.1*	7.437 *188.9*	50.89 *75.73*	69.73 *103.77*
	120	8.625 *219.1*	7.187 *182.5*	60.65 *90.26*	78.23 *116.42*
	140	8.625 *219.1*	7.001 *177.8*	67.68 *100.72*	84.37 *125.56*
	160	8.625 *219.1*	6.813 *173.1*	74.61 *111.03*	90.42 *134.56*
10	20	10.750 *273.1*	10.250 *260.4*	28.01 *41.68*	63.78 *94.92*
	30	10.750 *273.1*	10.136 *257.5*	34.20 *50.90*	69.19 *102.97*
	40	10.750 *273.1*	10.020 *254.5*	40.44 *60.18*	74.63 *111.06*
	60	10.750 *273.1*	9.750 *247.7*	54.68 *81.37*	87.05 *129.54*
	80	10.750 *273.1*	9.562 *242.9*	64.36 *95.78*	95.50 *142.12*
	100	10.750 *273.1*	9.312 *236.5*	76.95 *114.51*	106.47 *158.44*
	120	10.750 *273.1*	9.062 *230.2*	89.20 *132.74*	117.16 *174.35*
	140	10.750 *273.1*	8.750 *222.3*	104.02 *154.80*	130.09 *193.60*
	160	10.750 *273.1*	8.500 *215.9*	115.52 *171.91*	140.13 *208.54*



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. 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 384 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,
- Green Powder Coat (GR), conforming to commercial standards for Powder Coating
- 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

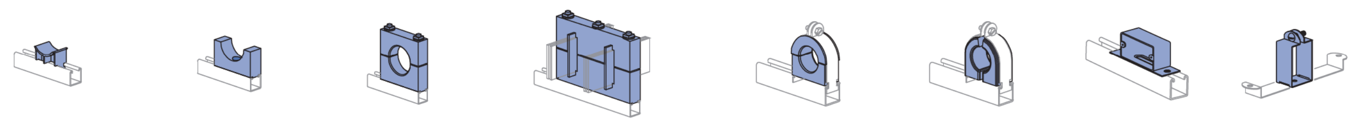
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

LISTINGS

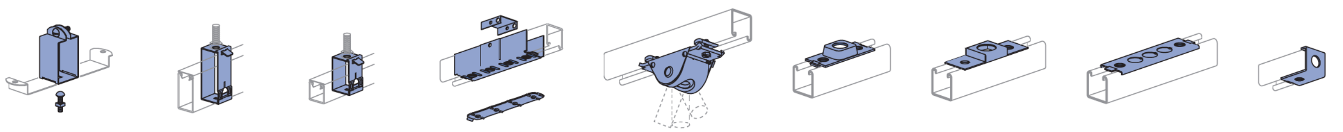
UL File No. - E19459	Channel & Closure Strips
UL File No. - E25629	Fittings
CSA File No. - 013669	All Products

1 5/8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

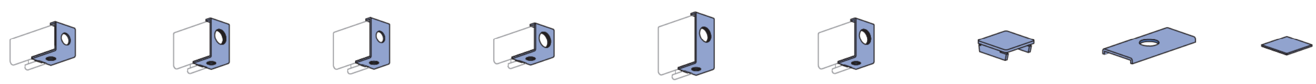
Electrical Fittings



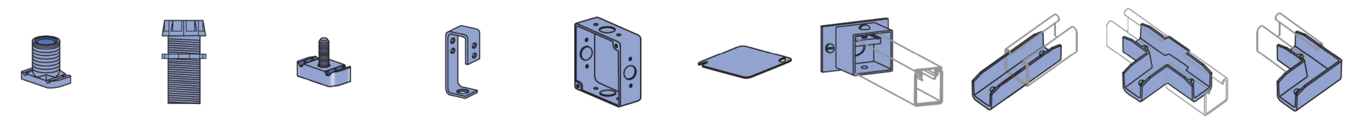
P1753-Pg 128 | P2649 A-Pg 128 | P2645 A-Pg 129 | P2647 A-Pg 129 | P1690-Pg 129 | P1787-Pg 130 | P2567-Pg 129 | P2537-Pg 131



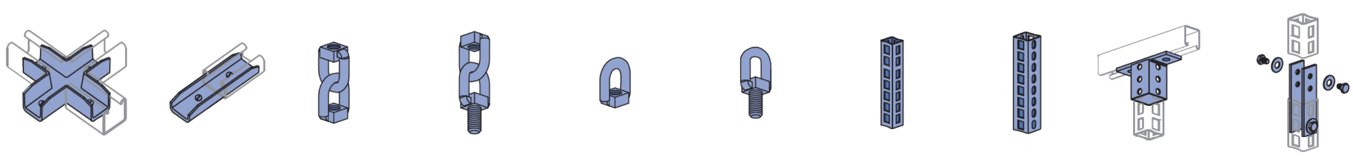
P2539-Pg 131 | P2755-Pg 131 | P2855-Pg 131 | P3922-Pg 131 | P2534-50-Pg 129 | P2535-Pg 130 | P2536-Pg 130 | P2522-Pg 130 | P3521-50-Pg 131



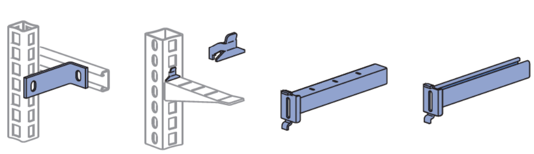
P2521-50-Pg 131 | P5521-50-Pg 131 | P5021-50-Pg 132 | P2521-100-Pg 131 | P5021-100-Pg 132 | P5521-100-Pg 132 | P1180 W-Pg 132 | P2541-Pg 132 | P2552-Pg 133



P2540-Pg 132 | P2603-Pg 132 | P3116-125-Pg 133 | P2602-Pg 131 | P2801-Pg 132 | P2802-Pg 132 | P2803-Pg 132 | P2900-Pg 133 | P2901-Pg 133 | P2902-Pg 133

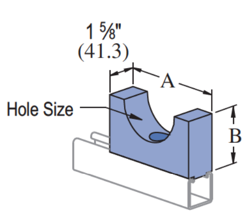


P2903-Pg 133 | P2904-Pg 133 | M2037-Pg 133 | M2137-Pg 133 | M2250-Pg 133 | M2350-Pg 133 | P16F-Pg 134 | P21H-Pg 134 | P2820-Pg 136 | P2822-Pg 136



P2823-Pg 136 | P2821-Pg 136 | P2920-Pg 136 | P2928-Pg 136

P2649A THRU P2649H — MAPLE CABLE SADDLES

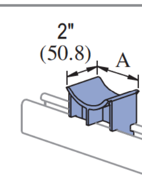


Part No.	Hole Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2649A	0 - 1 *0 - 25.4*	3 *76.2*	1¾ *44.5*	31 *14.1*
P2649B	1 - 1½ *25.4 x 38.1*	3½ *88.9*	2 *50.8*	38 *17.2*
P2649C	1½ - 2 *38.1 - 50.8*	4 *101.6*	2¼ *57.2*	47 *21.3*
P2649D	2 - 2½ *50.8 x 63.5*	4½ *114.3*	2½ *63.5*	57 *25.9*
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: Paraffin impregnated maple hardwood.

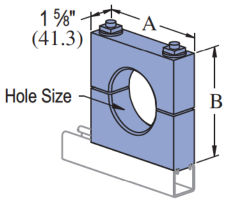
P1753, P1754 — CABLE SADDLES (C) FG



Part Number	"A" In *(mm)*	Maximum Cable Dia. In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1753 FG	2¹³⁄₁₆ *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

P2645A THRU P2645H — MAPLE CABLE CLAMPS



- ⅜" studs, square nuts and washers included.
- Specify hole size when ordering.
- Order channel nuts as required.

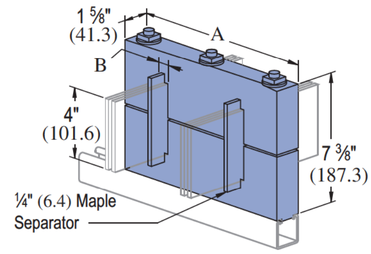
Material: Paraffin impregnated maple hardwood.

Part No.	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*	–	–

P2647A THRU P2647F — 4" (101.6) BUS BAR MAPLE CLAMPS

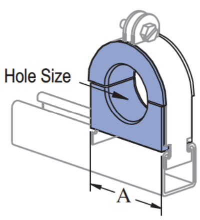
- ½" studs, square nuts and washers are included.
- Channel nuts must be ordered separately.
- Bus bar maple clamps also available in ¼" (6.4) x 2" (50.8) and ¼" (6.4) x 6" (152.4).

Material: Paraffin impregnated maple hardwood.



Part No.	"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*

P1690 THRU P1697 — MAPLE CABLE CLAMPS

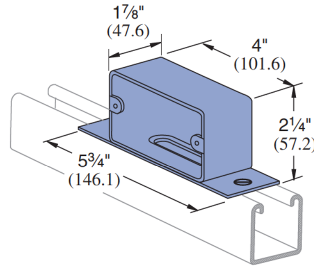


- Use with steel clamp and Everdur hardware. Order clamp separately.
- Specify hole size when ordering.

Material: Paraffin impregnated maple hardwood.

Part No.	Steel Clamp No.	Hole Size In (mm)	"A" In (mm)	Wt/100 pcs Lbs (kg)
P1690	P1113 E	0 -⅝ *0 - 15.9*	1 5⁄16 *33.3*	24 *10.9*
P1691	P1115 E	½ - 1 *12.7- 25.4*	1 15⁄16 *49.2*	42 *19.1*
P1692	P1117 E	¾ - 1½ *19.1 x 38.1*	2⅜ *60.3*	54 *24.5*
P1693	P1118 E	1¼ - 1¾ *31.8 x 44.5*	2⅞ *73.0*	65 *29.5*
P1694	P1119 E	1½ - 2¼ *38.1 x 57.2*	3½ *88.9*	84 *38.1*
P1695	P1120 E	2 - 2½ *50.8 x 63.5*	4 *101.6*	107 *48.5*
P1696	P1121 E	2¼ - 3 *57.2 - 76.2*	4½ *114.3*	123 *55.8*
P1697	P1123 E	3 - 4 *76.2 - 101.6*	5 9⁄16 *141.3*	163 *73.9*

P2567 — OUTLET BOX

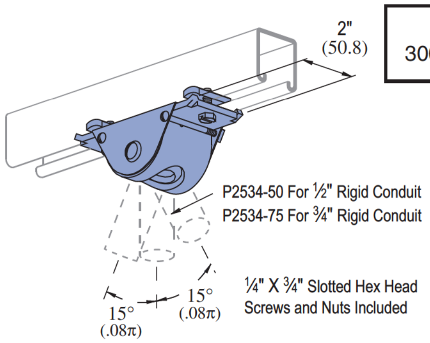


Material: 14 Gauge (.075)

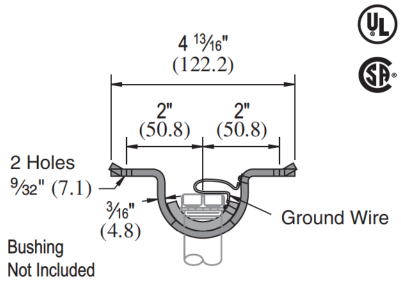
Assembly: 1 Box, 2 Screws, 2 Channel Nuts

Wt/100 pcs: 88 Lbs (47.8 kg)

P2534-50, P2534-75 — CONDUIT SWING FITTING



Design Load
300 Lbs (1.33 kN)

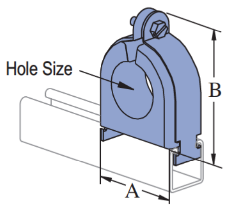


- Conduit hanger fittings allow a free swivel of 15˚ in one direction.
- Fitting may be mounted to the slot side of the Unistrut channel or to the back.

Wt/100 pcs: 96 Lbs (43.5 kg)

1 ⅝" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

P1787 THRU P1795 — PORCE-A-CLAMP™



Patents Pending

Strap Material:
Electro-galvanized Steel (EG) or
Stainless Steel (SS)

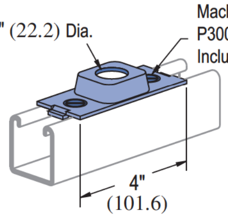
Use With: All 1⅝" channel

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.
- Temperature Rating -50°F to +275°F (-45°C to +135°C)

Part Number	Hole Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1787A	⅜ *9.5*			
P1787B	½ *12.7*	1.36 *34.5*	1.82 *46.2*	25 *11.3*
P1787C	⅝ *15.9*			
P1788	¾ *19.1*			
P1788A	⅞ *22.2*	1.86 *47.2*	2.34 *59.4*	37 *16.8*
P1788B	1 *25.4*			
P1788C	1⅛ *28.6*			
P1789	1¼ *31.8*			
P1789A	1⅜ *34.9*	2.36 *59.9*	2.86 *72.6*	58 *26.3*
P1789B	1½ *38.1*			
P1789C	1⅝ *41.3*			
P1790	1¾ *44.5*			
P1790A	1⅞ *47.6*	2.86 *72.6*	3.50 *88.9*	76 *34.5*
P1790B	2 *50.8*			
P1790C	2⅛ *54.0*			
P1791	2¼ *57.2*	3.36 *835*	4.05 *102.9*	90 *40.8*
P1791A	2⅜ *60.3*			

Part Number	Hole Size In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1791B	2½ *63.5*	3.36 *85.3*	4.05 *102.9*	90 *40.8*
P1791C	2⅝ *66.7*			
P1792	2¾ *69.9*			
P1792A	2⅞ *73.0*	3.86 *98.0*	4.75 *120.7*	109 *49.4*
P1792B	3 *76.2*			
P1792C	3⅛ *79.4*			
P1793	3¼ *82.6*			
P1793A	3⅜ *85.7*	4.36 *110.7*	5.125 *130.2*	130 *59.0*
P1793B	3½ *88.9*			
P1793C	3⅝ *92.1*			
P1794	3¾ *95.3*			
P1794A	3⅞ *98.4*	4.86 *123.4*	5.54 *140.7*	160 *72.6*
P1794B	4 *101.6*			
P1794C	4⅛ *104.8*			
P1795	4¼ *108.0*			
P1795A	4⅜ *111.1*	5.24 *133.1*	5.92 *150.4*	160 *72.6*
P1795B	4½ *114.3*			

P2535
CONDUIT HANGER CONNECTION FOR ½"CONDUIT

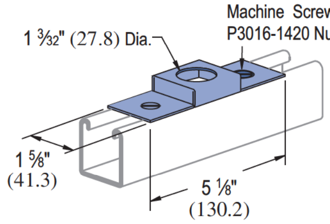


Design Load
400 Lbs (1.78 kN)

Material: 12 gauge (2.7).

Wt/100 pcs: 28 Lbs (12.7 kg)

P2536
CONDUIT HANGER CONNECTION FOR ¾"CONDUIT

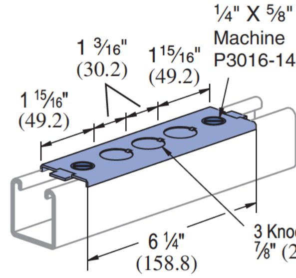


Material: 16 gauge (1.5)

Design Load
200 Lbs (0.89 kN)

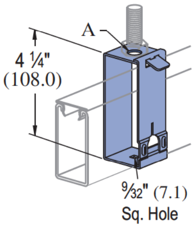
Wt/100 pcs: 36 Lbs (16.3 kg)

P2522 — OUTLET BOX CONNECTION



Wt/100 pcs: 35 Lbs (15.9 kg)

P2755, P2756, P2757
Raceway Hangers



Design Load
120 Lbs (0.53 kN)

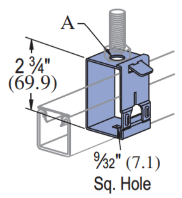
Part No.	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2755	9/16 14.3	44 20.0
P2756	7/8 22.2	44 20.0
P2757	13/32 10.3	44 20.0

Use with Channels:
P1001, P1101, P2001, P5000, & P5500.

Material: 14 gauge (1.9).

P2855, P2856, P2857
Raceway Hangers

EG



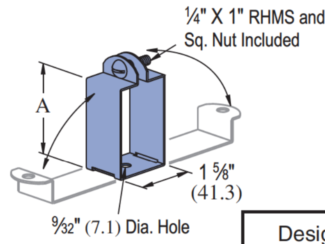
Use with Channels:
P1000, P1100, P3000, P3300

Material: 14 gauge (1.9).

Design Load
120 Lbs (0.53 kN)

Part No.	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2855	9/16 14.3	32 14.5
P2856	7/8 22.2	32 14.5
P2857	13/32 10.3	32 14.5

P2537, P5537
Fluorescent Fixture Hangers



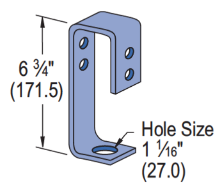
Design Load
120 Lbs (0.53 kN)

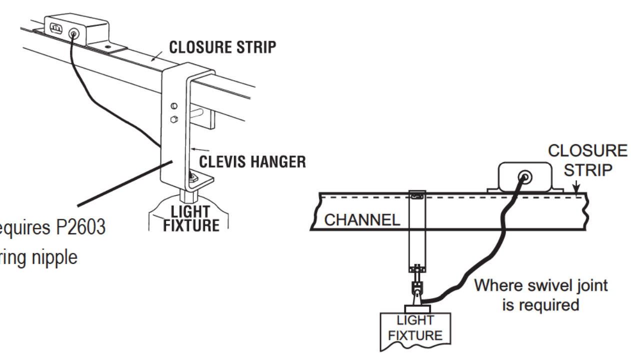
- Hanger provides more than 1/2" (12.7) space between channel and fixtures.

Materials: 18 gauge (1.2).

Part No.	Use w/Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2537	P1000 P1100 P3000	2 7/16 61.9	19 8.6
P5537	P5500	3 1/4 82.6	22 10.0

P2602
Mecury Vapor Fixture Hanger





Requires P2603 wiring nipple

Use with 1 5/8" Channel

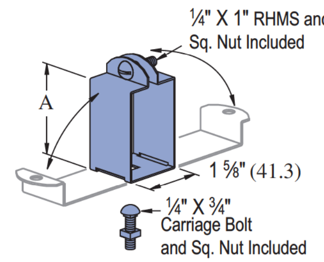
Finish: Electro-galvanized

Stock Size: 1/4"

NOTE: Supports fixture in slot up or down system.

Wt/100 pcs: 154 Lbs (69.9 kg)

P2539, P3539, P5539
Fluorescent Fixture Hangers



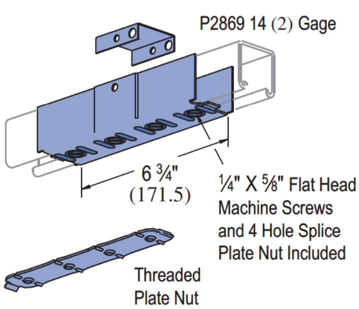
- Hanger provides 1/8" (3.2) space between channel and fixtures.

Materials: 18 gauge (1.2).

Design Load
120 Lbs (0.53 kN)

Part No.	Use w/Channel	"A" In (mm)	Wt/100 pcs Lbs (kg)
P2539	P1000 P1100	1 3/4 44.5	17 7.7
P3539	P3000	1 1/2 38.1	15 6.8
P5539	P5500	2 9/16 65.1	18 8.2

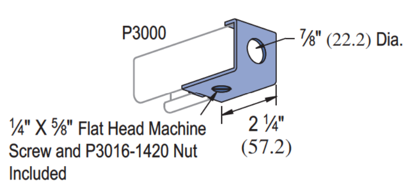
P3922 thru P3926
Splice Fittings



Material: 16 gauge (1.6).

Assy. No.	Use W/ Channel	"A" In (mm)	Clevis No.	Back Clevis No.	Plate Nut No.	Wt/100 pcs Lbs (kg)
P3922	P1000 P1100	1 5/8 41.3	P2377	P2517	P2869	100 45.4
P3923	P3000	1 3/8 34.9	P3377	P2517	P2869	97 44.0
P3924	P4000	13/16 20.6	P5377	P2517	P2869	80 36.3
P3925	P5500	1 5/8 41.3	P2377	P5517	P2869	103 46.7
P3926	P5000	1 5/8 41.3	P2377	P5017	P2869	106 48.1

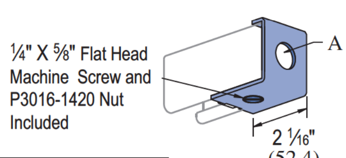
P3521-50
End Connectors For 1/2" Conduit



Material: 12 gauge (3).

Wt/100 pcs: 27 Lbs (12.2 kg)

P2521-50, P2521-75
End Connectors For 1/2" & 3/4" Conduit

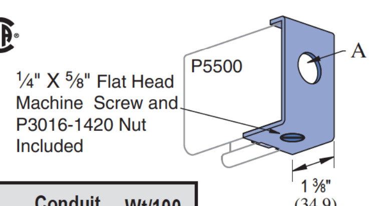


Part No.	Conduit Size A In	Wt/100 pcs Lbs (kg)
P2521-50	1/2	27 12.2
P2521-75	3/4	26 11.8

Use with channels:
P1000 and P1100.

Material:
12 gauge (3)

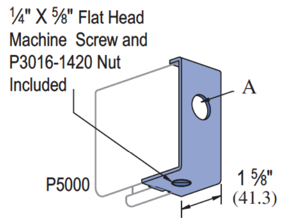
P5521-50, P5521-75
End Connectors For 1/2" & 3/4" Conduit



Part No.	Conduit Size A In	Wt/100 pcs Lbs (kg)
P5521-50	1/2	27 12.2
P5521-75	3/4	26 11.8

Material:
12 gauge (3).

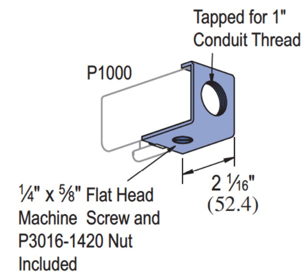
P5021-50, P5021-75 End Connector For ½" & ¾" Conduit



Material: 12 gauge (2.7).

Part No.	Conduit Size A In	Wt/100 pcs Lbs *(kg)*
P5021-50	½	31 *14.1*
P5021-75	¾	30 *13.6*

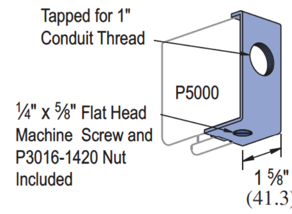
P2521-100 End Connector For 1" Conduit



Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

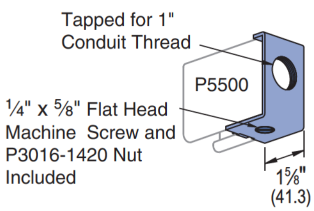
P5021-100 End Connector For 1" Conduit



Material: 12 gauge (2.7).

Wt/100 pcs: 28 Lbs (12.7 kg)

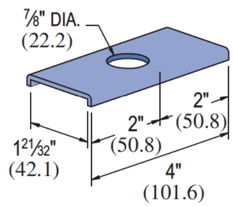
P5521-100 End Connector For 1" Conduit

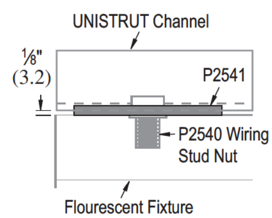


Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

P2541 Spacer Clevis



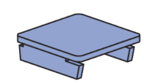


Material: 12 gauge (2.7).

Wt/100 pcs: 24 Lbs (10.9 kg)

P1180W thru P5580W End Caps

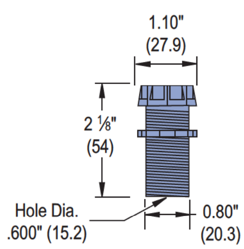
EG



Material: 14 gauge (1.9)

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)*

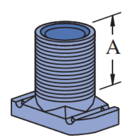
P2603 Fixture Wiring Nipple



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

Wt/100 pcs: 14 Lbs (6.4 kg)

P2540, P2540A Wiring Stud Nut



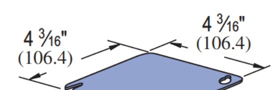
Stamped Ident. No.
P2540 – 121961
P2540A – 121960
Material: Sintered metal.

½" American Standard Straight Pipe Thread

Design Load
320 Lbs (1.42 kN)

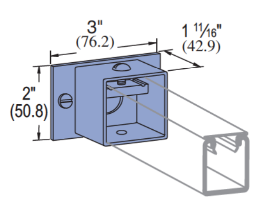
Part No.	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P2540	1⁵⁄₆₄ *27.4*	10.0 *4.5*
P2540A	⅝ *15.9*	8 *3.6*

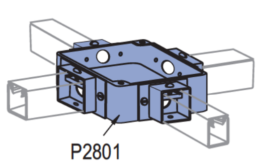
P2802 Junction Box Cover



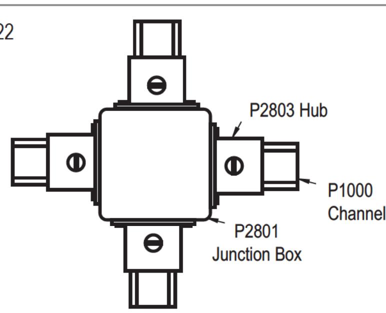
Wt/100 pcs: 30 Lbs (13.6kg)

P2803 Hub Assembly





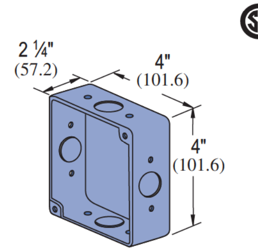
Stamp ID No. 122022



Note: Combine junction box (P2801) and hub assemblies (P2803) to make 1, 2, 3, or 4 way junction box.

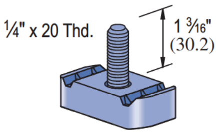
Wt/100 pcs: 32 Lbs (14.5 kg)

P2801 Junction Box



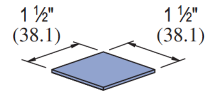
Wt/100 pcs: 113 Lbs (51.4 kg)

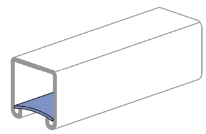
P3116-125
Fixture Stud Nut



Wt/100 pcs: 11 Lbs (5.0 kg)

P2552
Polypropylene Wire Retainer

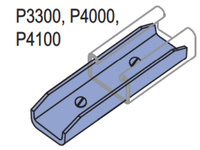




Retainer may be easily pushed into channel to support wires until closure strip is installed.

Wt/100 pcs: .30 Lbs (.1 kg)

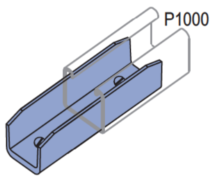
P2904



3/8"-16 x 1/4" Socket Cup Point
Set Screws Included
Extruded Aluminum

Wt/100 pcs: 12 Lbs (5.4kg)

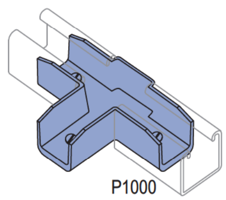
P2900 AL



3/8"-16 x 1/4" Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 20 Lbs (9.1 kg)

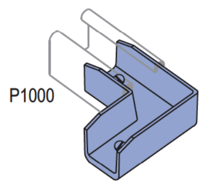
P2901



3/8"-16 x 1/4" Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 35 Lbs (15.9 kg)

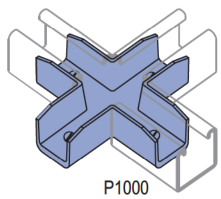
P2902 AL



3/8"-16 x 1/4" Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 27 Lbs (12.2 kg)

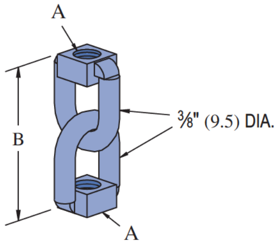
P2903



3/8"-16 x 1/4" Socket Cup Point
Set Screws Included
Material: Cast aluminum.

Wt/100 pcs: 45 Lbs (20.4 kg)

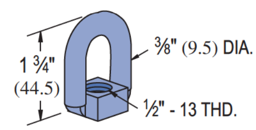
M2037, M2050
Swivel Hangers



Design Load
600 Lbs (2.67 kN)

Part No.	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2037	⅜" - 16	2 31/32 *75.4*	23 *10.4*
M2050	½" - 13	2¾ *69.9*	32 *14.5*

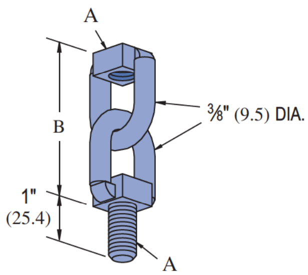
M2250
Swivel Hanger



Design Load
600 Lbs (2.67 kN)

Wt/100 pcs: 18 Lbs (8.2 kg)

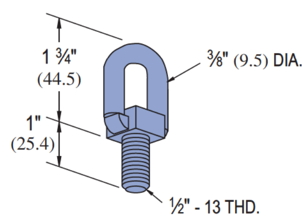
M2137, M2150
Swivel Hangers



Design Load
600 Lbs (2.67 kN)

Part No.	"A" In	"B" In (mm)	Wt/100 pcs Lbs (kg)
M2137	⅜" - 16	2 29/32 *74*	27 *12.2*
M2150	½" - 13	2¾ *69.9*	45 *20.4*

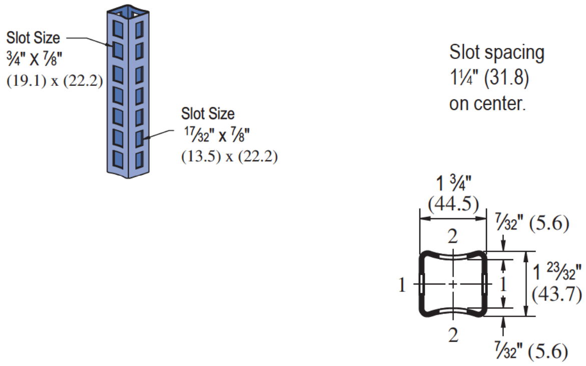
M2350
Swivel Hanger



Design Load
600 Lbs (2.67 kN)

Wt/100 pcs: 20 Lbs (9.1 kg)

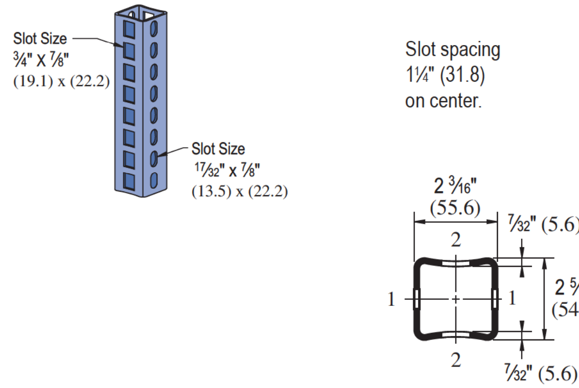
P16F



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

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)

P21H



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

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)

P16F - Column Loading

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

P21H - Column Loading

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

P16F - Column Loading (Metric)

Unbraced Height *mm*	Max. Allowable Load Column Loaded at C.G. *kN*	Max. Allowable Load Column Loaded at Slot Face *kN*
610	*42.7*	*14.7*
914	*40.0*	*13.8*
1,219	*36.9*	*12.9*
1,524	*33.4*	*12.0*
1,829	*29.4*	*10.7*
2,134	*24.9*	*9.8*
2,438	*20.0*	*8.5*
2,743	*16.0*	*7.1*
3,048	*12.9*	*6.2*
3,658	*8.9*	*4.9*

P21H - Column Loading (Metric)

Unbraced Height *mm*	Max. Allowable Load Column Loaded at C.G. *kN*	Max. Allowable Load Column Loaded at Slot Face *kN*
610	*78.7*	*27.6*
914	*75.2*	*26.7*
1,219	*71.2*	*25.4*
1,524	*66.7*	*24.0*
1,829	*61.8*	*22.7*
2,134	*56.0*	*20.9*
2,438	*50.3*	*19.1*
2,743	*44.0*	*17.3*
3,048	*36.9*	*15.6*
3,658	*25.8*	*12.5*
4,267	*18.8*	*10.2*

P16F - Beam Loading

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

P21H - Beam Loading

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

P16F - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	*7.2*	*1*	*7.2*	*7.2*	*7.2*
750	*5.8*	*2*	*5.8*	*5.8*	*5.4*
1,000	*4.3*	*4*	*4.3*	*4.3*	*3.0*
1,250	*3.5*	*6*	*3.5*	*2.9*	*1.9*
1,500	*2.9*	*9*	*2.7*	*2.0*	*1.4*
1,750	*2.5*	*12*	*2.0*	*1.5*	*1.0*
2,000	*2.2*	*16*	*1.5*	*1.1*	*0.8*
2,500	*1.7*	*25*	*1.0*	*0.7*	*0.5*
3,000	*1.5*	*36*	*0.7*	*0.5*	*0.3*
3,500	*1.2*	*49*	*0.5*	*0.4*	*0.2*
4,000	*1.1*	*64*	*0.4*	*0.3*	*0.2*

P21H - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	*17.1*	*1*	*17.1*	*17.1*	*17.1*
750	*13.7*	*2*	*13.7*	*13.7*	*13.7*
1,000	*10.3*	*3*	*10.3*	*10.3*	*8.8*
1,250	*8.2*	*5*	*8.2*	*8.2*	*5.7*
1,500	*6.9*	*7*	*6.9*	*5.9*	*3.9*
1,750	*5.9*	*10*	*5.8*	*4.3*	*2.9*
2,000	*5.1*	*13*	*4.4*	*3.3*	*2.2*
2,500	*4.1*	*20*	*2.8*	*2.1*	*1.4*
3,000	*3.4*	*29*	*2.0*	*1.5*	*1.0*
3,500	*2.9*	*40*	*1.4*	*1.1*	*0.7*
4,000	*2.6*	*52*	*1.1*	*0.8*	*0.5*

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.

P16F - Elements of Section

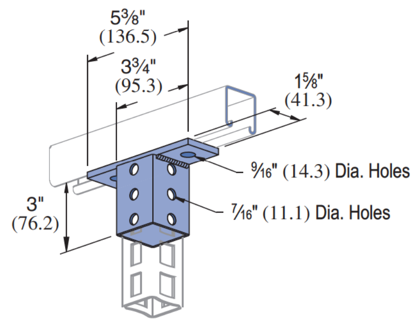
Parameter	P16F		P16F (metric)	
Area of Section	0.416	In^2	*2.68*	*cm^2*
Axis 1-1				
Moment of Inertia (I)	0.168	In^4	*7.0*	*cm^4*
Section Modulus (S)	0.192	In^3	*3.1*	*cm^3*
Radius of Gyration (r)	0.650	In	*1.7*	*cm*
Axis 2-2				
Moment of Inertia (I)	0.210	In^4	*8.7*	*cm^4*
Section Modulus (S)	0.240	In^3	*3.9*	*cm^3*
Radius of Gyration (r)	0.725	In	*1.8*	*cm*

P21H - Elements of Section

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*

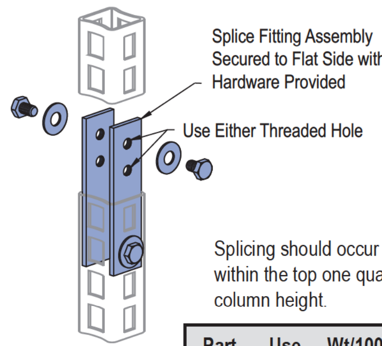
P2820, P2940

Channel/Tube Connectors



Part No.	Use With	Wt/100 pcs Lbs *(kg)*
P2820	P16F	116 *(2.6)*
P2940	P21H	148 *(67.1)*

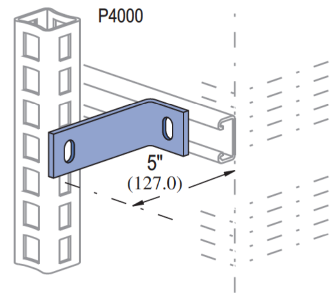
P2822, P2932 — Splice Fittings



Splicing should occur within the top one quarter of column height.

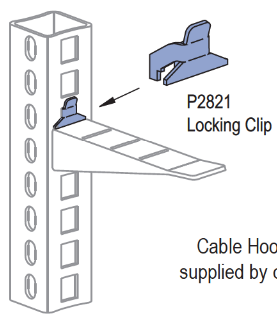
Part No.	Use With	Wt/100 pcs Lbs *(kg)*
P2822	P16F	97 *(44.0)*
P2932	P21H	122 *(55.3)*

P2823 — 90° Rack Fitting



Wt/100 pcs: 66 Lbs (29.9 kg)

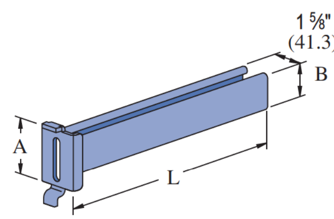
P2821 — Locking Clip



Exclusive Cable Hook Locking Clip prevents Cable Hook removal.

Wt/100 pcs: 3 Lbs (1.4 kg)

P2928, P2929 and P2930 — Cable Brackets



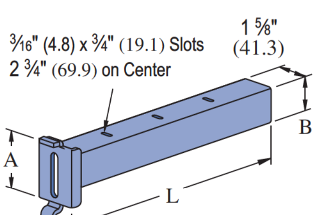
Use with P16F or P21H.

Material: 12 gauge steel.

Part Number	"L" In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Design Load Lbs *(kN)*
P2928	6 *152.4*	3½ *88.9*	⅞ *22.2*	92 *41.7*	500 *2.22*
P2929	12 *304.8*	3½ *88.9*	1⅝ *41.3*	320 *145.1*	250 *1.11*
P2930	18 *457.2*	3½ *88.9*	1⅝ *41.3*	420 *190.5*	170 *0.76*

Safety factor of 3.

P2920 thru P2924 — Cable Brackets HG



Use with P16F or P21H.

Material: 12 gauge steel.

Part Number	"L" In *(mm)*	"A" In *(mm)*	"B" In *(mm)*	Wt/100 pcs Lbs *(kg)*	Uniform Design Load Lbs *(kN)*
P2920	5½ *139.7*	3½ *88.9*	⅞ *22.2*	90 *40.8*	500 *2.22*
P2921	8¼ *209.6*	3½ *88.9*	⅞ *22.2*	120 *54.4*	325 *1.45*
P2922	11 *279.4*	3½ *88.9*	1⅝ *41.3*	300 *136.1*	275 *1.22*
P2923	13¾ *349.3*	3½ *88.9*	1⅝ *41.3*	340 *154.2*	220 *0.98*
P2924	19¼ *489.0*	3½ *88.9*	1⅝ *41.3*	430 *195.0*	160 *0.71*

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.

P3000, & -KO

Gauge	Number and Conductor Size (AWG) 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

P3300

Gauge	Number and Conductor Size (AWG) 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

P5500, & -KO

Gauge	Number and Conductor Size (AWG) 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

P1000, & -KO, P1100 & -KO

Gauge	Number and Conductor Size (AWG) 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

P5000, & -KO

Gauge	Number and Conductor Size (AWG) 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

Channel Size and Inside Area				
Channel Part Number	Size	Area	40% Area	25% Area
P3300 & KO	1⅝" x ⅞"	0.975 629	0.390 252	0.244 157
P3000 & KO	1⅝" x 1⅜"	1.677 1,082	0.671 433	0.419 270
P1000 & KO, P1100 & KO	1⅝" x 1⅝"	2.028 1,308	0.811 523	0.507 327
P5500 & KO	1⅝" x 2⁷⁄₁₆"	3.169 2,045	1.268 818	0.792 511
P5000 & KO	1⅝" x 3¼"	4.308 2,779	1.723 1,112	1.077 695

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

Also UL Listed
P1001, P1101, P3001, P3301, P5001 & P5501

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

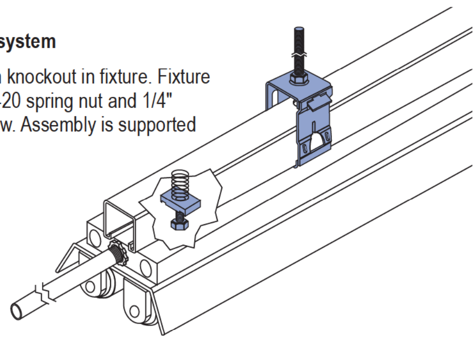
Raceway Wire Size AWG	P1000, &-KO P1100, &-KO		P3000, &-KO		P3300		P5000 &-KO		P5500, &-KO	
	A	B	A	B	A	B	A	B	A	B
14	6	10	5	10	4	6	10	10	10	10
12	6	10	4	10	3	6	10	10	10	10
10	5	8	4	6	-	-	8	10	8	10
8	4	6	3	4	-	-	6	9	6	8
6	2	3	2	2	-	-	4	6	4	6

Unistrut channels are also certified by Canadian Standards Association.

Fluorescent Fixtures - Support Applications

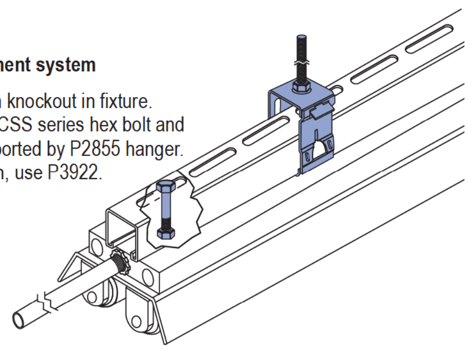
Spring-Nut attachment system

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.

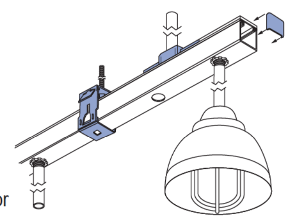
Deflection Table

	Distance Between Supports - In *(mm)*								
Channel	8' (2.4m)	10' (3m)	12' (3.7m)	14' (4.3m)	16' (4.9m)	18' (5.5m)	20' (6.1m)	22' (6.7m)	24' (7.3m)
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

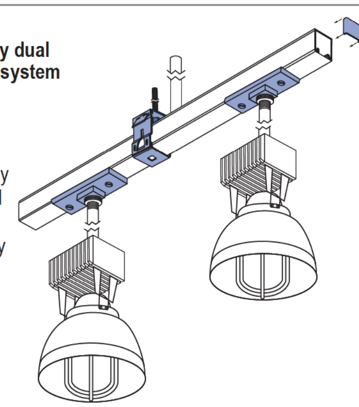
H.I.D. Knockout mounted system

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.

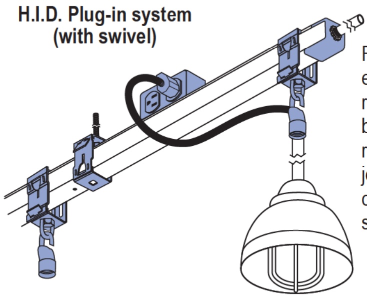


High-Bay dual mounted system

Fixtures are connected to and wired form raceway by conduit connector fitting P2536. Raceway is supported by P2855 hanger. P1280W end caps and P3184 closure strip complete the assembly. Conduit connected to raceway through channel knockout.



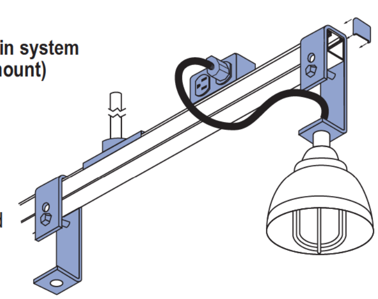
H.I.D. Plug-in system (with swivel)



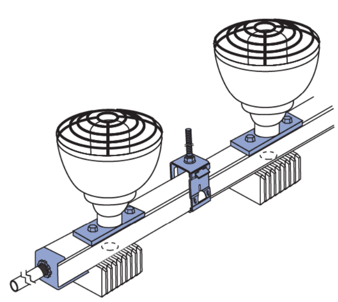
Fixtures, supported by P2855 hangers and M2250 eyelets, plug into receptacle mounted in P2567 outlet box. P2855 hangers also support raceway. P2521-75 end connector joins conduit to raceway. P1280W end caps (not shown) and P3184 closure strip complete assembly.

H.I.D. Plug-in system (rigid mount)

Fixtures are supported by P2602 clevis hangers. Cover plate on P2567 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.



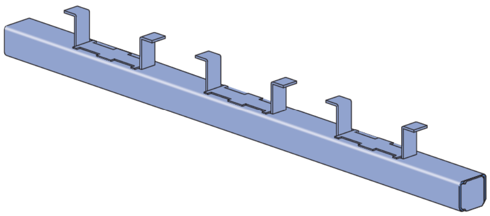
Uplighting with underhung or remote ballast

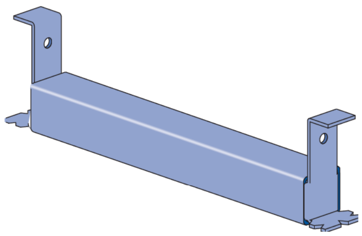


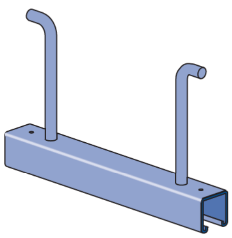
Fixtures attached to and wired from P2535 conduit fittings mounted to slot side of channel. Raceway can be wired by P2521 as shown or, conduit can enter through available knockout. Ballasts in P2521 are connected at the knockout by fixture adapter. In remote ballast installations, follow manufacturers 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.

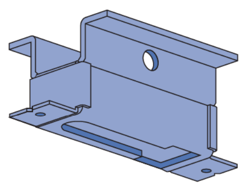
UNISTRUT

CONCRETE INSERTS









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:

- Hot dipped galvanized (HG), conforming to ASTM A123 or A153;
- Pre-galvanized (PG), conforming to ASTM A653 GR 33
- Plain (PL).

DESIGN LOAD

Design loads, where shown, are based on 3,000 PSI concrete, unless noted.

STANDARD LENGTHS

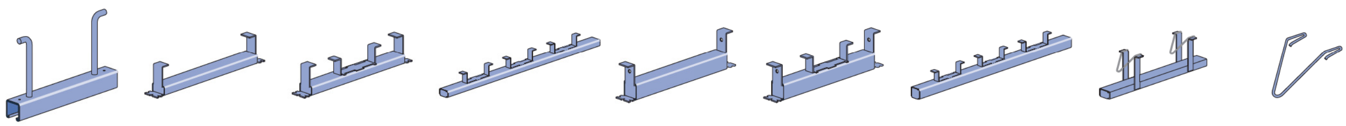
Insert lengths range from 3 inches (76.2 mm) to 20 feet (6.10m) with a tolerance of ±¼-inch (6.4mm).

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.

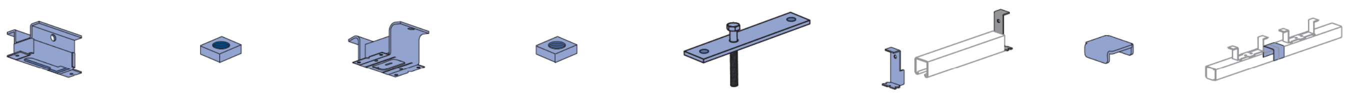
Custom-designed inserts are available on special order. Consult factory for ordering information.

Heavy Duty **Light Duty** **Standard Duty**



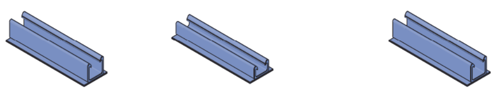
P3754-Pg 141 | P3349-Pg 143 | P3352-Pg 143 | P3354-Pg 143 | P3249-Pg 142 | P3253-Pg 142 | P3254-Pg 142 | P3165-Pg 144 | P2865-Pg 144

Spot Inserts and Components



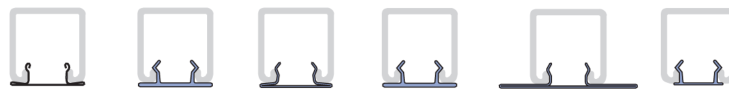
P3245-Pg 144 | P3245N4-Pg 144 | M24-Pg 144 | M2506-Pg 144 | P3700-Pg 145 | P1703-Pg 145 | P2407-Pg 145 | P3663-Pg 145

Fiberglass Concrete Inserts



Heavy Duty-Pg 193 | Light Duty-Pg 194 | Heavy Duty - Standard Profile-Pg 195

Closure Strips



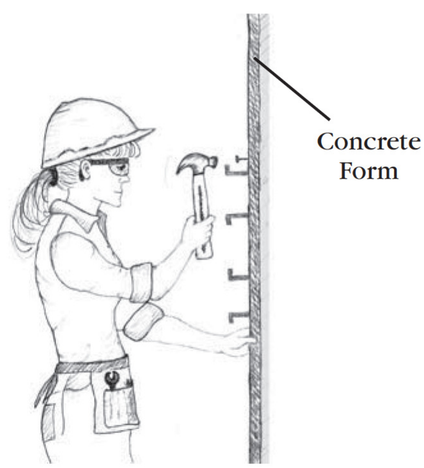
P1184 Pg 60 | P1184P Pg 60 | P3184 Pg 60 | P3184P Pg 60 | P3184F Pg 60 | P3712P Pg 60

Channel Nuts

Heavy Duty-Pg 73 | Heavy Duty-Pg 73 | Standard Duty-Pg 73 | Standard Duty-Pg 73 | Light Duty-Pg 73 | Light Duty-Pg 73

Installing Concrete Inserts

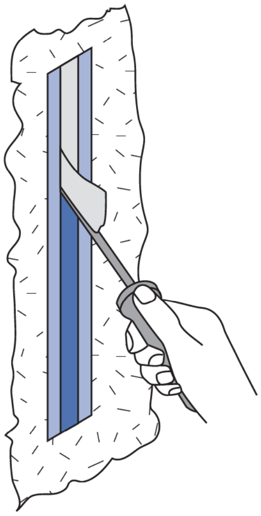
1. Nail insert to concrete form using prepunched nail holes



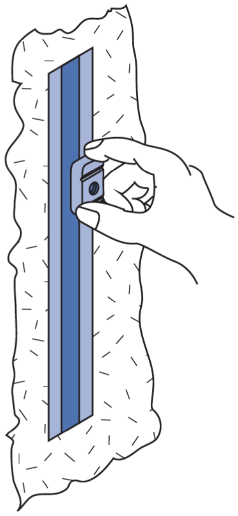
2. Attach rebars to flanges on insert

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.

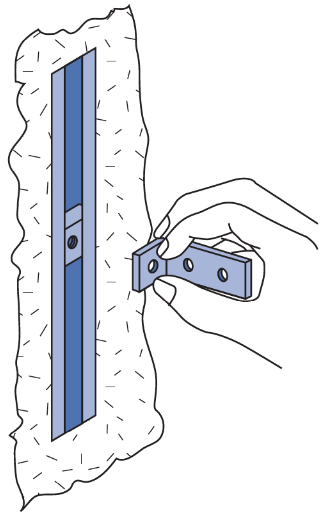
Using Installed Concrete Insert



1. Scrape out filler



2. Insert channel nut.

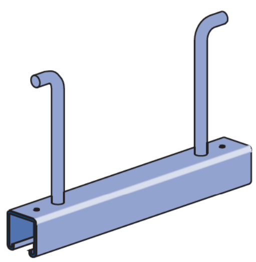


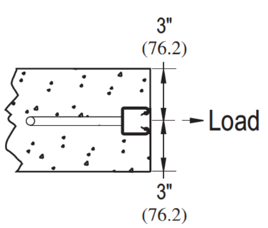
3. Attach fitting

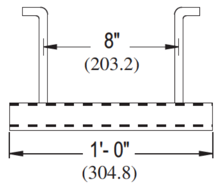
P3754

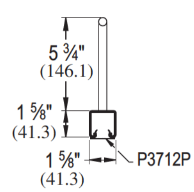
1⅝" x 1⅝" Channel

- 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 hot-dipped galvanized (HG) conforming to ASTM A123 or A153, or pre-galvanized (PG) conforming to ASTM A653-G90.









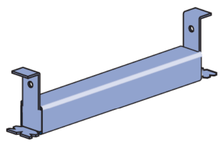
Part Number	Insert Length ±¼" *(6.4mm)* In *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Anchor Spacing In *(mm)*	Max. Allowable Point Load Lbs *(kN)*	Spacing of Point Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kN)*
P3754	12 *304.8*	210 *95.3*	8 *203.2*	2,500 *11.12*	3 *76.2*	5,000 *22.24*

Safety factor 3

1⅝" Channel | Telestrut | Nuts & Hardware | General Fittings | Pipe/Conduit Supports | Electrical Fittings | Concrete Inserts | Solar | Unipier®

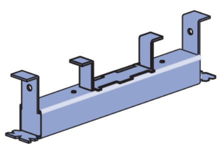
P3200 Series — 1⅝" x 1⅜" Channel PG HG

P3249 thru P3252



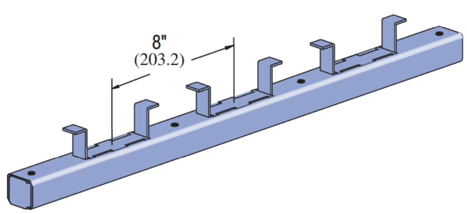
"NC" Suffix – No Closure Strip, With End Caps
"WC" Suffix – With Closure Strip & End Caps

P3253

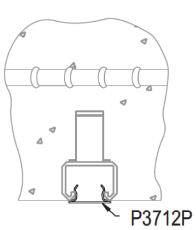


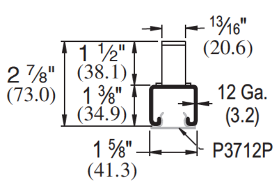
"NC" Suffix – No Closure Strip, With End Caps & Back Plates
"WC" Suffix – With Closure Strip, End Caps & Back Plates

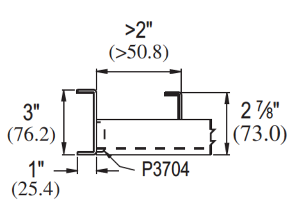
P3254 thru P3270



"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







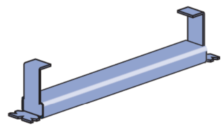
- Includes closure and end caps unless otherwise requested.
- P3280 end cap used when distance to first anchor is up to 2" (51 mm).
- P3704 end cap is used when end distance to first anchor is over 2" (51 mm).
- Nail or anchor inserts to forms every 16" (406.4 mm) to 24" (609.6 mm).
- Anchors are 8" (203.2 mm) on center.
- Material: Cold formed from 12 Ga. (3) steel conforming to ASTM A1011 SS GR 33 or ASTM A653 GR 33. A. Stainless steel available on special order.
- Finish: Choice of hot-dipped galvanized (HG) conforming to ASTM A123 or A153, or pre-galvanized (PG) conforming to ASTM A653-G90.

Part Number	Insert Length In/Ft *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Allowable Point Load Lbs *(kN)*	Min. Spacing of Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kN)*
P3249	3" *76.2*	85 *39*	500 *2.22*	—	500 *2.22*
P3250	4" *101.6*	100 *45*	800 *3.56*	—	800 *3.56*
P3251	6" *152.4*	130 *59*	1,000 *4.45*	—	1,000 *4.45*
P3252	8" *203.2*	159 *72*	1,200 *5.34*	—	1,200 *5.34*
P3253	12" *304.8*	227 *103*	2,000 *8.90*	—	2,000 *8.90*
P3254	16" *406.4*	270 *122*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3255	20" *508.0*	357 *162*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3256	24" *609.6*	399 *181*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3257	32" *812.8*	527 *239*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3257A	36" *914.4*	616 *279*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3258	40" *1,016.0*	661 *300*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3259	4' *1,219.2*	786 *357*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3260	5' *1,524.0*	1,003 *455*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3261	6' *1,828.8*	1,173 *532*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3262	7' *2,133.6*	1,390 *630*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3263	8' *2,438.4*	1,560 *708*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3264	9' *2,743.2*	1,741 *790*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3265	10' *3,048.0*	1,947 *883*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3266	12' *3,657.6*	2,334 *1,059*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3267	14' *4,267.2*	2,717 *1,232*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3268	16' *4,876.8*	3,116 *1,413*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3269	18' *5,486.4*	3,530 *1,601*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*
P3270	20' *6,096.0*	3,882 *1,761*	2,000 *8.90*	12 *304.8*	2,000 Lbs./Ft. *2,976.3 (kg/m)*

Safety factor 3.

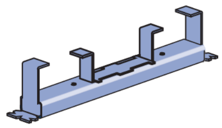
- Includes closure and end caps unless otherwise requested.
- P3380 end cap used when distance to first anchor is up to 2" (51 mm).
- P3703 end cap is used when end distance to first anchor is over 2" (51 mm).
- Nail or anchor inserts to forms every 16" (406.4 mm) to 24" (609.6 mm).
- Anchors are 8" (203.2 mm) on center.
- Material: Cold formed from 12 Ga. (3 mm) steel conforming to ASTM A1011 SS GR. 33 or A653 GR 33. A. Stainless steel available on special order.
- Finish: Choice of hot-dipped galvanized (HG) conforming to ASTM A123 or A153, or pre-galvanized (PG) conforming to ASTM A653-G90.

P3349 thru P3351



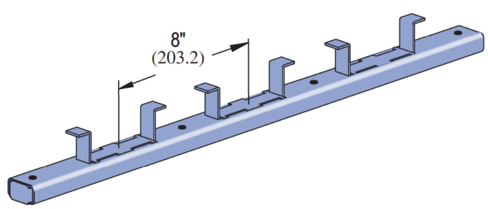
"NC" Suffix – No Closure Strip, With End Caps
"WC" Suffix – With Closure Strip & End Caps

P3352 thru P3353

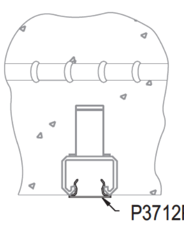


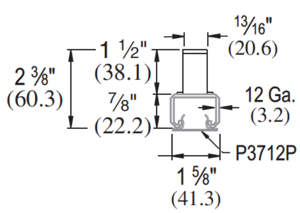
"NC" Suffix – No Closure Strip, With End Caps & Back Plates
"WC" Suffix – With Closure Strip, End Caps & Back Plates

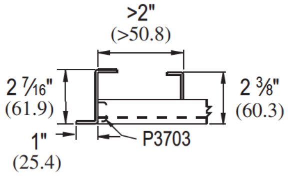
P3354 thru P3370

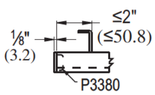


"NC" Suffix – No Closure Strip, W/End Caps & Back Plates
"WC" Suffix – W/Closure Strip, End Caps & Back Plates
"X" – No Closure Strip, No End Caps, W/Back Plates





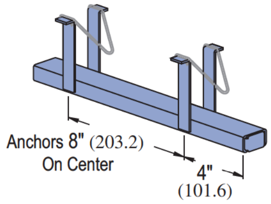


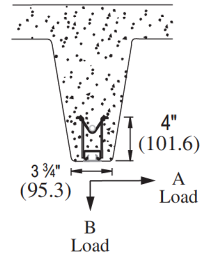


Part Number	Insert Length In/Ft. *(mm)*	Wt/100 pcs Lbs *(kg)*	Max. Allowable Point Load Lbs *(kN)*	Min. Spacing of Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kN)*	
P3349	3" *76.2*	68 *31*	400 *1.78*	—	400 *1.78*	
P3350	4" *101.6*	81 *37*	500 *2.22*	—	500 *2.22*	
P3351	6" *152.4*	102 *46*	750 *3.34*	—	750 *3.34*	
P3352	8" *203.2*	122 *55*	1,000 *4.45*	—	1,000 *4.45*	
P3353	12" *304.8*	174 *79*	1,500 *6.67*	—	1,500 *6.67*	
P3354	16" *406.4*	185.0 *84*	1,500 *6.67*	12 *304.8*	3,000 *13.34*	
P3355	20" *508.0*	231 *105*	1,500 *6.67*	12 *304.8*	3,000 *13.34*	
P3356	24" *609.6*	277 *126*	1,500 *6.67*	12 *304.8*	3,000 *13.34*	
P3357	32" *812.8*	370 *168*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3357A	36" *914.4*	416 *189*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3358	40" *1,016.0*	463 *210*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3359	4' *1,219.2*	555 *252*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3360	5' *1,524.0*	694 *315*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3361	6' *1,828.8*	832 *377*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3362	7' *2,133.6*	971 *440*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3363	8' *2,438.4*	1,110 *503*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3364	9' *2,743.2*	1,249 *567*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3365	10' *3,048.0*	1,387 *629*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3366	12' *3,657.6*	1,665.0 *755*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3367	14' *4,267.2*	1,942 *881*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3368	16' *4,876.8*	2,220 *1,007*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3369	18' *5,486.4*	2,497 *1,133*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(kg/m)*
P3370	20' *6,096.0*	2,775 *1,259*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*	Lbs./Ft. *(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 No.	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.

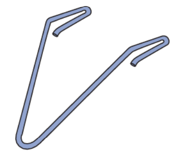
Maximum allowable load/ft.

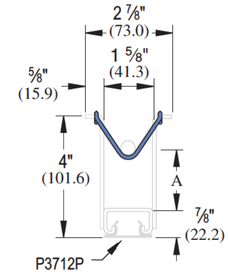
Concrete	A Lbs *(kN)*	B Lbs *(kN)*
Light Wt	425 *1.89*	800 *3.56*
Normal Wt	500 *2.22*	1,000 *4.45*

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 pre-galvanized (PG) conforming to ASTM A653-G90, or plain (PL).

P2865-10, -15, -20 — Hold-Down Springs

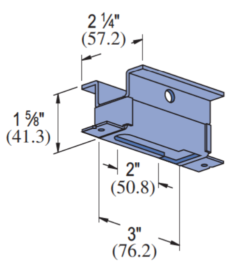


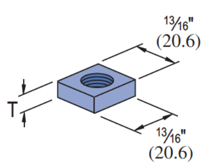


Finish: Plain

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*

P3245





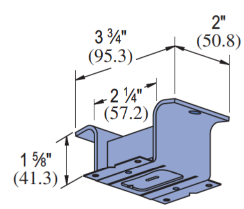
Part Number	Wt/100 pcs Lbs *(kg)*	Max. Allowable Pt. Load Lbs *(kN)*
P3245	54 *24.5*	1,000 *4.45*

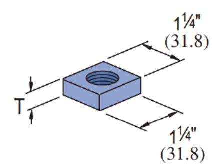
Square Nut for P3245 Insert

Part Number	Size/Thread In	T In (mm)	Wt/100 pcs Lbs *(kg)*
P3245-N4	¼" — 20	5⁄16" *7.9*	6 *2.7*
P3245-N6	⅜" — 16	5⁄16" *7.9*	5 *2.3*
HSQN050	½" — 13	7⁄16" *11.1*	6 *2.7*

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





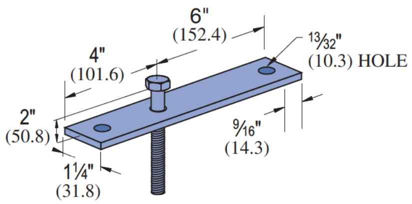
Part Number	Wt/100 pcs Lbs *(kg)*	Max. Allowable Pt. Load Lbs *(kN)*
M24	52 *23.6*	800 *3.56*

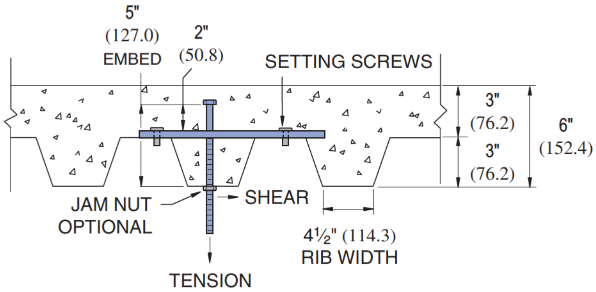
Square Nut for M24

Part Number	Size/ Thread In	T In (mm)	Wt/100 pcs Lbs *(kg)*
M2506	¼" — 20	¼" *6.4*	13 *5.9*
M2508	⅜" — 16	⅜" *9.5*	14 *6.4*
M2510	½" — 13	½" *12.7*	14 *6.4*
M2512	⅝" — 11	½" *12.7*	12 *5.4*
M2523	¾" — 10	½" *12.7*	11 *5.0*
M2524	⅞" — 9	½" *12.7*	10 *4.5*

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.

P3700 Series — Deck Insert



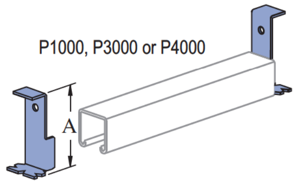


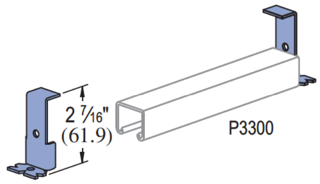
Part Number	Rod Dia. In	Tension Load Lbs *(kN)*	Shear Load Lbs *(kN)*	Wt/100 pcs Lbs *(kg)*
P3700-37	⅜	850 *3.78*	600 *2.67*	89 *40.4*
P3700-50	½	1,380 *6.14*	1000 *4.45*	111 *50.3*
P3700-62	⅝	1920 *8.54*	1760 *7.83*	141 *64.0*

Notes:

1. Allowable loads have been determined by the manufacturer's testing, analysis, and technical specification.
2. Values are based on a safety factor of 5.
3. 20 Gauge Metal Deck

P1703, P1704, P3703, P3704, P4703 — End Cap Anchors PG HG

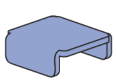




Part Number	Channel	"A" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P1703	P1000	2¹³⁄₃₂ *61.1*	30 *13.6*
P1704	P1000	3¹⁷⁄₃₂ *89.7*	37 *16.8*
P3703	P3300	2⁷⁄₁₆ *61.9*	17 *7.7*
P3704	P3000	3 *76.2*	20 *9.1*
P4703	P4000	2⅜ *60.3*	27 *12.2*

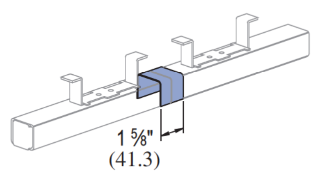
Note: End cap anchor for use with 1⅝" wide standard Unistrut inserts only.

P2407, P3280, P3380 — End Caps EG



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 1⅝" 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 *(kN)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs *(kN)*
P3249	3 *76.2*	85 *38.6*	3 *76.2*	500 *2.22*	–	500 *2.22*
P3349		68 *30.8*	3 *76.2*	400 *1.78*	–	400 *1.78*
P3250	4 *101.6*	100 *45.4*	4 *101.6*	800 *3.56*	–	800 *3.56*
P3350		81 *36.7*	4 *101.6*	500 *2.22*	–	500 *2.22*
P3251	6 *152.4*	130 *59.0*	6 *152.4*	1,000 *4.45*	–	1,000 *4.45*
P3351		102 *46.3*	6 *152.4*	750 *3.34*	–	750 *3.34*
P3252	8 *203.2*	159 *72.1*	8 *203.2*	1,200 *5.34*	–	1,200 *5.34*
P3352		122 *55.3*	8 *203.2*	1,000 *4.45*	–	1,000 *4.45*
P3754	12 *304.8*	210 *95.3*	8 *203.2*	2,500 *11.12*	3 *76.2*	5,000 *22.24*
P3253		227 *103.0*	4 *101.6*	2,000 *8.90*	–	2,000 *8.90*
P3353		174 *78.9*	4 *101.6*	1,500 *6.67*	–	1,500 *6.67*
P3254	16 *406.4*	270 *122.5*	4 *101.6*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3354		185 *83.9*	4 *101.6*	1,500 *6.67*	12 *304.8*	3,000 *13.34*
P3255	20 *508.0*	357 *161.9*	4 *101.6*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3355		231 *104.8*	4 *101.6*	1,500 *6.67*	12 *304.8*	3,000 *13.34*
P3256	24 *609.6*	399 *181.0*	4 *101.6*	2,000 *8.90*	12 *304.8*	4,000 *17.79*
P3356		277 *125.6*	4 *101.6*	1,500 *6.67*	12 *304.8*	3,000 *13.34*

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 *(kN)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs/Ft *(kg/m)*
P3270	194 *88.0*	4 *101.6*	2,000 *8.90*	12 *304.8*	2,000 *2,976.3*
P3370	139 *63.0*	4 *101.6*	1,500 *6.67*	12 *304.8*	1,500 *2,232.2*
P3170*	165 *74.8*	8 *203.2*	1,000 *4.45*	12 *304.8*	1,000 *1,488.2*

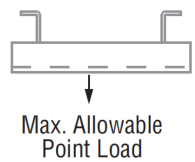
*When used in prestressed concrete "T" Beam.

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 *(kN)*	Min. Spacing Between Pt. Loads In *(mm)*	Max. Allowable Uniform Load Lbs/Ft *(kg/m)*
M26/M2812	54 *24.5*	–	1,500 *6.67*	–	1,500 *2,232*
M3245	52 *23.6*	–	1,000 *4.45*	–	1,000 *1,488*
M24/M2512	52 *23.6*	–	800 *3.56*	–	800 *1,190*

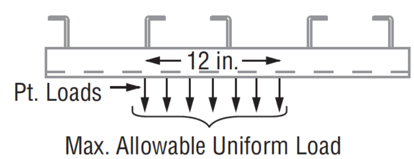
Maximum Allowable Point Load



The maximum allowable point load may be placed anywhere along the insert.

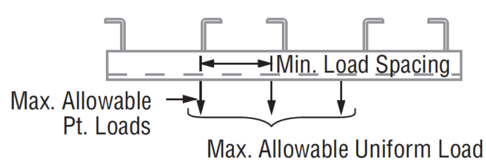
All loads placed less than 2" from the end of an insert must be reduced by 50%.

Maximum Allowable Uniform Load



The maximum allowable uniform load must be placed as a series of point loads.

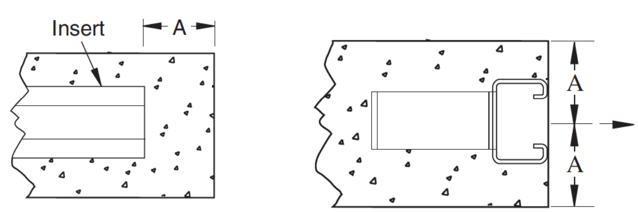
Spacing of Multiple Point Loads



Pull-Out Load

Minimum Edge Distance to Achieve Rated Pull-Out Capacity

1⅞" (47.6mm); P3170
A = 3" (76.2mm); all others



SOLAR COMPONENTS

Unistrut® represents a line of steel, aluminum, and fiberglass strut and accessories used extensively in electrical infrastructure support.

Unistrut is available in a range of corrosion inhibiting finishes making it a prime choice in today's marketplace. The Unistrut system is infinitely adjustable for a multitude of configurations and uses.

The solar components shown in this section allow you to shape an effective solution for mounting solar panels that fits your exact needs.

MATERIAL

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

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:

Green Powder Coat (GR), conforming to commercial standards for Powder Coating,

Electro-galvanized (EG), conforming to ASTM B633 Type III SC1;

Hot-dipped Galvanized (HG), conforming to ASTM A123 or A153

Plain (PL).

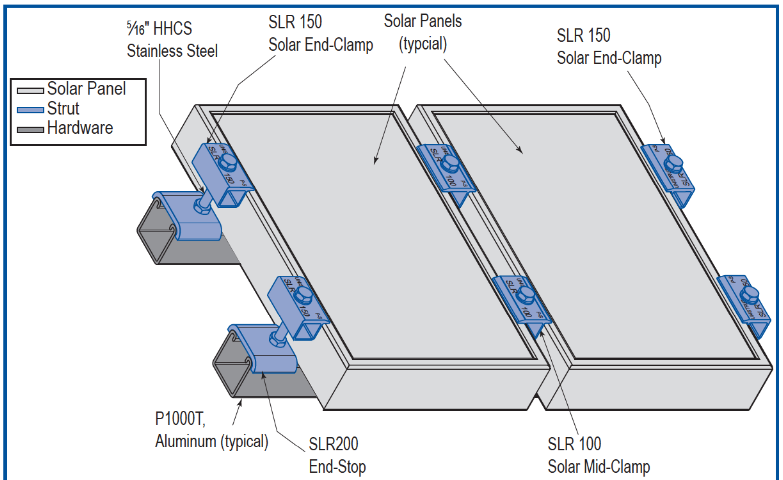
DIMENSIONS

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.

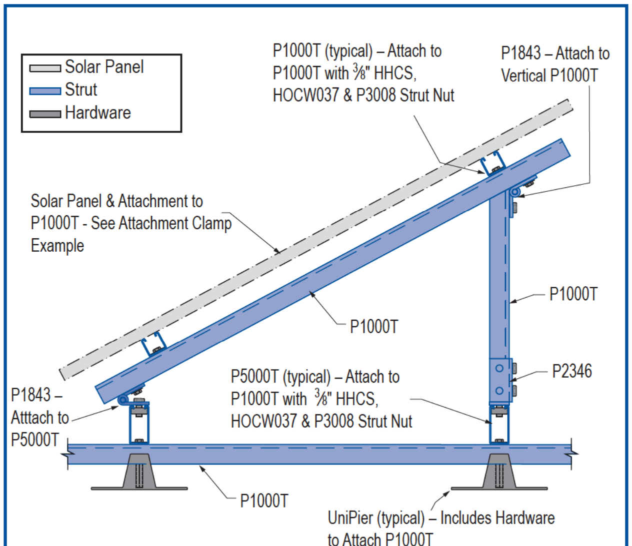
DESIGN BOLT TORQUE

BOLT SIZE	¼"-20	5/16"-18	⅜"-16	½"-13	⅝"-11	¾"-10
Rec.Torque Ft/Lbs *(N•m)*	6 *(8)*	11 *(15)*	19 *(26)*	50 *(68)*	100 *(136)*	125 *(170)*
Max Torque Ft/Lbs *(N•m)*	7 *(9)*	15 *(20)*	25 *(34)*	70 *(95)*	125 *(170)*	135 *(183)*

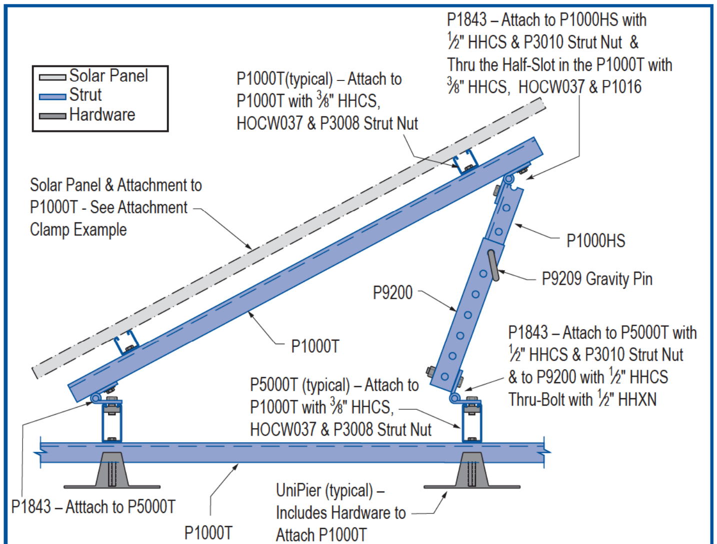
Typical Solar Installation



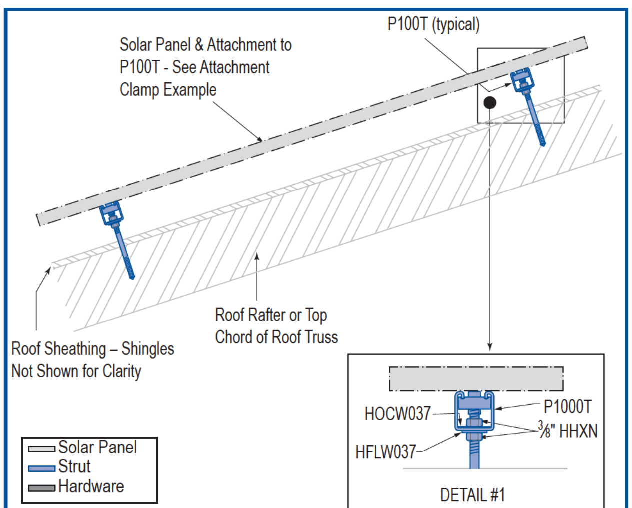
Unistrut® SLR 100 (Mid-Clamp); SLR 150 (End-Clamp) Solar Panel Clamps



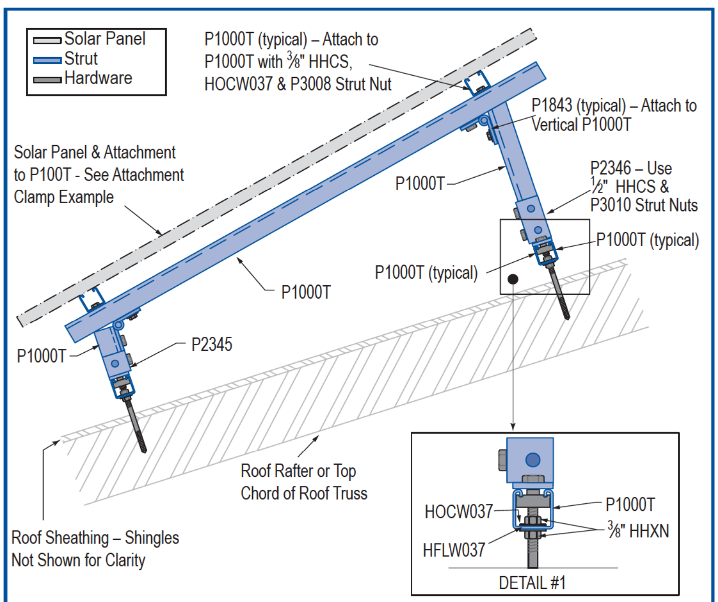
Solar Panel Support Frame Flat Roof with Fixed Angle



Solar Panel Support Frame Flat Roof with Variable Angle

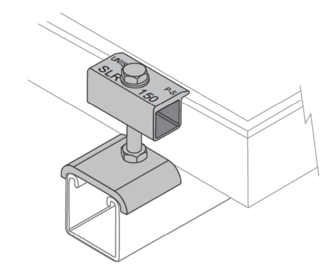


Solar Panel Support Frame Residential Roof, Parallel to Roof Slope



Solar Panel Support Frame Residential Shingle, Angled From Roof Slope

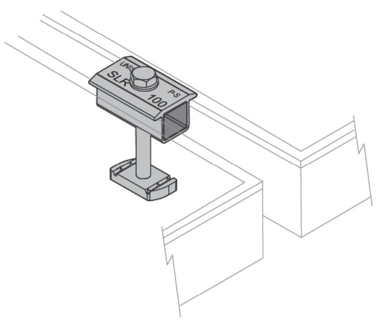
SLR200 – Solar End Clamp



- $\frac{5}{16}$" x $2\frac{3}{4}$" hex head cap screw; stainless steel nut; lock washer included
- End-clamp design for use with strut based racking system
- Patent-pending end-stop feature allows use with vertical strut
- Meets uplift loads of 350 lbs.

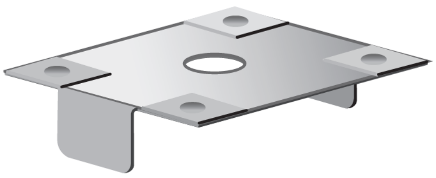
***Patent-pending**

SLR100 – Solar Mid-Clamp



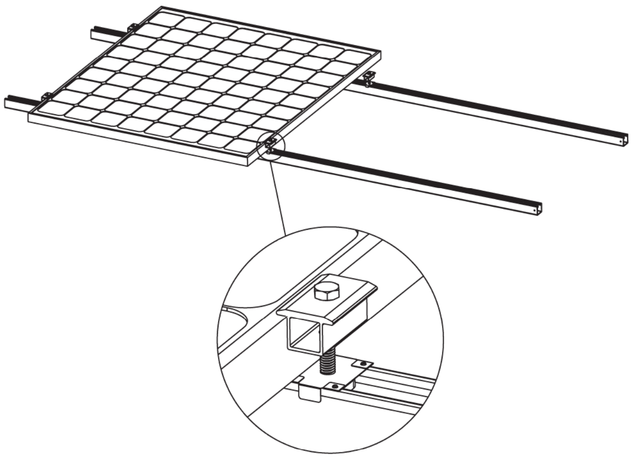
- $\frac{5}{16}$" x $2\frac{3}{4}$" hex head cap screw; stainless steel nut; lock washer included
- Mid-clamp design for use with strut based racking system
- Provides .8"(21 mm) panel spacing
- Meets spacing requirements of WEEB-WMC
- Meets uplift loads of 350 lbs.

WEEB - WMC – Electrical Equipment Bonding Washer



•Patented design features stainless steel teeth that pierce into anodized aluminum, providing a gas tight connection which prevents oxidation

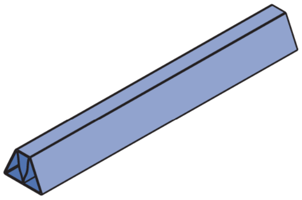
- Meets ANSI/UL467 requirements for bonding/grounding systems
- Quick installation that is safe, reliable and consistent

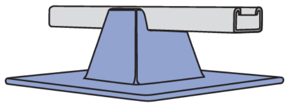


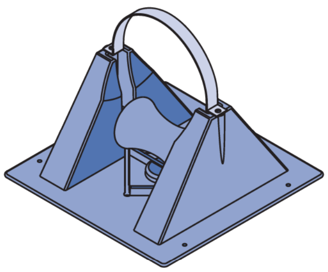
1 5/8" Channel
Telestrut
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
Solar
Unipier®

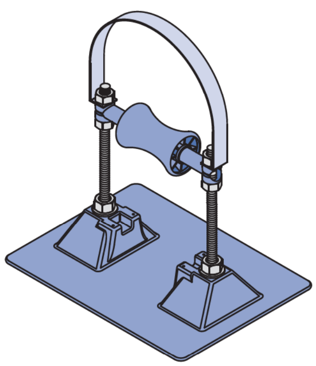
Key Advantages

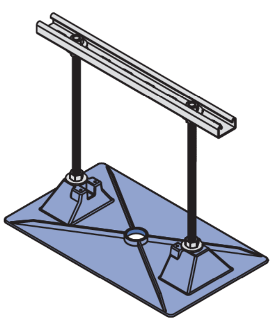
- The market's only specific panel mounting components made exclusively for use with Unistrut.
- Simple design used by the industry for a variety of installation methods and applications.
- Stainless steel hardware included with all solar clamps.
- Available in Black or Silver Anodized (Material AA-6063-T6) for corrosion protection and sleek appearance.
- Best fit with Unistrut channel to create less penetration, and superior slip resistance.
- Designed for maximum loads up to 90 miles per hour.
- Available and supported by Unistrut's national network of distributors.





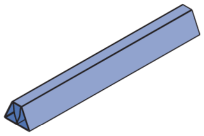






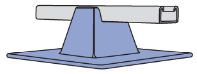
UNIpier®
ROOFTOP PIPE SUPPORT SYSTEM

Sleeper Support

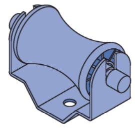


Rooftop Sleeper Support
Pg 153 - 154

Strut Support

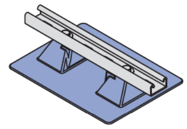


**Model UP
Strut Support**
Pg 155

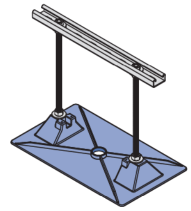


**M-RBS Roller for
Model UP
Strut Support**
Pg 155

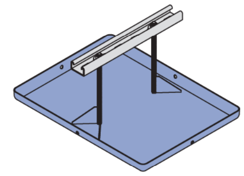
Conduit Support



**Mounted
Polycarbonate Base**
Pg 157

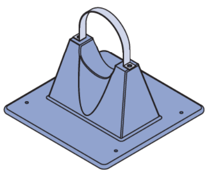


**Elevated Support
Polycarbonate Base**
Pg 157

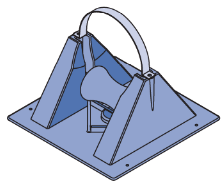


**Elevated Support
Steel Base**
Pg 158

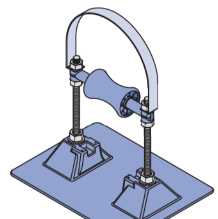
Gas and Mechanical Support



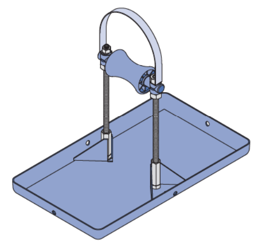
**Mounted
Polycarbonate Base**
Pg 158



**Mounted, w/Roller
Polycarbonate Base**
Pg 158

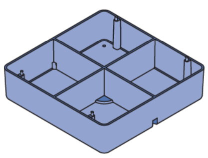


**Elevated Support, w/Roller
Polycarbonate Base**
Pg 159

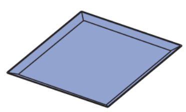


**Elevated Support, w/Roller
Steel Base**
Pg 160

Accessories

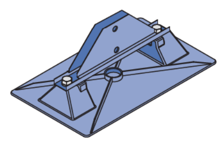


Spacer for Model 1.5, 3-R
Pg 160

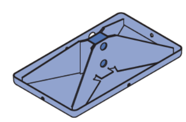


**Support Pads &
Deck Plates**
Pg 160

Pipe Hanger Bases

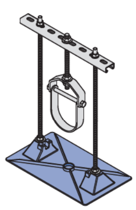


Polycarbonate Bases
Pg 161

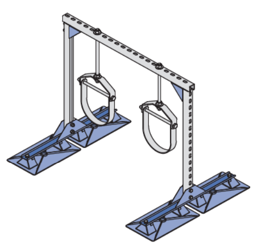


Steel Bases
Pg 161

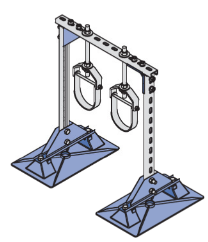
Fabricated Supports



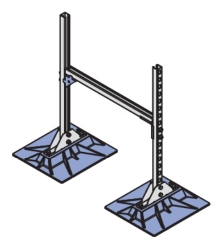
Single Base Trapeze
Pg 162



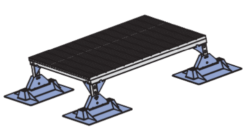
Double Base Trapeze
Pg 163



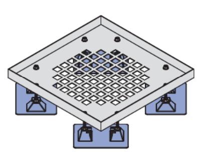
Heavy Duty, Double Base Trapeze
Pg 163



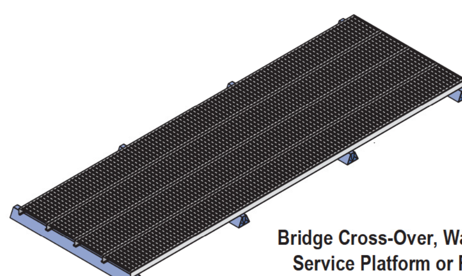
Double Base Duct Support
Pg 163



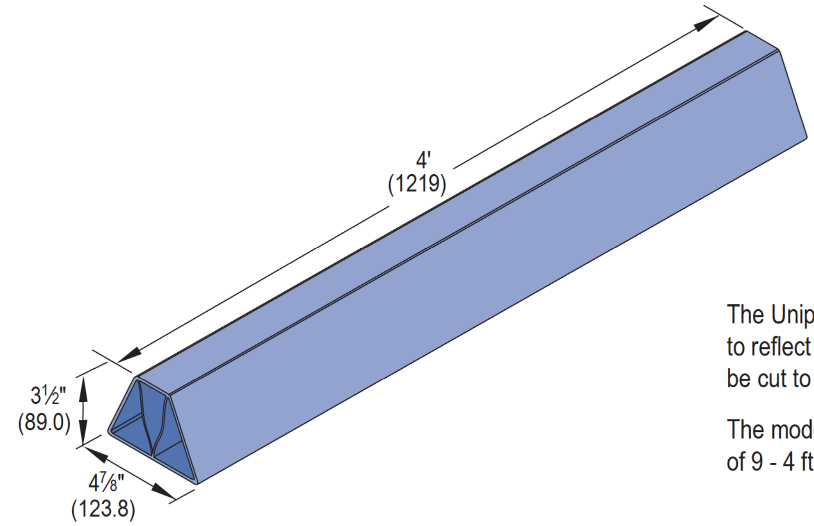
Heavy Duty Mechanical Support
Pg 164



Light Duty Mechanical Support
Pg 164



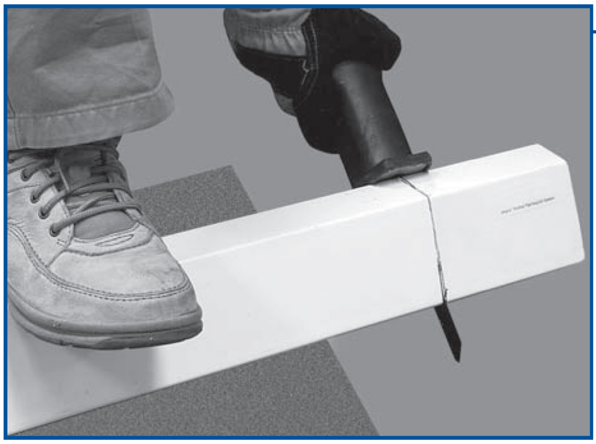
**Bridge Cross-Over, Walkway,
Service Platform or Ramp**
Pg 164



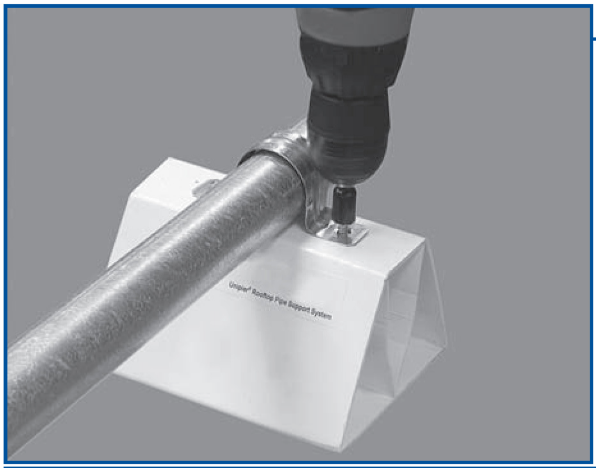
The Unipier rooftop sleeper is the first rooftop support that is white to reflect the sun's UV rays. It is cost-effective, lightweight and can be cut to the desired length while on the job site.

The model RSS4 is conveniently packaged in shrink wrap bundles of 9 - 4 ft. supports that can be easily carried to the rooftop.

The Unipier sleeper support is lightweight, just 4 lbs./4 ft. section, so it is easily transported to the job site in bundles of 9 supports.



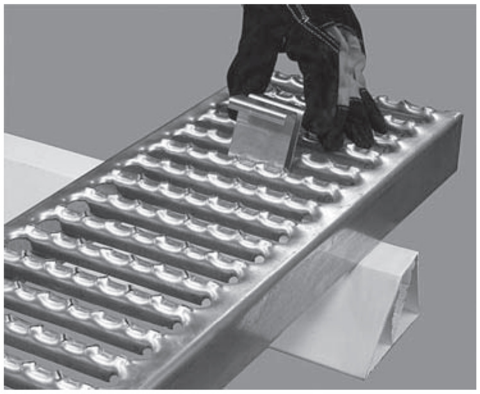
The Unipier sleeper support can be conveniently cut to lengths of 6" or longer right on the job site.



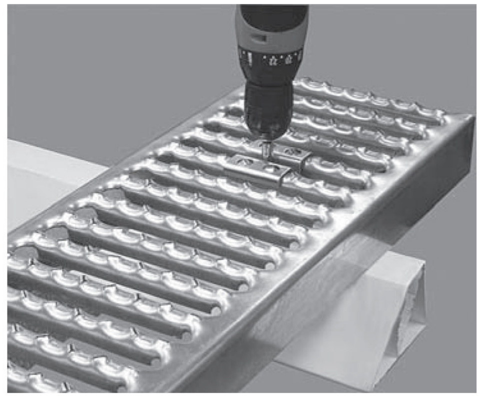
TEK screws or other self tapping fasteners are used to attach conduit supports, pipe clamps or other clamping fittings.

NOTE: Load not to exceed 50 lbs./6" length
Part Number: RSS4

The Sleeper Support is not restricted to just pipe clamps. It makes a perfect companion for the Roofwalk® Rooftop Walkways.

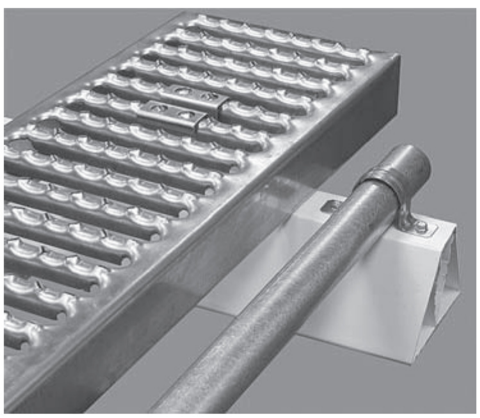


Position the grating on the Unipier sleeper support and insert the appropriate size hold down clip (G639, G607, or G620).

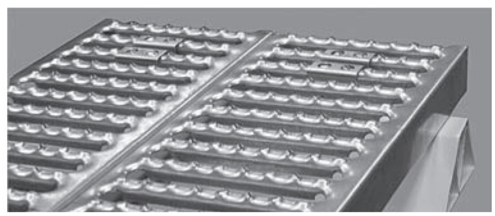


Use a TEK screw to attach the hold down clip.

That's all that is required!



You can even use the Unipier support for multiple tasks. Here we have Unistrut Roofwalks® Rooftop Walkways and a piece of electrical conduit attached to the sleeper.



Grating can also be used to construct a platform for heavy equipment or even as a workstand.

UP-SPSS Style Support

- Align Center hole of P4100T on base.
- Place square washer inside P4100T.
- Insert screw & torque to 19 ft./lbs.

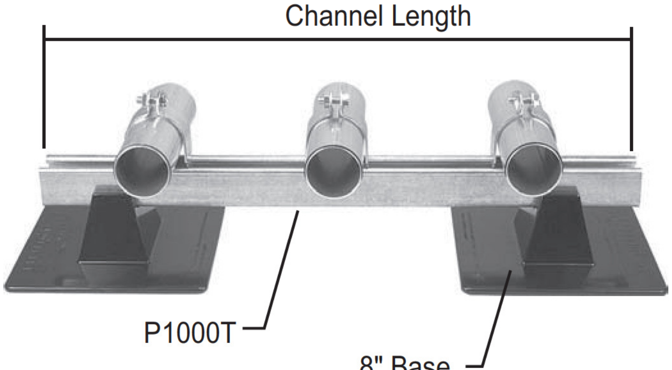
Part Number	Qty. Unipier Bases	Supporting Channel	
		Qty.	Description
UP-BK	4	0	Base Only
UP-SPSS-6 HG	4	4	6" - P4100T HG (up to 3½" Pipe)
UP-SPSS-10HG	4	4	10" - P4100T HG (4" to 8" Pipe)

NOTE:
1. The maximum uniform load on P1000T is 400 lbs.
2. Uniform load is limited by roof base allowed load of 200 lbs. (5 psi on roof).

Single Pier Installation

1. Align center hole of Unistrut P4100T on base and attach using supplied hardware. Torque screw to 19 ft./lbs.
2. Place pipe/tubing on P4100T and attach pipe/tubing clamp.

UP-MPDS Style Support



Trapeze Installation

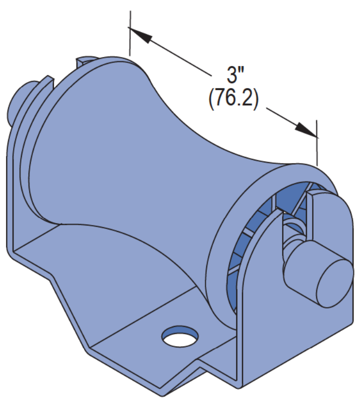
1. Align end holes of Unistrut P1000T on bases and attach using supplied hardware. Torque screw to 19 ft./lbs.
2. Place pipe/tubing on support and attach with appropriate pipe/tubing clamp.

Part Number	Qty. Unipier Bases	Supporting Channel	
		Qty.	Description
UP-MPDS-26HG	4	2	26" - P1000T HG for Trapeze
UP-MPDS-38HG	4	2	38" - P1000T HG for Trapeze
UP-MPDS-50HG	4	2	50" - P1000T HG for Trapeze
UP-MPDS-62HG	4	2	62" - P1000T HG for Trapeze

NOTE:
1. The maximum uniform load on P1000T is 400 lbs.
2. Uniform load is limited by roof base allowed load of 200 lbs. (5 psi on roof).

NOTE: Kits do not include pipe/tubing or clamps.

M-RBS



The M-RBS roller is designed for use with the UP-BK base. The roller is made of polycarbonate and the roller rod is 6/6 nylon.

Note: Maximum load is 100 lbs. and should not extend more than 12" above the roof.
Wt./Ea.: 0.7 lbs.

Support Spacing

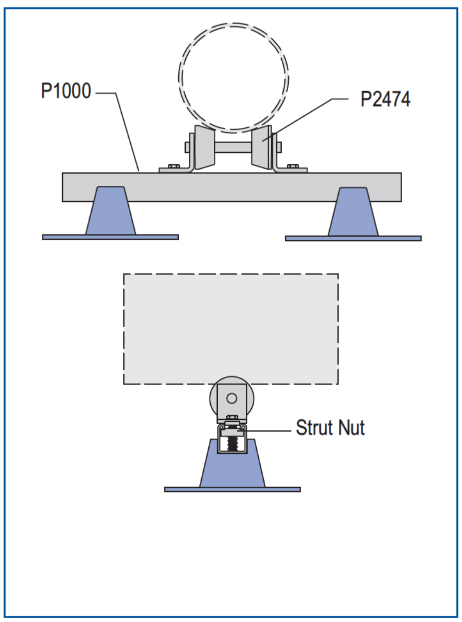
Pipe Size (Nom.)	Support Spacing: Sch. 40 Pipe Water-Filled[a] – Single Pier	Sch. 40 Pipe Water-Filled[a] – Trapeze[d]	Conduit GRC[b] – Single Pier	Conduit GRC[b] – Trapeze[d]
3⁄8"	7'	7'	N/A	N/A
½"	7'	7'	10'	10'
¾"	7'	7'	10'	10'
1"	7'	7'	12'	12'
1¼"	7'	7'	14'	14'
1½"	9'	9'	14'	14'
2"	10'	10'	16'	16'

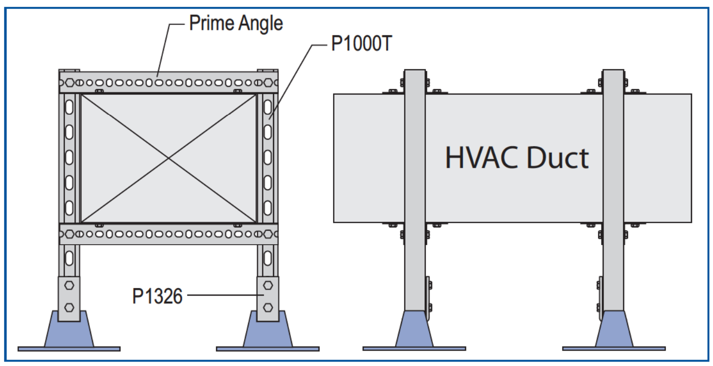
Pipe Size (Nom.)	Support Spacing: Sch. 40 Pipe Water-Filled[a] – Single Pier	Sch. 40 Pipe Water-Filled[a] – Trapeze[d]	Conduit GRC[b] – Single Pier	Conduit GRC[b] – Trapeze[d]
2½"	11'	11'	16'	16'
3"	12'	12'	13'[c]	20'
3½"	13'	13'	11'[c]	20'
4"	12'[c]	14'	9'[c]	20'
5"	8'[c]	16'	6'[c]	20'
6"	6'[c]	17'	4'[c]	20'
8"	4'[c]	19'	N/A	N/A

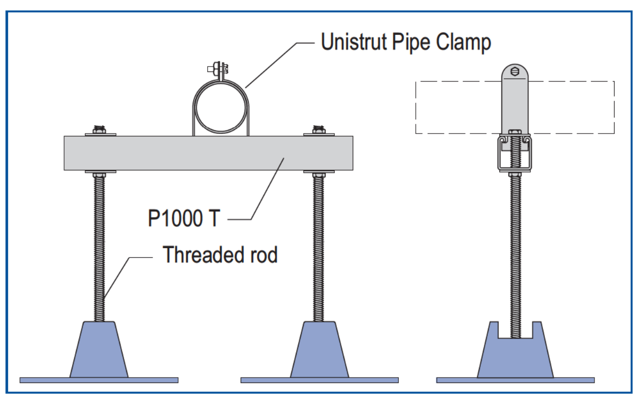
Note:
(a) Based on ANSI/MSS SP-69, 2003 Edition, Table 3.
(b) Based on 2002 NEC, Table 344.30(B)(2).
(c) Spacing limited to roof base allowed load of 200 lbs. (5 psi on roof).
(d) Spacing may be limited by maximum allowed weight on trapeze to 400 lbs.

Application Examples

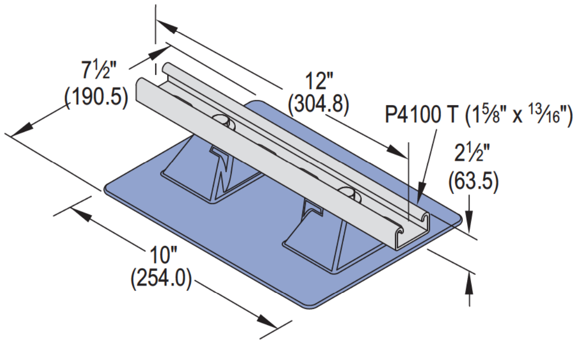
Unipier Rooftop Support System provides a simple and versatile way to support and manage pipe, tubing, conduit, HVAC systems, and the like. The Unipier Rooftop Support System does not require roof surface penetration and allows the parts to remain off the surface.

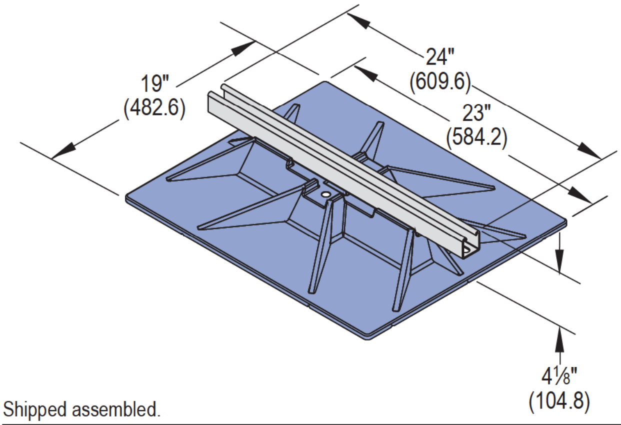






Mounted Support, Polycarbonate Base





Shipped assembled.

Part Number	Material	Max. Uniform Load	Wt./Each
2.5-CS-2	Polycarbonate	100 lbs.	2.3 lbs.
24-BS-4	Polycarbonate	640 lbs.	8.0 lbs.

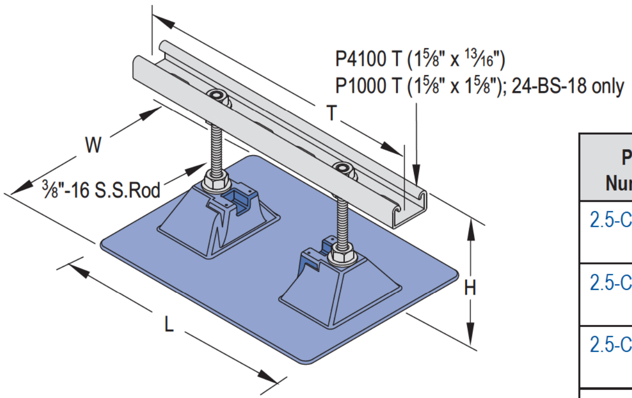
Determining Maximum Pipe Size

Maximum pipe size supported by any of the strut supports is determined by the load and the clear space required between the pipes. The spacing between pipes should be as follows:

- 1" between piping 3" and smaller.
- 1-½" between a pipe 3" and smaller and a pipe 4" or larger.
- 2" between piping 4" and larger.
- At least 1" between pipe clamp and end of strut

For example, a support for two 3" pipes would require:
1" + 3" + 1-½" + 3" + 1" = 9-½" wide channel support

Elevated Support, Polycarbonate Base



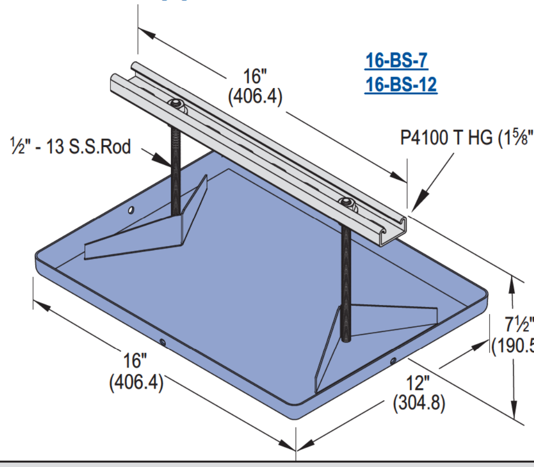
Note: Base for 2.5-CS-5, 2.5-CS-7 shown. Other bases have additional support or flanges to handle the increased loads.

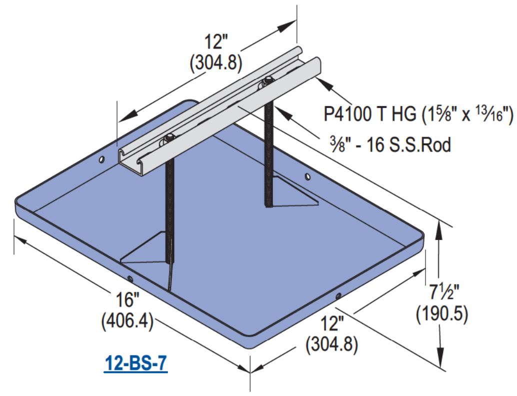
All bases are polycarbonate material

Shipped assembled.

Part Number	"H" (max) in. (mm)	"W" in. (mm)	"L" in. (mm)	"T" in. (mm)	Max. Uniform Load	Wt./Each (lbs.)
2.5-CS-5	5" *(127.0)*	7 ½" *(190.5)*	10" *(254.0)*	12" *(304.8)*	100 lbs.	2.1
2.5-CS-7	7 ½" *(190.5)*	7 ½" *(190.5)*	10" *(254.0)*	12" *(304.8)*	100 lbs.	2.5
2.5-CS-12	12" *(304.8)*	9" *(228.6)*	15 ¼" *(387.4)*	12" *(304.8)*	100 lbs.	4.0
16-BS-7	7" *(177.8)*	9" *(228.6)*	15 ¼" *(387.4)*	16" *(406.4)*	125 lbs.	5.0
16-BS-12	12" *(304.8)*	9" *(228.6)*	15 ¼" *(387.4)*	16" *(406.4)*	125 lbs.	8.0
20-BS-7	7" *(177.8)*	16" *(406.4)*	18" *(457.2)*	20" *(508.0)*	440 lbs.	10.8
20-BS-12	12" *(304.8)*	16" *(406.4)*	18" *(457.2)*	20" *(508.0)*	440 lbs.	15.1
24-BS-18	12" *(304.8)*	23" *(584.2)*	19" *(482.6)*	24" *(609.6)*	640 lbs.	8.0

Elevated Support, Steel Base





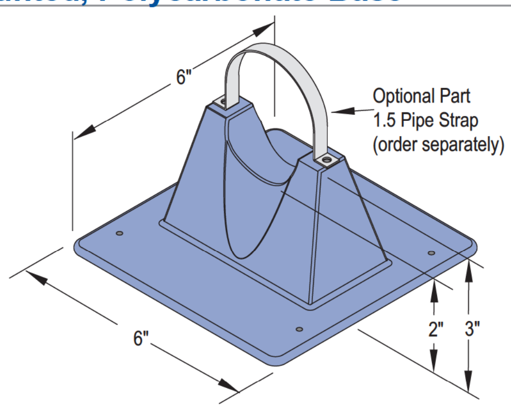
Shipped assembled.

Part Number	Base Material	Max. Uniform Load	Wt./Each
16-BS-7 HG	Hot-Dipped Galvanized	150 lbs.	7.5 lbs.
16-BS-7 SS	Stainless Steel	150 lbs.	7.5 lbs.

Part Number	Base Material	Max. Uniform Load	Wt./Each
12-BS-7 HG	Hot-Dipped Galvanized	150 lbs.	7.5 lbs.
12-BS-7 SS	Stainless Steel	150 lbs.	7.5 lbs.

Unipier® Rooftop Pipe Support System - Gas & Mechanical Support

Mounted, Polycarbonate Base



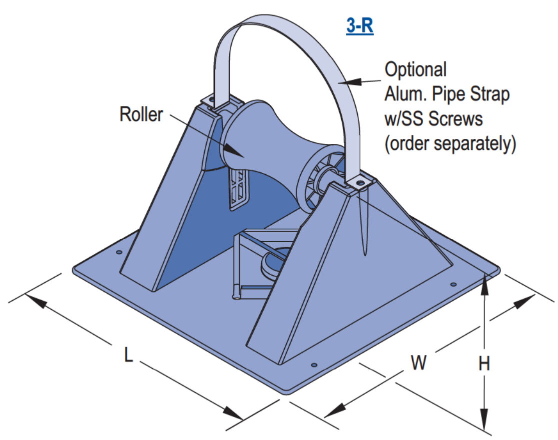
Part Number	Max. Pipe Capacity	Max. Uniform Load	Wt./Ea.	Optional Pipe Strap
1.5 Pipe Support	1½" ID , 1.9" OD	80 lbs.	0.35 lbs.	1.5 Pipe Strap

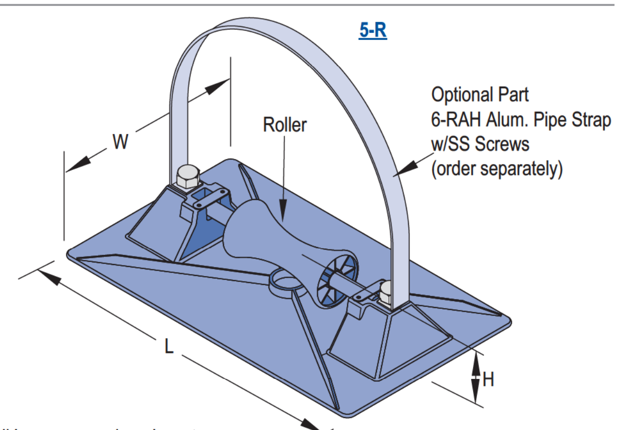
Note: Base is polycarbonate

Optional pipe strap aluminum w/SS Screws

Shipped assembled.

Mounted, with Roller, Polycarbonate Base

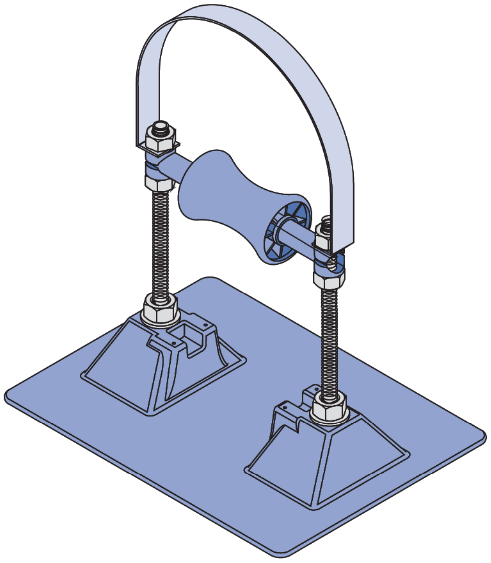


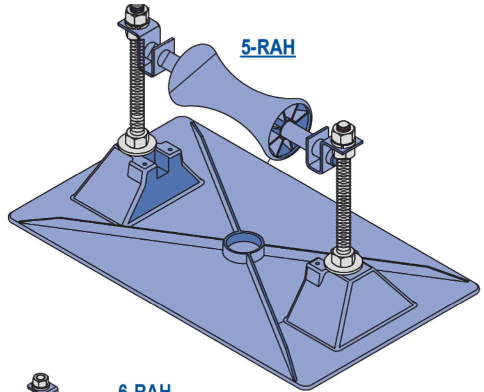


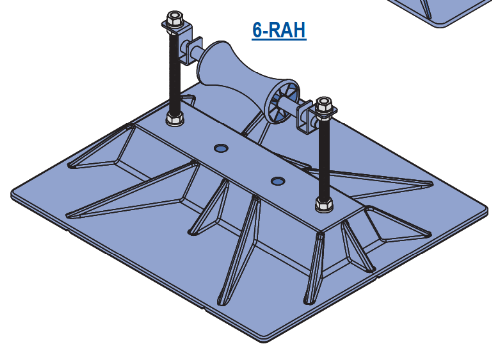
Note: All bases are polycarbonate

Part Number	"H" in. (mm)	"W" in. (mm)	"L" in. (mm)	Roller size	Max. Pipe Capacity	Max. Uniform Load	Wt./Ea. Lbs.	Optional Pipe Strap
3-R-2	2.15" *(54.6)*	7 ¾" *(196.9)*	7 ¾" *(196.9)*	3" *(76.2)*	3" ID 3 ¾" OD	100 lbs.	1.1 lbs.	3-R-2 Pipe Strap
3-R-4	4" *(101.6)*	7 ¾" *(196.9)*	7 ¾" *(196.9)*	3" *(76.2)*	3" ID 3 ¾" OD	100 lbs.	1.2 lbs.	3-R-4 Pipe Strap
5-R	2.35" *(59.7)*	9" *(228.6)*	15 ¼" *(387.4)*	5" *(127.0)*	5" ID 6" OD	150 lbs.	2.4 lbs.	6-RAH Pipe Strap

Elevated Support, with Roller, Polycarbonate Base





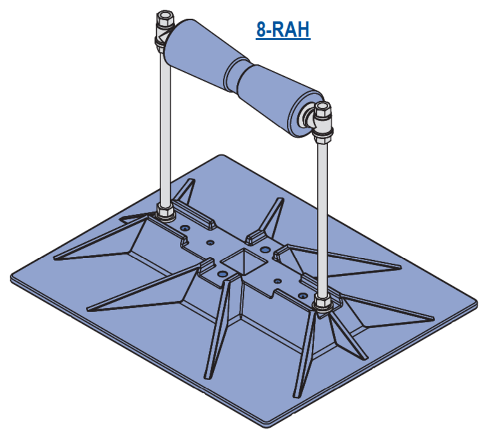


Note: Base for 3-RAH-7 shown. Other bases have additional support or flanges to handle the increased loads.

All bases are polycarbonate material

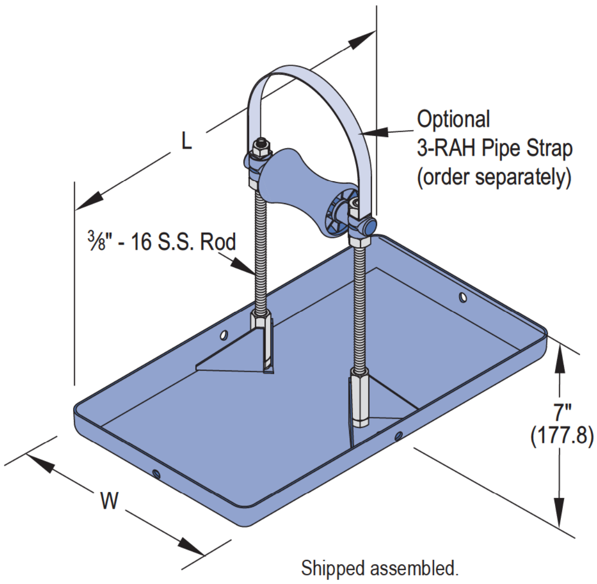
Optional pipe strap aluminum w/SS Screws

Shipped assembled.



Part Number	"H " (max) in. (mm)	"W" in. (mm)	"L" in. (mm)	Roller Size in. (mm)	Max. Pipe Capacity	Max. Uniform Load	Wt./Ea. Lbs.	Optional Pipe Strap
3-RAH-7	7" *(177.8)*	7 ½" *(190.5)*	10" *(254.0)*	3" *(76.2)*	3" ID 3¾" OD	100 lbs.	1.9	3-RAH Pipe Strap
3-RAH-12	12" *(304.8)*	9" *(228.6)*	15 ¼" *(387.4)*	3" *(76.2)*	3" ID 3¾" OD	100 lbs.	5.8	3-RAH Pipe Strap
5-RAH-7	7" *(177.8)*	9" *(228.6)*	15 ¼" *(387.4)*	5" *(127.0)*	5" ID 6" OD	150 lbs.	4.8	6-RAH Pipe Strap
5-RAH-12	12" *(304.8)*	9" *(228.6)*	15 ¼" *(387.4)*	5" *(127.0)*	5" ID 6" OD	150 lbs.	4.8	6-RAH Pipe Strap
6-RAH-7	7 ½" *(190.5)*	16" *(406.4)*	18" *(457.2)*	5" *(127.0)*	6" ID 8 ½" OD	250 lbs.	8.8	6-RAH Pipe Strap
6-RAH-12	12" *(304.8)*	16" *(406.4)*	18" *(457.2)*	5" *(127.0)*	6" ID, 8 ½" OD	250 lbs.	9.8	6-RAH Pipe Strap
8-RAH-18	18" *(457.2)*	19" *(482.6)*	23" *(584.2)*	12" *(304.8)*	6" ID, 8 ½" OD	640 lbs.	20.0	8-RAH Pipe Strap

Elevated Support, with Roller, Steel Base



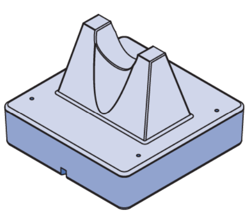
Shipped assembled.

Part Number	"W" in. (mm)	"L" in. (mm)	Roller in. (mm)	Material	Max. Pipe Capacity	Max. Uniform Load	Wt. Each Lbs
3-RAH-7 HG	8" *(203.2)*	14" *(355.6)*	3" *(76.2)*	Hot-Dipped Galvanized	3" ID 3¾" OD	100 lbs.	3.3
3-RAH-7 SS	8" *(203.2)*	14" *(355.6)*	3" *(76.2)*	Stainless Steel	3" ID 3¾" OD	100 lbs.	3.3
4-RAH-7 HG	12.07" *(306.6)*	16.07" *(408.2)*	5" *(127.0)*	Hot-Dipped Galvanized	4" ID 5" OD	150 lbs.	6.8
4-RAH-7 SS	12.07" *(306.6)*	16.07" *(408.2)*	5" *(127.0)*	Stainless Steel	4" ID 5" OD	150 lbs.	5.8

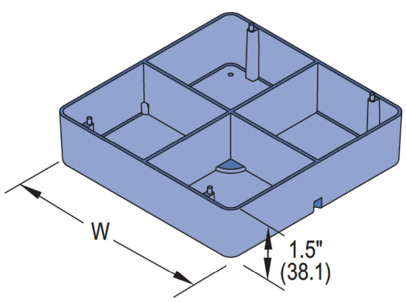
Note: Optional 3-RAH Pipe Strap aluminum w/SS Screws

Unipier® Rooftop Pipe Support System - Accessories

Spacer for Model 1.5 and Model 3-R



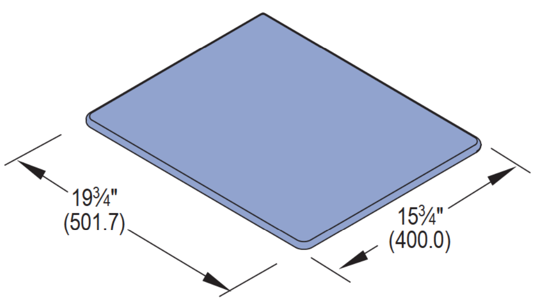
Example: Spacer with Model 1.5



Part Number	Use With	"W"	Added Pipe Clearance	Wt./Ea.
1.5 Spacer	1.5	6"	1 ½"	0.43 lbs
3-R Spacer	3-R-2 or 3-R-4	7-½"	2"	0.75 lbs

Material: Polycarbonate

Support Pad, Polycarbonate



The Unipier support pad is designed to provide a barrier between the roof membrane and rooftop equipment. The support pad is 1/8" thick and are compatible with all current types of decking and commonly used built-up and single-ply roof membranes.

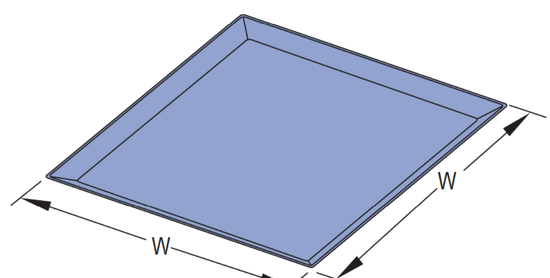
Support pads should be installed in the following areas:

- Under all Unipier pipe supports. The pipe support must be placed evenly over the support pad.
- In high traffic points or where regular maintenance is necessary to service rooftop equipment.

When installing the support pad, remove all rock, aggregate, dirt and excess dust from an area of the roof membrane slightly larger than the support pad. Then, apply the support pad on the cleaned area and center the Unipier pipe support on the rooftop pad.

The maximum roof top load should not exceed 5 p.s.i. The rooftop pad can withstand higher loading, but the roof membrane and insulation are typically limited to 5 p.s.i.

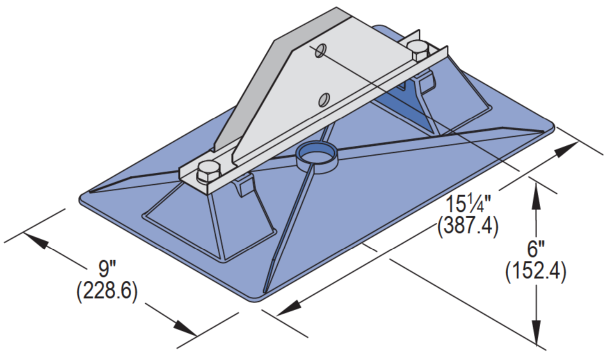
Deck Plate, Stainless Steel



Part Number	Material	Width "W"	Wt./Each
Deck Plates 12 SS	Stainless Steel	12"	2.0 lbs.
Deck Plates 18 SS	Stainless Steel	18"	4.5 lbs.

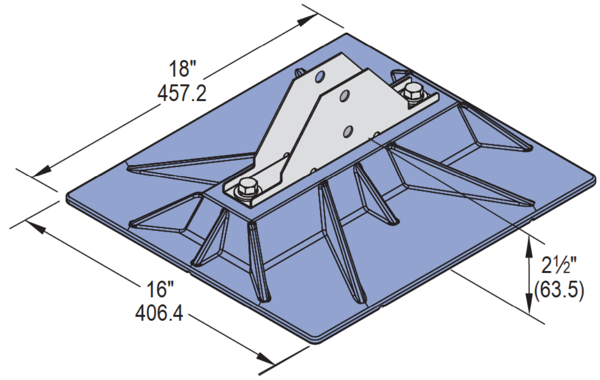
Polycarbonate Base

Model 6-H Base P



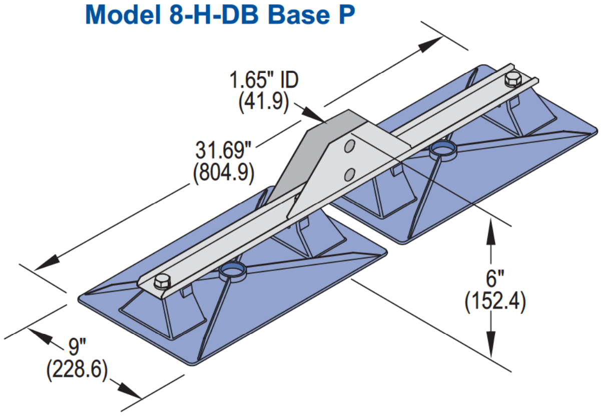
Note: Maximum 150 lbs. Load
Wt./Ea.: 2.5 lbs.

Model 8-H-SB Base P



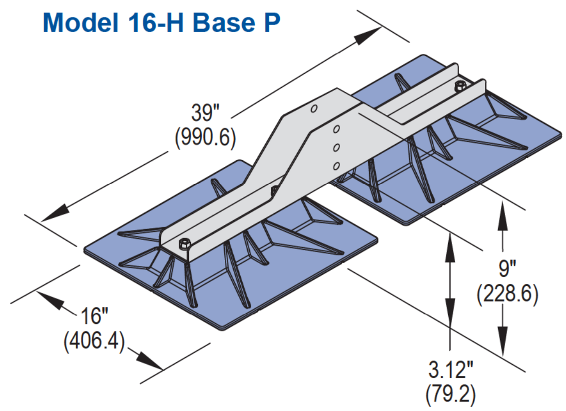
Note: Maximum 350 lbs. Load
Wt./Ea.: 5.5 lbs.
Note: Contact Unistrut for optional configuration to allow for adjustability.

Model 8-H-DB Base P



Note: Maximum 350 lbs. Load
Wt./Ea.: 4.5 lbs.

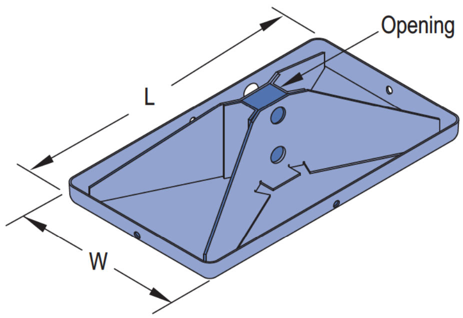
Model 16-H Base P



Note: Maximum 350 lbs. Load
Wt./Ea.:18.5 lbs.

Stainless Steel / Hot Dip Galvanized Steel Base

Model 6-H, 8-H, 16-H Base HG or S.S.



Part Number	"W"	"L"	"Opening"
6-H Base HG	8" *(203.2mm)*	14" *(355.6mm)*	1-5/8" x 7/8" *(41.3 x 22.2)*
6-H Base SS	8" *(203.2mm)*	14" *(355.6mm)*	1-5/8" x 7/8" *(41.3 x 22.2)*
8-H Base HG	16" *(406.4mm)*	12" *(304.8mm)*	1-5/8" x 1-5/8" *(41.3 x 41.3)*
8-H Base SS	16" *(406.4mm)*	12" *(304.8mm)*	1-5/8" x 1-5/8" *(41.3 x 41.3)*
16-H Base HG	20" *(508.0mm)*	20" *(508.0mm)*	3" x 3" *(76.2 x 76.2)*
16-H Base SS	20" *(508.0mm)*	20" *(508.0mm)*	3" x 3" *(76.2 x 76.2)*

Custom Fabrication

The Unipier products offer a great deal of flexibility. If you do not find an "off-the-shelf" support for your particular application, contact Unistrut with your requirements. We can design and build the proper support for your unique application.

Samples of typical custom fabrications are shown in this section of the catalog.

Custom products are shown on the following pages. For a quotation on custom fabrication, contact Unistrut with the parameters for your design as shown below.

Pipe Stands

1. Quantity of supports required (or total footage of pipe)
2. Type of pipe
3. Size of pipe and number of pipes per support
4. Pipe contents
5. Clearance height above roof
6. Thickness of any insulation around pipe

Duct and Cable Tray Supports

1. Dimension of duct
2. Clearance height above roof
3. Total footage of duct
4. Thickness of insulation, if any

Unistrut Roofwalks® Rooftop Walkways, Crossover, Ramp and Platforms

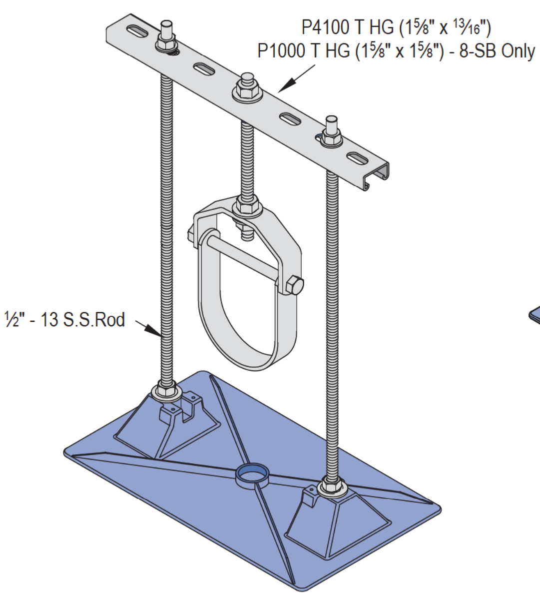
1. Width and length desired
2. Height off roof
3. Specify if railing is needed
4. Type of roof

Mechanical Supports

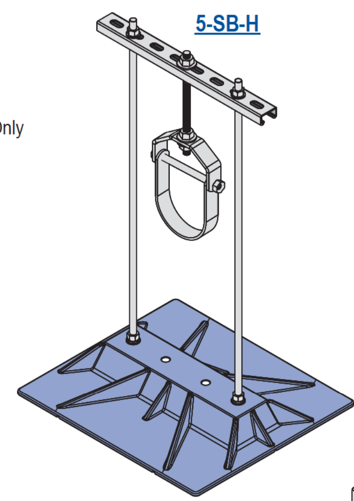
1. Width and length desired
2. Height off roof
3. Weight of unit

Single Base Trapeze

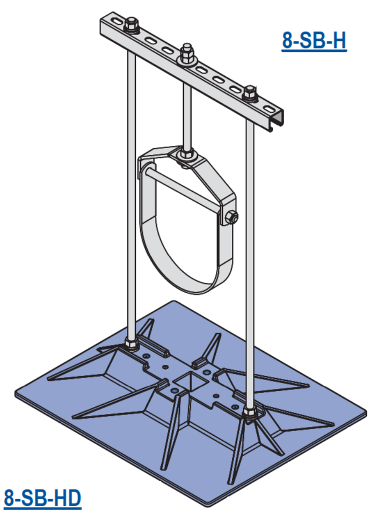
2.5-SB-H



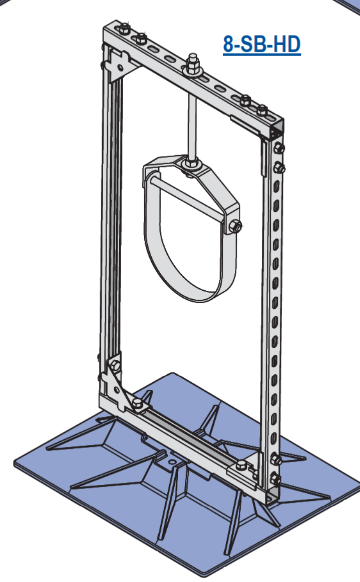
5-SB-H



8-SB-H



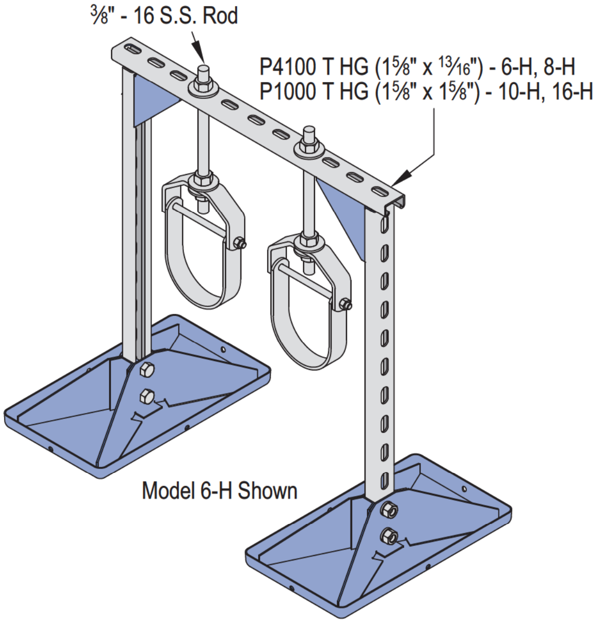
8-SB-HD



Model	Material	Max. Uniform Load Per Pipe Stand
2.5-SB-H (shown)	Polycarbonate	125 lbs.
5-SB-H	Polycarbonate	250 lbs.
5-SB-H HG	Hot-Dipped Galvanized	170 lbs.
8-SB-H	Polycarbonate	296 lbs.
8-SB-HD	Polycarbonate	640 lbs.

NOTE: For maximum pipe size, refer to note on page 163.

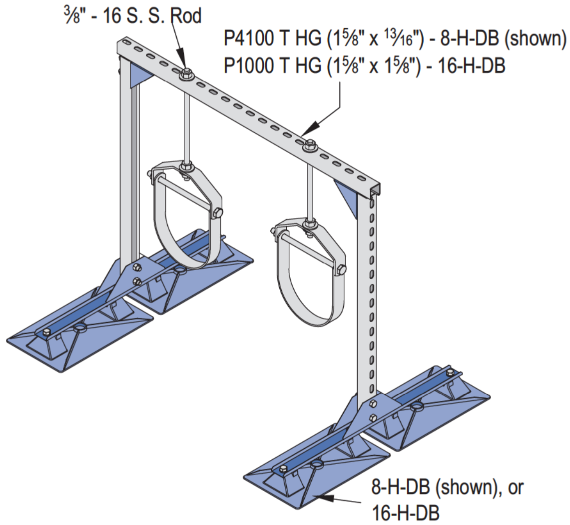
Double Base Trapeze



Model 6-H Shown

Model	Material	Max. Uniform Load Per Pipe Stand	Max. Pipe Capacity
6-H-P	Polycarbonate	300 lbs.	7 ½"
8-H-P	Polycarbonate	700 lbs.	9"
6-H-HG	Hot-Dipped Galvanized	300 lbs.	7 ½"
6-H-SS	Stainless Steel	300 lbs.	7 ½"
8-H-HG	Hot-Dipped Galvanized	700 lbs.	9"
8-H-SS	Stainless Steel	700 lbs.	9"
10-H-P	Polycarbonate	1,600 lbs.	9"
16-H-HG	Hot-Dipped Galvanized	1,600 lbs.	18"
16-H-SS	Stainless Steel	1,600 lbs.	18"

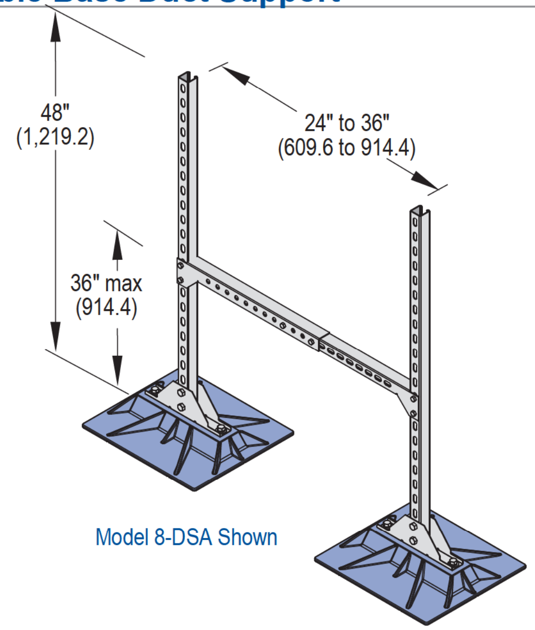
Heavy Duty Double Base Trapeze



Model	Max. Uniform Load Per Pipe Stand	Max. Pipe Capacity
8-H-DB	700 lbs.	9"
16-H-DB	1,600 lbs.	18"

Base Material: Polycarbonate

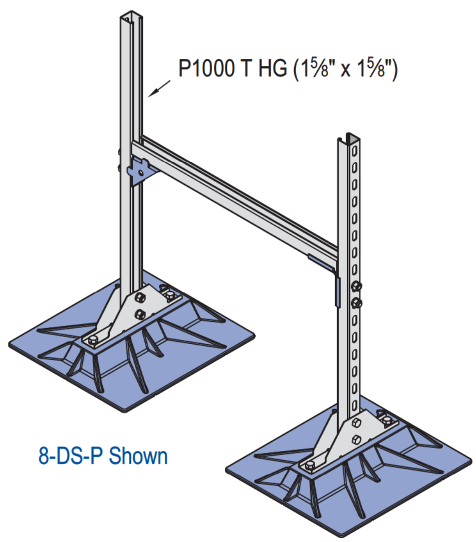
Double Base Duct Support



Model 8-DSA Shown

Model	Material	Max. Uniform Load Per Duct
6-DSA	Polycarbonate	150 lbs.
8-DSA	Polycarbonate	300 lbs.

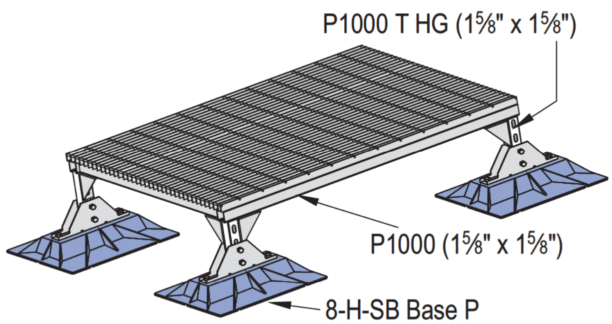
Double Base Duct Support



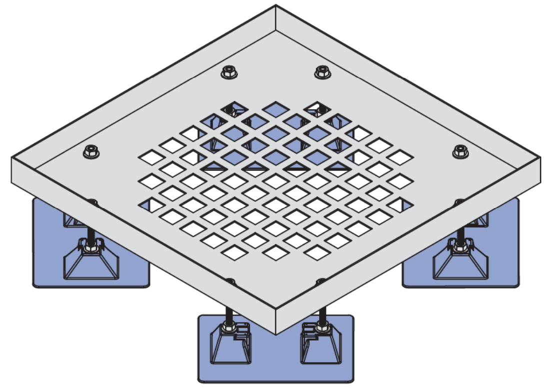
8-DS-P Shown

Model	Material	Max. Uniform Load Per Duct
6-DS-P	Polycarbonate	150 lbs.
6-DS-HG	Hot-Dipped Galvanized	300 lbs.
6-DS-SS	Stainless Steel	300 lbs.
8-DS-P	Polycarbonate	300 lbs.
8-DS-HG	Hot-Dipped Galvanized	300 lbs.
8-DS-SS	StainlessSteel	300 lbs.
8-DS-DB-P	Polycarbonate	300 lbs.
10-DS-P	Polycarbonate	300 lbs.

Heavy Duty Mechanical Support

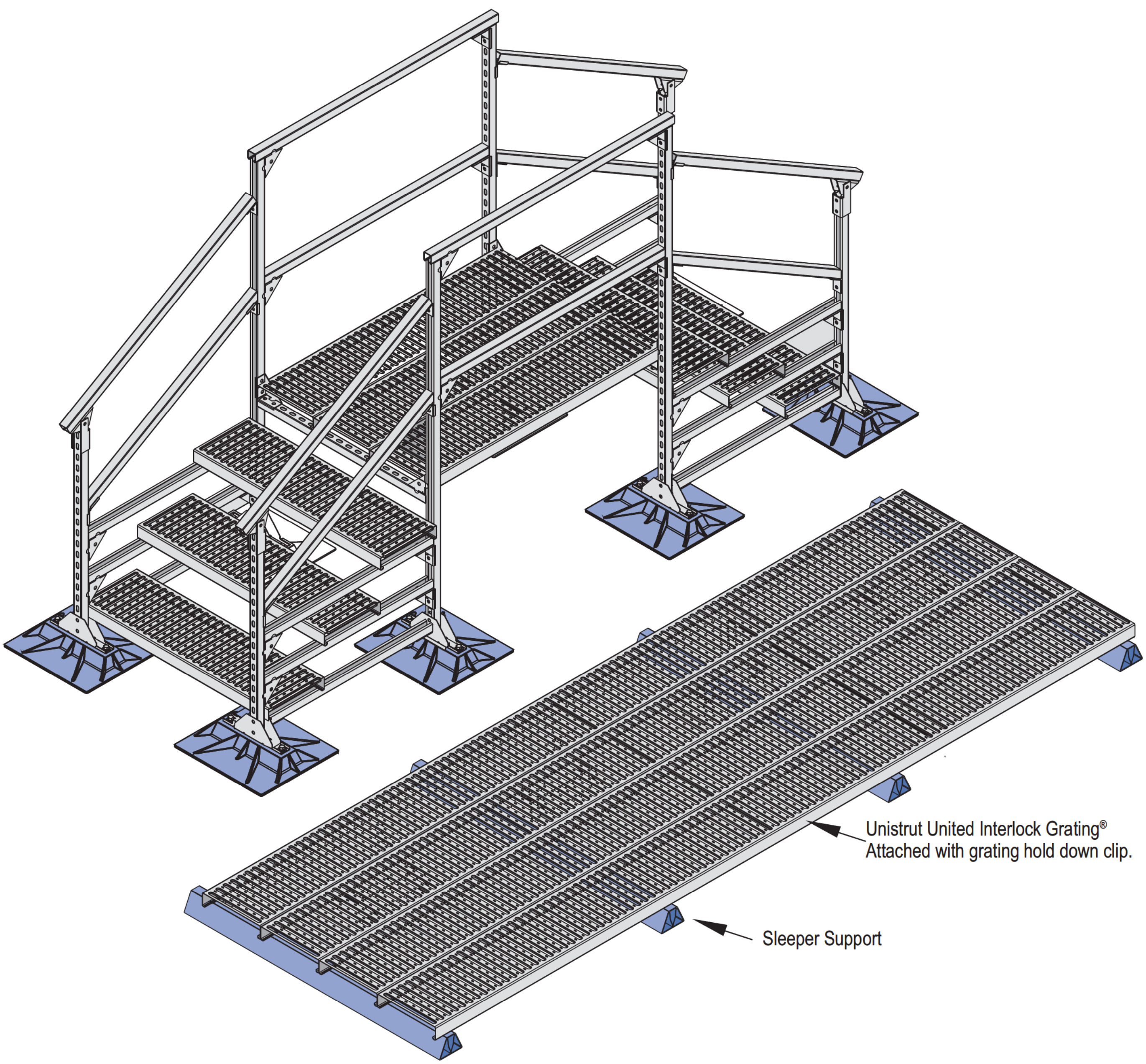


Light Duty Mechanical Support



Note: Adjustable height, maximum load 200 lbs.
Available Sizes: 18" x 18", 24" x 24", 30" x 30", 36" x 36"
Note: Custom sizes available, Contact Unistrut for information.

Bridge Cross-Over, Walkway, Service Platform or Ramp



Product Description:

A pipe support used to support roof mounted gas pipes, electrical conduit, solar piping and other mechanical piping. Unique design absorbs thermal expansion and contraction of pipes thus preventing damage to the roof membrane. Pipes rests include:

- "U" shaped cradle situated in a polycarbonate resin seat.
- Self-lubricating roller polycarbonate resin rod and roller. As daytime temperatures warm the roof membrane and the mechanical pipe network found on the roof, causing them to expand, the roller bearing in the pipe stand rolls beneath the pipe it supports. A difference between night and day temperatures of 20° F. causes 100 ft. of 1" steel pipe to move as much as 1/4".
- A strut system constructed of hot-dipped galvanized steel components including clevis hangers or band hangers.
- For the duct supports, the ducts rest on a 1 5/8" x 1 5/8" or 1 5/8" x 7/8" Unistrut channel and are adjustable in height.

Composition and Material:

Support base is made of polycarbonate resin or hot-dipped galvanized or stainless steel as indicated for the specific base. The base is gently rounded to prevent gouging the roof membrane. Carbon black is added to the polycarbonate resin for UV resistance and protection.

Pipe Roller is made of polycarbonate, or steel as indicated for the specific part.

Other Metal Parts are made of hot-dipped galvanized or stainless steel.

Duct Supports are made of hot-dipped galvanized Unistrut channel

All-Thread Rod are 1/2" or 3/8" stainless steel and are used for vertical supports.

Compatibility:

Pillow Block Pipe Stands are recommended for use on and compatible with all current types of decking and with all commonly used built-up and single-ply roofing membranes where roof-mounted pipes occur. For heavier loads it is prudent to use a Unipier Support Pad or other traffic pad to further protect the roof membrane.

Adjustable Height:

Several models allow adjustable height as desired or required by the code or roof system. Each model can be configured to allow plus or minus height above the roof. Purchasers should specify desired heights upon ordering the pillow block hangers.

Installation Process:

1. Center the support beneath the pipes or ducts so that the pipe or ducts are squarely over the pipe stand.
2. For adjustable models, adjust the support to the desired height and to ensure a uniform load with other supports. Make certain the horizontal support strut is level.
3. Place the pipe or duct on the support without dropping or causing undue impact.

For heavier loads it is prudent to install an additional sheet of roofing material, a Unipier Deck Plate, or Unipier Support Pad beneath the duct support.

For built-up roofs, all loose aggregate from an area 2" larger than each base should be removed from the area directly beneath the support. Care should be taken to install each support so it supports a proportional and equal amount of weight at each support.

Optional Straps:
For many of the models, the pipe may be secured to the pipe stand by using optional Unipier Pipe Straps.

Note:
When using a pipe strap, allow sufficient room between the pipe and the strap to allow free movement of the pipe without binding.

Loads and Spacing:
Unistrut recommends that spacing not exceed 10' between centers depending upon the load. Make certain each pipe stand is properly elevated to ensure a uniform load weight at all pipe stands and not exceed the load specified for the particular model support. All loads given in this catalog are for uniformly distributed loads.

Maintenance:
Normally maintenance is not required. Semi-annual inspection is required to check pipe stand position and set pipe alignment, weight distribution and improper installation which may cause pipe stand damage or failure.

Typical Steel Pipe Weights – Pipe Standing Load

For Schedule 40 Steel Pipe. (ASTM A53-86)

Pipe Size	Pounds per Foot of Pipe Empty	Pounds per Foot Containing Gas / Pounds per Foot Containing Water	PSI per Foot on Model 6-RAH-7 BASE	5 Feet Spacing	7.5 Feet Spacing	10 Feet Spacing
3"	7.575	7.578	.02	37.89 lbs. .13 psi	56.84 lbs. .20 psi	75.78 lbs. .26 psi
		13.4	.04	67.00 lbs. .23 psi	100.50 lbs. .35 psi	134.00 lbs. .47 psi
4"	10.790	10.794	.03	53.97 lbs. .19 psi	80.96 lbs. .28 psi	107.94 lbs. .37 psi
		16.3	.05	81.50 lbs. .28 psi	122.25 lbs. .42 psi	163.00 lbs. .57 psi
5"	14.620	14.627	.04	73.14 lbs. .25 psi	109.7 lbs. .38 psi	146.27 lbs. .51 psi
		23.2	.07	116.00 lbs. .40 psi	174.00 lbs. .60 psi	232.00 lbs. .80 psi
6"	18.970	18.98	.05	94.49 lbs. .33 psi	142.35 lbs. .49 psi	189.80 lbs. .66 psi
		31.5	.09	157.50 lbs. .55 psi	236.25 lbs. .82 psi	315.00 lbs. 1.09 psi
8"	28.55	28.567	.08	142.84 lbs. .50 psi	214.25 lbs. .74 psi	285.67 lbs. .99 psi
		50.1	.14	250.00 lbs. .87 psi	375.75 lbs. 1.30 psi	501.00 lbs. 1.74 psi
10"	40.48	40.507	.12	202.54 lbs. .70 psi	303.80 lbs. 1.05 psi	405.07 lbs. 1.41 psi
		74.6	.21	373.00 lbs. 1.30 psi	559.50 lbs. 1.94 psi	746.00 lbs. 2.60 psi

PSI is in pounds per square inch on models 6-RAH-7 BASE, which contain 2 bases for a total of 288 square inches of roof contact area support.

Chart of Usual Pipe Diameters

PIPE	PVC (Steel Size)	PVC (C900)	Cast Iron	Steel	Conduit
Inside Diameter	Outside Diameter	Outside Diameter	Outside Diameter	Outside Diameter	Outside Diameter
½"	.84"	–	–	.84"	.840"
¾"	1.05"	–	–	1.05"	1.050"
1"	1.32"	–	–	1.32"	1.315"
1 ¼"	1.66"	–	–	1.66"	1.660"
1 ½"	1.90"	–	–	1.90"	1.90"
2"	2.38"	2.50"	2.50"	2.38"	2.375"
2 ½"	2.88"	–	–	2.88"	2.875"
3"	3.50"	–	3.96"	3.50"	3.500"
3 ½"	–	–	–	–	4.000"
4"	4.50"	4.80"	5.00"	4.50"	4.500"
5"	–	–	–	5.56"	5.563"
6"	6.63"	6.90"	7.22"	6.63"	6.625"
8"	8.63"	9.05"	9.42"	8.63"	–
10"	10.75"	11.10"	11.60"	10.75"	–

The above dimensions are for usual and customary pipe sizes. Actual pipe sizes may vary from manufacturer to manufacturer.

Unipier Specifications for Typical Bases

Base Model	Outside Dimension at Roof Contact (in.)	Roof Contact Area (in.^{2})	Allowable Loading in Pounds	PSI on Roof for Each Base Under Maximum Load	Composition of Material of Base
1.5	6 X 6	24.42	80	3.27	P
1.5 SPACER	6 X 6	33.06	80	2.41	P
2.5-CS-2, 2.5-CS-5, 2.5-CS-7	7.5 X 10	57.50	100	1.73	P
2.5-CS-12	9 X 15.25	111.75	100	0.89	P
2.5-SB-H P	9 X 15.25	111.75	125	1.11	P
3-R-2; 3-R-4	7.75 X 7.75	39.64	100	2.52	P
3-R SPACER	7.25 X 7.25	52.56	100	1.90	P
3-RAH-7	7.5 X 10	57.50	100	1.73	P
3-RAH-12	9 X 15.25	111.75	100	1.11	P
3-RAH-7 HG / SS	8 X 14	96.06	100	1.04	HG / SS
4-RAH-7 HG / SS	12 X 16	174.89	150	0.85	HG / SS
5-R; 5-RAH-7; 5-RAH-12	9 X 15.25	111.75	150	1.34	P
5-SB-H HG	12 X 16	174.89	170	0.97	HG / SS
5-SB-H P	16 X 18	220.32	250	1.13	P
6-RAH-7; 6-RAH-12	16 X 18	220.32	250	1.13	P
6-RAH-7 HG/SS; 6-RAH-RS HG/SS	12 X 16	174.89	150	0.85	HG / SS
6-H-P (used in pairs)	9 X 15.25	223.50	310	1.38	P
6-H (2 Bases) HG / SS	8 X 14	192.12	310	1.61	HG / SS
8-H-SB-P (used in pairs)	16 X 18	440.64	700	1.58	P
8-H-DB-P (used in pairs)	9 X 31.69	447.00	700	1.56	P
8-H HG / SS (used in pairs)	12 X 16	349.78	700	2.00	HG / SS
8-RAH-18	19 x 23	325.98	640	1.96	P
8-SB-H	19 x 23	325.98	640	1.96	P
10-H-DS P	19 x 23	325.98	640	1.96	P
12-BS-7 HG / SS	12 X 16	174.89	150	0.85	HG / SS
16-BS-7; 16-BS-12	9 X 15.25	111.75	125	1.11	P
16-BS-7 HG / SS	12 X 16	174.89	150	0.85	HG / SS
16-H-P (used in pairs)	16 X 39	881.28	1600	1.81	P
16-H HG / SS (used in pairs)	20 X 20	800.00	1600	2.00	HG / SS
20-BS-7; 20-BS-12	16 X 18	220.32	250	1.13	P
24-BS-4; 24-BS-18	19 x 23	325.98	640	1.96	P

P – Polycarbonate Resin, SS – Stainless Steel - ASTM No. 304, HG – Hot-Dipped Galvanized

Note: Care should be taken to properly engineer the roof design so as to not overload the actual limits or manufacturer's recommended limits for each pipe support, the roof membrane, the roof top insulation, or the roof structure.

Note: Unipier has set the above load limits for each base to come within usual and customary roof structure, roof insulation, and roof membrane load limits. Unipier's manufacturing recommendations do not replace actual engineering required for each specific job.

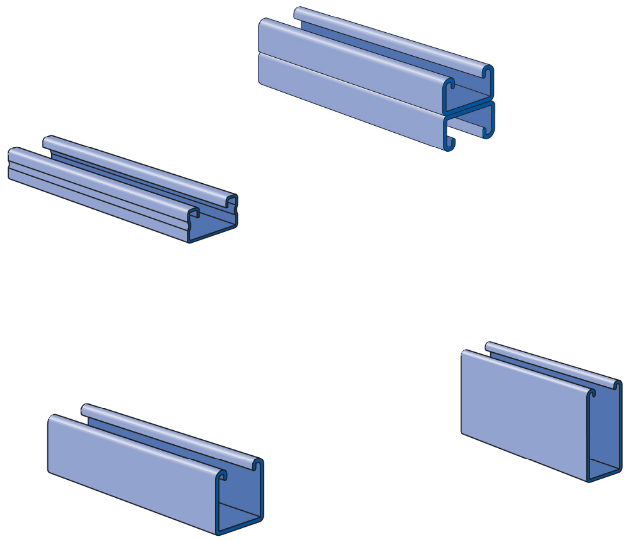
Technical Properties For Polycarbonate Resin*

PROPERTY	ASTM TEST METHOD	VALUE
PHYSICAL		
Specific Gravity	D792	1.20
Specific Volume, in^3/lb (cm^3/g)	–	23.1 (0.83)
Weight/Volume, lbs/in^3 (g/cm^3)	–	0.043 (1.20)
Water Absorption %	D570	–
24 hours @ 73°F (23°C)	–	0.15
Equilibrium, 73°F (23°C)	–	0.35
Equilibrium, 212°F (100°C)	–	0.58
Mold Shrinkage, in/in (mm/mm)	D955	0.005-0.007
Light Transmittance, % at 0.125"	D1003	89
Haze, % @ 0.125"	D1003	1
Refractive Index	–	1.586
THERMAL		
Deflection Temperature °F (°C)	D648	–
@ 66 psi (0.46 MPa)	–	–
@ 254 psi (1.82 MPa)	–	270 ( )
Specific Heat, Btu/lb/°F (kJ/kg/°K)	–	0.30 (1.25)
Thermal Conductivity	–	–
Btu-in/h-ft^2- °F (W/Km)	–	1.35 (.19)
Coefficient of Thermal Expansion	–	–
in/in/°F (m.m/°C)	D696	3.75 x 10^{-5} (6.75 s 10^{-5})
Vicat Softening Temperature, °F (°C)	D1525	305-315 (152-157)
Viscosity Midpoint	D1238	9.5
(Melt Flow Rate) g/10 min.	Condition 0	–
Brittleness Temperature, °F (°C)	D746	<-200 (-129)
Flammability Ratings	–	–
ASTM	D365°	AEB>1"
UL Standard 94° 1/16 (1.6 mm)	UL94	V-2
UL Standard 94° 1/8" (3.2 mm)	UL94	V-2
Oxygen Index	D2863	25.0
PHYSICAL		
Dielectric Strength, volts/mil (kV/mm)	D149	380 (15.0)
Short time, 125 mils (3.2mm)	–	–
Dielectric Constant	D150	–
60 Hz	–	3.17
106 Hz	–	2.96
Dielectric Factor	D150	–
60 Hz	–	0.0009
106 Hz	–	0.010
Volume Resistivity, ohm-cm	–	D257
@ 73°F, dry (23°C)	–	>10^{16}
Arc Resistance, sec	D495	–
Stainless Steel Electrodes	–	10-11
Tungsten Electrodes	–	120

PROPERTY	ASTM TEST METHOD	VALUE
MECHANICAL		
Tensile Strength, psi (MPa)	D638	–
Yield	–	9,000 (62)
Ultimate	–	10,000 (69)
Elongation, %	D638	–
Rupture	–	130
Flexural Strength, psi (MPa)	D790	14,000 (97)
Flexural Modules, 10^5 psi (MPa)	D790	3.40 (2,300)
Compressive Strength, psi (MPa)	D695	12,500 (86)
Compressive Modules, psi (MPa)	D695	–
10^5 osu (MPa)	–	3.45 (2,400)
Shear Strength, psi (MPa)	D732	–
Yield	–	6,000 (40)
Ultimate	–	10,000 (70)
Shear Modules, 10^5 psi (MPa)	–	1.14 (790)
Izod Impact Strength, ft-lbs/in (J/m)	D1822	–
Notched, 1/8" thick (3.22mm)	–	15 (801)
Tensile Impact Strength, ft-lbs/in^2 (kJ/m^2)	D1822	–
S-type	–	275 (579)
Dynatup Impact Strength, ft-lbs/in (J)	D3763	47 (64)
Fatigue Strength, psi @ 2.5mm	D671	–
cycles (MPa)	–	1,000 (7.0)
Rockwell Hardness	D785	–
M	–	70
R	–	118
Deformation Under Load %	D621	–
4000 psi @ 73°F (27 MPa @ 23°C)	–	0.2
4000 psi @ 158°F (27 MPa @ 70°C)	–	0.5
Taber Abrasion Resistance	–	–
Weight Loss, mg/1000 cycles	D1044	10

*Polycarbonate Resin is used in all models indicated in catalog as Polycarbonate, and in all rollers.

1¼" FRAMING SYSTEM



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) ASTM A653 GR 33,
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 III (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 III (GR) or 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).

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
Rec. Torque Ft/Lbs (N•m)	6 *(8)*	11 *(15)*	19 *(26)*
Max Torque Ft/Lbs (N•m)	7 *(9)*	15 *(20)*	25 *(34)*

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.

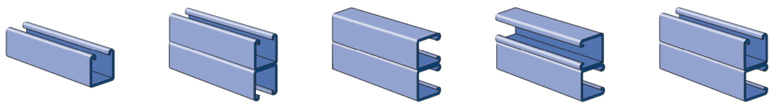
LOAD DATA

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 2007 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE USING ASD METHOD. Loads are based on 33 ksi steel cold formed to 42 ksi.

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

A1000 Series

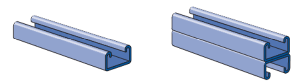
1¼" x 1¼"
14 Ga.



A1000-Pg 171 | A1001-Pg 171 | A1001 A-Pg 172 | A1001 B-Pg 172 | A1001 C-Pg 172

A3300 Series

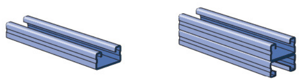
1¼" x ¾"
14 Ga.



A3300-Pg 173 | A3301-Pg 173

A4000 Series

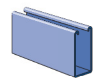
1¼" x ⅝"
19 Ga.



A4000-Pg 175 | A4001-Pg 175

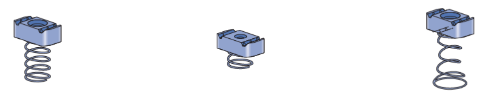
A5000 Series

1¼" x 2½"
14 Ga.

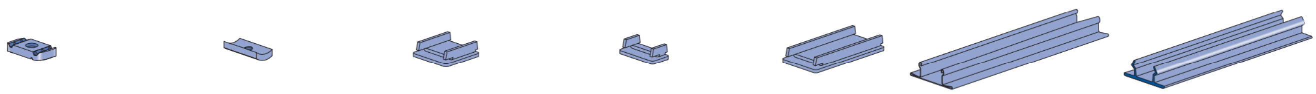


A5000-Pg 177

Channel Nuts & Closures

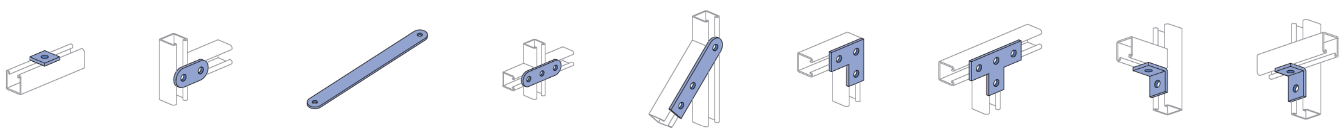


A1006-1420-Pg 178 | A4006-1420-Pg 178 | A5006-1420-Pg 178

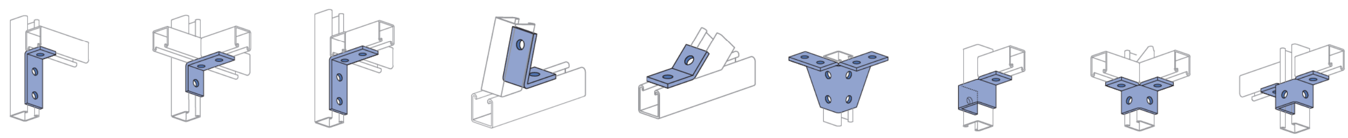


A3006-1420-Pg 178 | A3016-0832-Pg 178 | A1280-Pg 178 | A4280-Pg 178 | A5280-Pg 178 | A1184-Pg 178 | A1184P-Pg 178

A Series Fittings

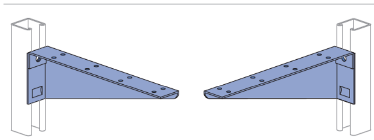


A1063-Pg 178 | A1065-Pg 178 | A1191-Pg 178 | A1066-Pg 179 | A2324-Pg 179 | A1036-Pg 179 | A1031-Pg 179 | A1026-Pg 179 | A1068-Pg 179



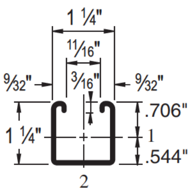
A1326-Pg 179 | A1458-Pg 179 | A1325-Pg 179 | A2110-Pg 179 | A2126-Pg 179 | A2084-Pg 179 | A2472 R-L-Pg 179 | A2223-Pg 179 | A2345-Pg 179

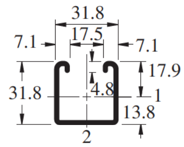
A2227-Pg 179 | A1047-Pg 180 | A3347-Pg 180 | A4047-Pg 180 | A5047-Pg 180 | A2608-Pg 180 | A2492 R-Pg 180 | A2492 L-Pg 180

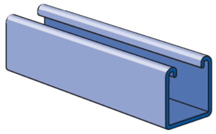


A2494 R-Pg 180 | A2494 L-Pg 180

A1000 – 1¼" x 1¼"







Wt/100 Ft: 104 Lbs(154 kg/100m)
Allowable Moment 2,170 In-Lbs (240 N•m)
14 Gauge Nominal Thickn,ess .075" (1.9mm)

A1000 - Beam Loading

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
18	960	0.04	960	960	960
24	720	0.07	720	720	660
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	0.90	110	80	50
96	180	1.16	80	60	40
108	160	1.46	70	50	30
120	140	1.75	50	40	30

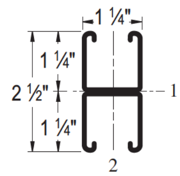
A1000 - Column Loading

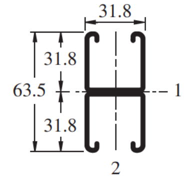
Unbraced Height In	Maximum Allowable Load at Slot Face Lbs	Maximum Column Load Applied at C.G. K = 0.65 Lbs	K = 0.80 Lbs	K =1.0 Lbs	K = 1.2 Lbs
18	1,960	5,900	5,430	4,800	4,210
24	1,840	5,210	4,590	3,850	3,220
36	1,500	3,940	3,220	2,480	2,010
48	1,220	2,950	2,300	1,790	1,460
60	1,020	2,260	1,790	1,400	1,130
72	880	1,840	1,460	1,130	910
84	780	1,550	1,230	940	**
96	690	1,340	1,050	**	**
108	620	1,170	910	**	**

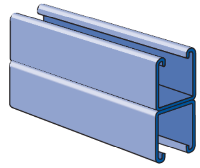
A1000/A1001 - Elements of Section

Parameter	A1000		A1001	
Area of Section	0.305	In^2	0.609	In^2
Axis 1-1				
Moment of Inertia (I)	0.061	In^4	0.302	In^4
Section Modulus (S)	0.086	In^3	0.242	In^3
Radius of Gyration (r)	0.447	In	0.704	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

A1001 – 1¼" x 2½"







Wt/100 Ft: 207 Lbs (308 kg/100m)
Allowable Moment 6,070 In-Lbs (690 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

A1001 - Beam Loading

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
18	1,650*	0.01	1,650*	1,650*	1,650*
24	1,650*	0.03	1,650*	1,650*	1,650*
36	1,350	0.09	1,350	1,350	1,350
48	1,010	0.16	1,010	1,010	820
60	810	0.26	810	790	530
72	670	0.37	670	550	370
84	580	0.50	540	400	270
96	510	0.66	410	310	210
108	450	0.83	330	240	160
120	400	1.01	260	200	130

A1001 - Column Loading

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	3,530	13,300	12,920	12,400	11,880
24	3,480	12,750	12,220	11,550	10,950
36	3,370	11,630	10,950	10,220	9,150
48	3,260	10,680	10,020	8,260	6,500
60	2,960	9,930	8,260	6,080	4,270
72	2,630	8,480	6,500	4,270	2,970
84	2,260	7,040	4,900	3,140	2,180
96	1,940	5,680	3,750	2,400	**
108	1,670	4,490	2,970	**	**
120	1,440	3,640	2,400	**	**

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

1¼" System
13⁄16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

A1000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	3.2	2	3.2	3.2	3.1
750	2.6	3	2.6	2.6	2.0
1,000	2.0	5	2.0	1.6	1.1
1,250	1.6	8	1.4	1.1	0.7
1,500	1.3	11	1.0	0.7	0.5
1,750	1.1	15	0.7	0.5	0.4
2,000	1.0	20	0.5	0.4	0.3
2,500	0.8	32	0.4	0.3	0.2
3,000	0.7	46	0.2	0.2	0.1

A1001 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	7.3*	1	7.3*	7.3*	7.3
750	7.3*	2	7.3*	7.3*	7.3
1,000	5.5	3	5.5	5.5	5.5
1,250	4.4	4	4.4	4.4	3.5
1,500	3.6	6	3.6	3.6	2.4
1,750	3.2	9	3.2	2.7	1.8
2,000	2.8	11	2.7	2.0	1.4
2,500	2.2	17	1.7	1.3	0.9
3,000	1.8	25	1.2	0.9	0.6
3,500	1.6	34	0.9	0.7	0.4

A1000 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	8.2	23.4	20.7	17.3	14.6
750	7.5	20.5	17.3	14.0	11.3
1,000	6.3	16.2	13.0	9.9	8.1
1,250	5.3	12.8	9.9	7.7	6.3
1,500	4.6	10.2	8.1	6.3	5.2
1,750	4.1	8.6	6.8	5.3	4.3
2,000	3.6	7.4	5.9	4.5	**
2,250	3.3	6.5	5.2	3.9	**
2,500	3.0	5.8	4.5	**	**
2,750	2.7	5.2	4.0	**	**

A1001 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	15.5	56.9	54.5	51.6	48.9
750	15.2	54.4	51.6	48.4	45.7
1,000	14.9	50.4	47.4	43.9	37.4
1,250	14.4	47.2	43.9	35.7	27.8
1,500	13.3	44.6	37.4	27.8	19.6
1,750	12.1	39.4	30.9	20.7	14.4
2,000	10.8	34.1	24.8	15.9	11.0
2,250	9.5	29.0	19.6	12.5	**
2,500	8.4	24.1	15.9	10.2	**
2,750	7.4	19.9	13.1	**	**

A1000/A1001 - Elements of Section (metric)

Parameter		A1000		A1001	
Area of Section		1.96	cm^2	3.93	cm^2
Axis 1-1					
	Moment of Inertia (I)	2.53	cm^4	12.57	cm^4
	Section Modulus (S)	1.41	cm^3	3.96	cm^3
	Radius of Gyration (r)	1.14	cm	1.79	cm
Axis 2-2					
	Moment of Inertia (I)	3.25	cm^4	6.50	cm^4
	Section Modulus (S)	2.05	cm^3	4.09	cm^3
	Radius of Gyration (r)	1.29	cm	1.29	cm

Notes:

* Load limited by spot weld shear.

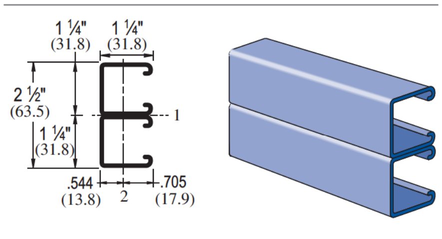
** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

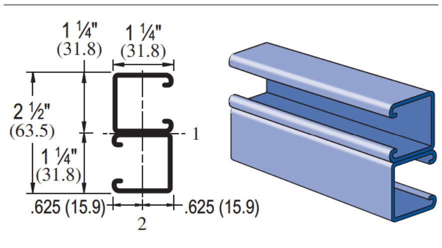
Finishes: PL, GR, HG, PG Standard Lengths: 10' & 20'

A1001A – 1¼" x 2½"



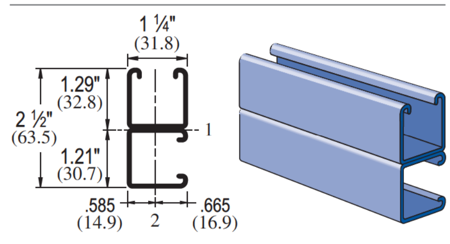
Wt/100 Ft: 207 Lbs (308 kg/100m)
Allowable Moment 7,930 In-Lbs (900 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

A1001B – 1¼" x 2½"



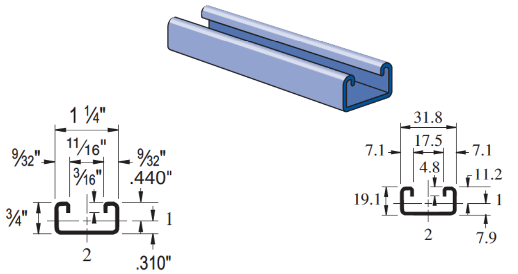
Wt/100 Ft: 207 Lbs (308 kg/100m)
Allowable Moment 7,930 In-Lbs (900 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

A1001C – 1¼" x 2½"



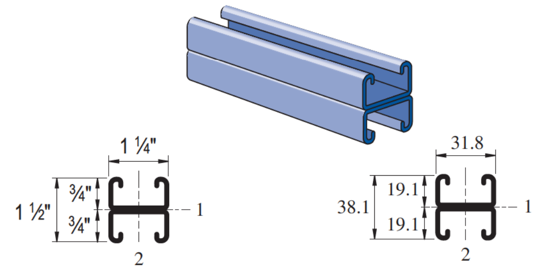
Wt/100 Ft: 207 Lbs (308 kg/100m)
Allowable Moment 6,760 In-Lbs (760 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)

A3300 – 1¼" x ¾"



Wt/100 Ft: 78 Lbs (116 kg/100m)
Allowable Moment 950 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)

A3300 - Beam Loading

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	420	0.07	420	420	320
24	320	0.12	320	270	180
36	210	0.26	160	120	80
48	160	0.47	90	70	50
60	130	0.75	60	40	30
72	110	1.09	40	30	20
84	90	1.42	30	20	10
96	80	1.88	20	20	10

A3301 - Beam Loading

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	990*	0.03	990*	990*	990*
24	860	0.07	860	860	850
36	580	0.15	580	560	380
48	430	0.27	420	320	210
60	350	0.43	270	200	140
72	290	0.62	190	140	90
84	250	0.85	140	100	70
96	220	1.11	110	80	50

A3300 - Column Loading

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
18	1,430	4,490	4,210	3,860	3,550
24	1,370	4,090	3,750	3,310	2,680
36	1,190	3,390	2,680	1,820	1,260
48	900	2,380	1,600	1,020	**
60	680	1,550	1,020	**	**

A3301 - Column Loading

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
18	2,540	9,890	9,620	9,300	9,020
24	2,510	9,510	9,200	8,710	7,960
36	2,410	8,800	7,960	6,730	5,490
48	2,230	7,560	6,320	4,690	3,310
60	1,970	6,210	4,690	3,050	2,120
72	1,650	4,890	3,310	2,120	**
84	1,380	3,680	2,430	**	**
96	1,160	2,820	1,860	**	**

A3300/A3301 - Elements of Section

Parameter	A3300		A3301	
Area of Section	0.230	In^2	0.459	In^2
Axis 1-1				
Moment of Inertia (I)	0.017	In^4	0.077	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)	0.083	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

NR = Not Recommended.

1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

A3300 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	1.4	3	1.4	1.2	0.8
750	1.2	5	1.1	0.8	0.5
1,000	0.8	8	0.6	0.4	0.3
1,250	0.7	12	0.4	0.3	0.2
1,500	0.6	18	0.3	0.2	0.1
1,750	0.5	24	0.2	0.1	0.1
2,000	0.4	33	0.1	0.1	0.1

A3301 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	3.9	2	3.9	3.9	3.9
750	3.1	3	3.1	3.1	2.5
1,000	2.4	5	2.4	2.1	1.4
1,250	1.9	7	1.8	1.3	0.9
1,500	1.6	10	1.2	0.9	0.6
1,750	1.3	14	0.9	0.7	0.4
2,000	1.2	18	0.7	0.5	0.4
2,500	0.9	29	0.4	0.4	0.2
3,000	0.8	43	0.3	0.2	0.1

A3300 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	6.1	18.3	16.8	14.9	12.2
750	5.8	16.7	14.9	11.5	8.4
1,000	4.9	13.8	10.4	6.8	4.7
1,250	3.9	10.1	6.8	4.3	**
1,500	3.1	7.1	4.7	**	**

A3301 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	11.2	42.4	41.0	39.0	35.7
750	11.0	40.9	39.0	34.9	30.4
1,000	10.5	37.7	33.4	27.4	21.4
1,250	9.8	33.0	27.4	20.0	14.0
1,500	8.9	28.1	21.4	14.0	9.7
1,750	7.7	23.2	16.1	10.3	**
2,000	6.7	18.6	12.3	7.9	**
2,250	5.8	14.7	9.7	**	**
2,500	5.0	11.9	7.9	**	**

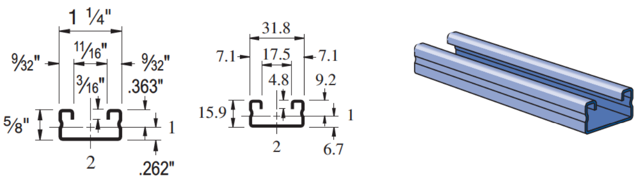
A3300/A3301 - Elements of Section (Metric)

Parameter		A3300		A3301	
Area of Section		1.48	cm^2	2.96	cm^2
Axis 1-1					
	Moment of Inertia (I)	0.69	cm^4	3.22	cm^4
	Section Modulus (S)	0.62	cm^3	1.69	cm^3
	Radius of Gyration (r)	0.68	cm	1.04	cm
Axis 2-2					
	Moment of Inertia (I)	2.17	cm^4	4.34	cm^4
	Section Modulus (S)	1.37	cm^3	2.73	cm^3
	Radius of Gyration (r)	1.21	cm	1.21	cm

Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

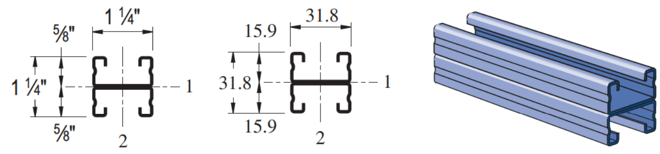
1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

A4000 – 1¼" x ⅝"



Wt/100 Ft: 45 Lbs (67 kg/100m)
Allowable Moment 560 In-Lbs (60 N•m)
19 Gauge Nominal Thickness .040" (1.0mm)

A4001– 1¼" x 1¼"



Wt/100 Ft: 90 Lbs (134 kg/100m)
Allowable Moment 1,470 In-Lbs (170 N•m)
19 Gauge Nominal Thickness .040" (1.0mm)

A4000 - Beam Loading

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	250	0.08	250	220	150
24	190	0.15	170	120	80
36	120	0.32	70	60	40
48	90	0.58	40	30	20
60	70	0.88	30	20	10
72	60	1.30	20	10	10

A4001 - Beam Loading

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	350*	0.02	350*	350*	350*
24	350*	0.06	350*	350*	350*
36	330	0.19	330	270	180
48	240	0.32	200	150	100
60	200	0.52	130	100	60
72	160	0.72	90	70	40
84	140	1.00	70	50	30

A4000 - Column Loading

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
18	960	2,510	2,290	1,990	1,700
24	880	2,190	1,890	1,530	1,230
36	670	1,570	1,230	830	580
48	470	1,110	730	470	**
60	340	710	470	**	**

A4001 - Column Loading

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
18	1,640	5,640	5,420	5,110	4,800
24	1,600	5,320	5,000	4,600	4,240
36	1,510	4,650	4,240	3,500	2,730
48	1,330	4,030	3,240	2,250	1,560
60	1,090	3,170	2,250	1,440	1,000
72	870	2,370	1,560	1,000	**
84	700	1,740	1,150	**	**

A4000/A4001 - Elements of Section

Parameter		A4000		A4001	
Area of Section		0.132	In^2	0.264	In^2
Axis 1-1					
	Moment of Inertia (I)	0.008	In^4	0.037	In^4
	Section Modulus (S)	0.022	In^3	0.058	In^3
	Radius of Gyration (r)	0.240	In	0.372	In
Axis 2-2					
	Moment of Inertia (I)	0.029	In^4	0.058	In^4
	Section Modulus (S)	0.046	In^3	0.093	In^3
	Radius of Gyration (r)	0.469	In	0.469	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

A4000 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	0.8	4	0.8	0.6	0.4
750	0.7	6	0.5	0.4	0.3
1,000	0.5	10	0.3	0.2	0.1
1,250	0.4	16	0.2	0.1	0.1
1,500	0.4	24	0.1	0.1	0.0

A4001 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	1.6*	1	1.6*	1.6*	1.6
750	1.6*	3	1.6*	1.6*	1.2
1,000	1.3	6	1.3	1.0	0.7
1,250	1.1	9	0.8	0.6	0.4
1,500	0.9	13	0.6	0.4	0.3
1,750	0.8	17	0.4	0.3	0.2
2,000	0.7	22	0.3	0.3	0.2

A4000 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	3.9	9.8	8.5	6.9	5.6
750	3.5	8.4	6.9	5.3	3.8
1,000	2.8	6.4	4.8	3.1	2.1
1,250	2.0	4.7	3.1	**	**
1,500	1.5	3.2	2.1	**	**

A4001 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	7.1	23.8	22.4	20.6	19.0
750	6.9	22.3	20.6	18.6	15.8
1,000	6.6	19.9	17.8	13.9	10.3
1,250	5.8	17.5	13.9	9.5	6.6
1,500	4.9	14.4	10.3	6.6	4.6
1,750	4.1	11.4	7.6	4.8	**
2,000	3.4	8.8	5.8	**	**
2,250	2.9	6.9	4.6	**	**

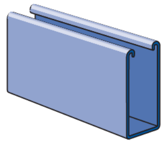
A4000/A4001 - Elements of Section (Metric)

Parameter		A4000		A4001	
Area of Section		0.85	cm^2	1.70	cm^2
Axis 1-1					
	Moment of Inertia (I)	0.32	cm^4	1.52	cm^4
	Section Modulus (S)	0.37	cm^3	0.96	cm^3
	Radius of Gyration (r)	0.61	cm	0.94	cm
Axis 2-2					
	Moment of Inertia (I)	1.21	cm^4	2.42	cm^4
	Section Modulus (S)	0.76	cm^3	1.52	cm^3
	Radius of Gyration (r)	1.19	cm	1.19	cm

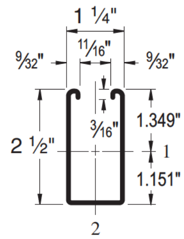
Notes:
* Load limited by spot weld shear.
** KL/r > 200
NR = Not Recommended.

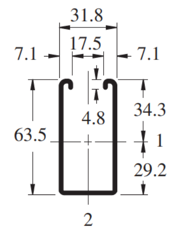
1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 177 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

A5000 – 1¼" x 2½"



Wt/100 Ft: 167 Lbs (249 kg/100m)
Allowable Moment 6,670 In-Lbs (750 N•m)
14 Gauge Nominal Thickness .075" (1.9mm)





A5000 - Beam Loading

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	2,220	0.04	2,220	2,220	2,220
36	1,480	0.09	1,480	1,480	1,480
48	1,110	0.15	1,110	1,110	980
60	890	0.24	890	890	630
72	740	0.34	740	650	430
84	640	0.47	640	480	320
96	560	0.61	490	370	240
108	490	0.76	390	290	190
120	440	0.94	310	230	160

A5000 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
600	10.1	1	10.1	10.1	10.1
750	8.1	1	8.1	8.1	8.1
1,000	6.1	3	6.1	6.1	6.1
1,250	4.8	4	4.8	4.8	4.1
1,500	4.0	6	4.0	4.0	2.9
1,750	3.4	8	3.4	3.2	2.1
2,000	3.0	10	3.0	2.4	1.6
2,500	2.4	16	2.1	1.6	1.0
3,000	2.0	23	1.4	1.1	0.7

A5000 - Column Loading

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	2,790	7,950	6,670	5,080	3,760
36	1,950	5,270	3,760	2,600	1,970
48	1,360	3,290	2,350	1,690	1,330
60	990	2,300	1,690	1,260	1,010
72	790	1,750	1,330	1,010	830
84	660	1,420	1,100	860	710
96	570	1,200	940	740	**
108	510	1,040	830	**	**
120	460	930	740	**	**

A5000 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Max. Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
600	12.5	35.8	30.2	23.1	17.2
750	10.7	29.7	23.1	16.0	11.9
1,000	7.8	20.5	14.4	10.1	7.7
1,250	5.8	14.0	10.1	7.3	5.7
1,500	4.5	10.5	7.7	5.7	4.6
1,750	3.7	8.3	6.2	4.8	3.9
2,000	3.2	6.9	5.3	4.1	3.3
2,250	2.8	5.9	4.6	3.6	3.0
2,500	2.5	5.2	4.1	3.2	**

A5000 - Elements of Section

Parameter	A5000	
Area of Section	0.492	In^2
Axis 1-1		
Moment of Inertia (I)	0.358	In^4
Section Modulus (S)	0.265	In^3
Radius of Gyration (r)	0.853	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

A5000 - Elements of Section (Metric)

Parameter	A5000	
Area of Section	3.17	cm^2
Axis 1-1		
Moment of Inertia (I)	14.91	cm^4
Section Modulus (S)	4.35	cm^3
Radius of Gyration (r)	2.17	cm
Axis 2-2		
Moment of Inertia (I)	5.94	cm^4
Section Modulus (S)	3.74	cm^3
Radius of Gyration (r)	1.37	cm

Notes:

* Load limited by spot weld shear. ** KL/r > 200 NR = Not Recommended.

1. Beam loads are given in <u>total</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to table below for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% & the corresponding deflection by 80%. Other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

Maximum Allowable Pull-Out And Slip Loads

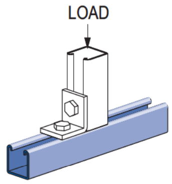
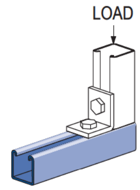
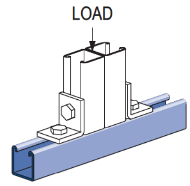
Nut Size/ Thread	Channel	Gauge	Max Allowable Pull-Out Lbs (kN)	Resistaance to Slip Lbs (kN)	Torque Ft-Lbs (N•m)
⅜" -16	A1000	14	900 4.00	500 2.22	19 26
5/16" -18	A3300	14	900 4.00	500 2.22	11 15
¼" -20	A5000	14	900 4.00	500 2.22	6 8
⅜" -16	A4000	19	300 1.33	400 1.78	19 26

Lateral Bracing Load Reduction Charts

Span Ft. (m)	In. (cm)	Single Channel A1000	A3300	A4000	A5000	Double Channel A1001	A3301	A4001
2 (0.6)	24 (61)	0.95	1.00	0.94	0.90	1.00	1.00	1.00
3 (0.9)	36 (91)	0.86	0.97	0.83	0.69	1.00	1.00	0.97
4 (1.2)	48 (122)	0.78	0.94	0.73	0.49	0.95	0.99	0.89
5 (1.5)	60 (152)	0.72	0.91	0.65	0.37	0.90	0.95	0.82
6 (1.8)	72 (183)	0.67	0.89	0.58	0.31	0.84	0.91	0.74
7 (2.1)	84 (213)	0.63	0.87	0.53	0.27	0.79	0.88	0.67
8 (2.4)	96 (244)	0.59	0.85	0.49	0.24	0.74	0.84	0.59
9 (2.7)	108 (274)	0.55	0.83	0.45	0.22	0.69	0.81	0.52
10 (3.1)	120 (305)	0.52	0.80	0.42	0.21	0.64	0.77	0.46
12 (3.7)	144 (366)	0.46	0.76	0.38	0.19	0.54	0.70	0.38

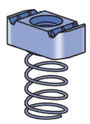
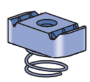
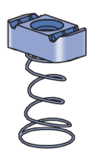
Nut design loads include a minimum safety factor of 3.

Bearing Loads on Unistrut Channel

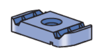
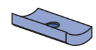
Loads are calculated based on 2001 Specification For The Design Of Cold Formed Steel Structural Members published by AISI			
Channel	**Bearing Length 1¼" (31.8 mm) Maximum Allowable Loads - Lbs** *(kN)*	**Bearing Length 1¼" (31.8 mm) Maximum Allowable Loads - Lbs** *(kN)*	**Bearing Length 2½" (63.5 mm) Maximum Allowable Loads - Lbs** *(kN)*
A1000	3,700 *(16.46)*	1,700 *(7.56)*	4,300 *(19.13)*
A3300	3,800 *(16.90)*	1,700 *(7.56)*	4,300 *(19.13)*
A4000	1,200 *(5.34)*	600 *(2.67)*	1,400 *(6.23)*
A5000	3,600 *(16.01)*	1,600 *(7.12)*	4,200 *(18.68)*

Channel Nut With Spring

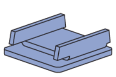
EG

	Part Number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With
	A1006-1420	¼" -20	6 *(2.7)*	A1000
	A1007	5/16" -18	6 *(2.7)*	
	A1008	⅜" -16	6 *(2.7)*	
	Part Number	**Nut Size Thread**	**Wt/100 pcs Lbs *(kg)***	**Use With**
	A4006-1420	¼" -20	5 *(2.3)*	A3300, A4000
	A4007	5/16" -18	5 *(2.3)*	
	A4008	⅜" -16	5 *(2.3)*	
	Part Number	**Nut Size Thread**	**Wt/100 pcs Lbs *(kg)***	**Use With**
	A5006-1420	¼" -20	6 *(2.7)*	A5000
	A5007	5/16" -18	6 *(2.7)*	
	A5008	⅜" -16	6 *(2.7)*	

Channel Nut Without Springs

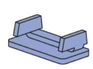
	Part Number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With
	A3006-1420	¼" -20	5 *(2.3)*	A1000, A3300, A4000, & A5000
	A3007	5/16" -18	5 *(2.3)*	
	A3008	⅜" -16	5 *(2.3)*	
	Part Number	**Nut Size Thread**	**Wt/100 pcs Lbs *(kg)***	**Use With**
	A3016-0832	#8 -32	1 *(0.5)*	A1000, A3300, A4000, & A5000
	A3016-1024	#10 -24	1 *(0.5)*	
	A3016-1032	#10 -32	1 *(0.5)*	
	A3016-1420	¼" -20	1 *(0.5)*	

A1280 End Cap



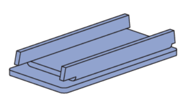
Material: .075" (1.9)
Note: Use with A1000 channel
Wt/100 pcs: 7 Lbs (3.2 kg)

A4280 End Cap



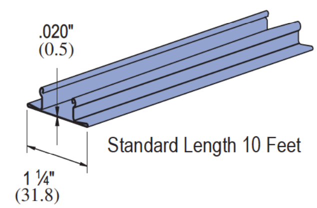
Material: .075" (1.9)
Note: Use with A4000 channel.
Wt/100 pcs: 3 Lbs (1.4 kg)

A5280 End Cap



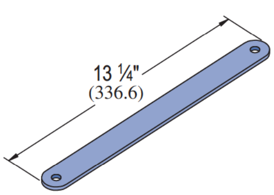
Material: .075" (1.9)
Note: Use with A5000 channel.
Wt/100 pcs: 14 Lbs (6.4 kg)

A1184 Closure Strip



Finish:
Perma-Green II (GR), Plain (PL).
Wt/100 Ft: 21 Lbs (31.3 kg/100M)

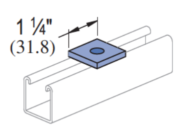
A1191



Wt/100 pcs: 87 Lbs (39.5 kg)

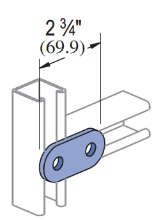
A1063

EG



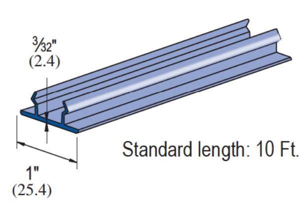
Wt/100 pcs: 8 Lbs (3.6 kg)

A1065



Wt/100 pcs: 17 Lbs (7.7 kg)

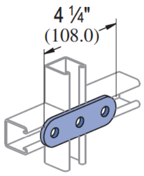
A1184P Closure Strip



Material: Paintable PVC.
Color: Green, Grey.
Wt/100 Ft: 21 Lbs (31.3 kg/100M)

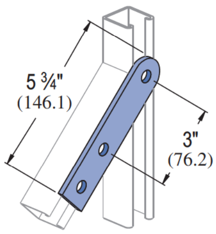
Standard Dimensions for 1¼" (31.8 mm) width series channel fittings *(Unless Otherwise Shown on Drawing)*
Hole Diameter: 13/32" (10.3mm); **Hole Spacing - From End:** ⅝" (15.9 mm); **Hole Spacing - On Center:** 1½" (38.1mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

A1066



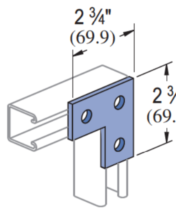
Wt/100 pcs: 26 Lbs (11.8 kg)

A2324



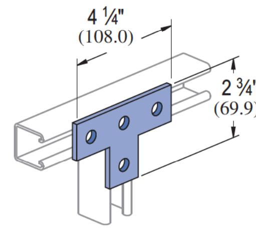
Wt/100 pcs: 39 Lbs (17.7 kg)

A1036



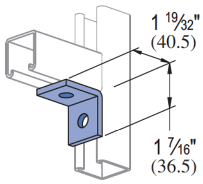
Wt/100 pcs: 27 Lbs (12.2 kg)

A1031



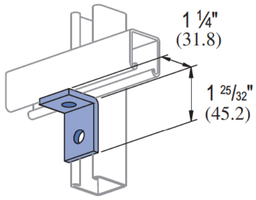
Wt/100 pcs: 34 Lbs (15.4 kg)

A1026



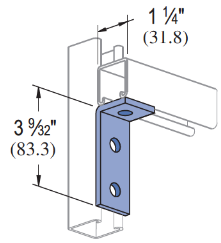
Wt/100 pcs: 17 Lbs (7.7 kg)

A1068 GR



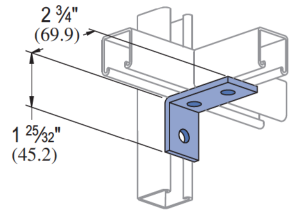
Wt/100 pcs: 17 Lbs (7.7 kg)

A1326



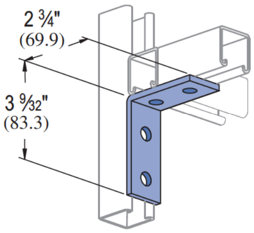
Wt/100 pcs: 27 Lbs (12.2 kg)

A1458



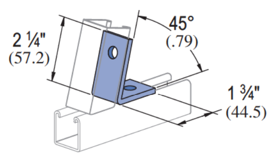
Wt/100 pcs: 27 Lbs (12.2 kg)

A1325



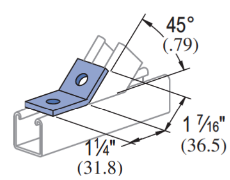
Wt/100 pcs: 38 Lbs (17.2 kg)

A2110



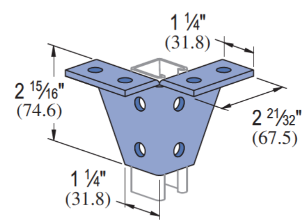
Wt/100 pcs: 23 Lbs (10.4 kg)

A2126



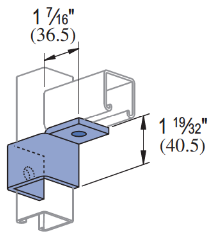
Wt/100 pcs: 17 Lbs (7.7 kg)

A2084



Wt/100 pcs: 90 Lbs (40.8 kg)

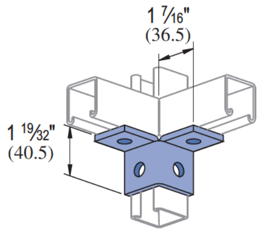
A2472 R-L



R-As shown
L-Opposite hand

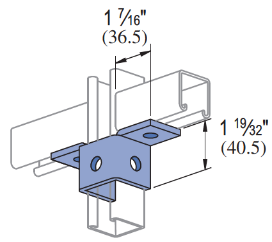
Wt/100 pcs: 33 Lbs (15.0 kg)

A2223



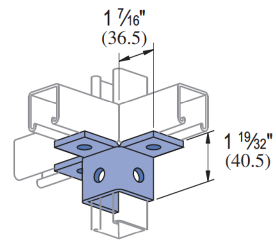
Wt/100 pcs: 34 Lbs (15.4 kg)

A2345



Wt/100 pcs: 41 Lbs (18.6 kg)

A2227

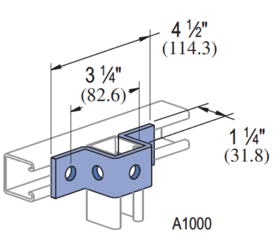


Wt/100 pcs: 52 Lbs (23.6 kg)

Standard Dimensions for 1¼" (31.8 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" (38.1mm); **Width:** 1¼"(31.8mm); **Thickness:** 3⁄16" (4.8mm)

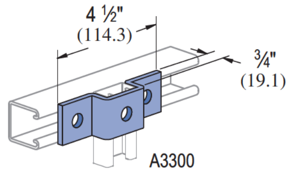
1¼" System
13⁄16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

A1047



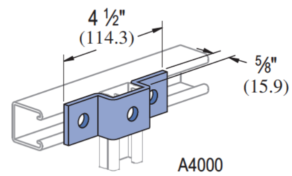
Wt/100 pcs: 43 Lbs (19.5 kg)

A3347



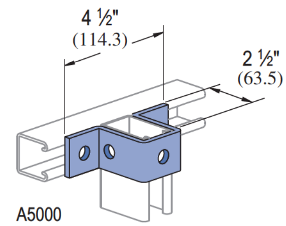
Wt/100 pcs: 37 Lbs (16.8 kg)

A4047



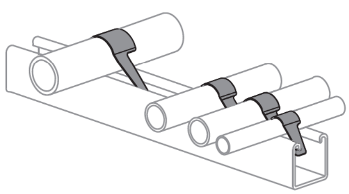
Wt/100 pcs: 34 Lbs (15.4 kg)

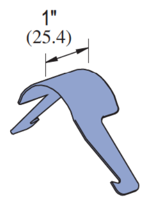
A5047



Wt/100 pcs: 58 Lbs (26.3 kg)

A2608 THRU A2617 — UNI-CLIP®

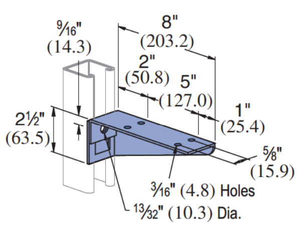




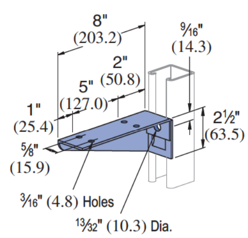
Part Number	Pipe Size In (mm)	O.D. Size In (mm)	Wt/100 pcs Lbs (kg)
A2608	¼ *(6.4)*	0.540 *(13.7)*	0.6 *(0.3)*
A2609	⅜ *(9.5)*	0.675 *(17.1)*	0.7 *(0.3)*
A2611	½ *(12.7)*	0.840 *(21.3)*	1.0 *(0.5)*
A2612	¾ *(19.1)*	1.050 *(26.7)*	1.4 *(0.6)*
A2613	1 *(25.4)*	1.35 *(33.4)*	2.0 *(0.9)*
A2614	1¼ *(31.8)*	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)*

Stainless steel, Type 301.

A2492 R-L



Right



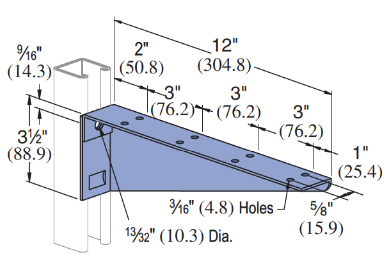
Left

Design Uniform Load
(Channel Upright Listed)
A1000 200 Lbs (.89 kN)
A4000 130 Lbs (.58 kN)
Safety Factor of 2½

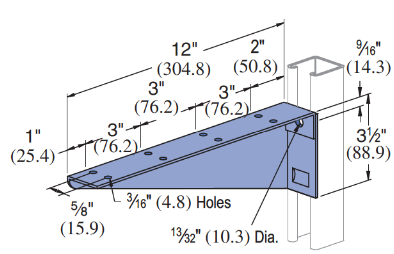
Material: 14 Gauge Steel.

Wt/100 pcs: 56 Lbs (25.4 kg)

A2494 R-L



Right



Left

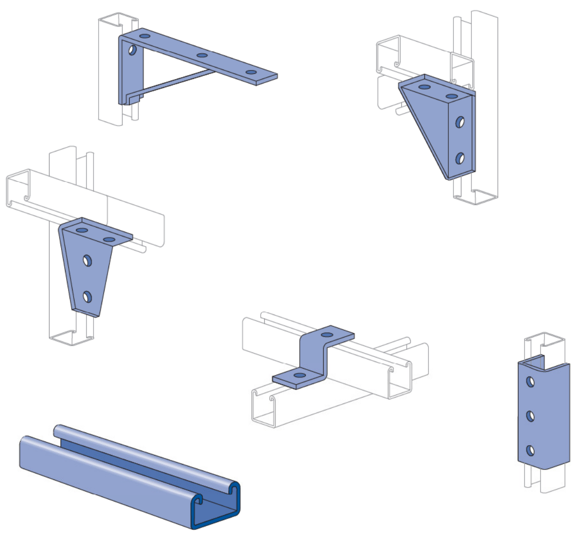
Design Uniform Load
(Channel Upright Listed)
A1000 200 Lbs (.89 kN)
A4000 130 Lbs (.58 kN)
Safety Factor of 2½

Material: 14 Gauge Steel.

Wt/100 pcs: 94 Lbs (42.6 kg)

Standard Dimensions for 1¼" (31.8 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" (38.1mm); **Width:** 1¼"(31.8mm); **Thickness:** 3/16" (4.8mm)

13/16" FRAMING SYSTEM



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 A1011 SS Grade 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 III (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 III, electrogalvanized (EG) with zinc electrolytically to commercial standards ASTM B653-G90 Type III SC1; or plain (PL).

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" (3.2*mm*).

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	1/4"-20	Rec. Torque Ft/Lbs (N•m)	6 *(8)*	Max Torque Ft/Lbs (N•m)	7 *(9)*

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.

LOAD DATA

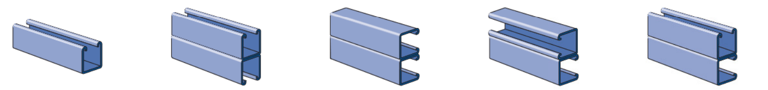
All beam and column load data pertains to carbon steel and stainless steel channels. Load tables and charts are constructed to be in accordance with the SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE USING ASD METHOD. Loads are based on 33 ksi steel cold formed to 42 ksi.

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

1¼" System
13⁄16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

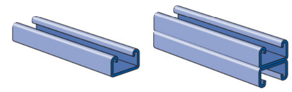
P6000 Series

13⁄16" x 13⁄16"
19 Ga.

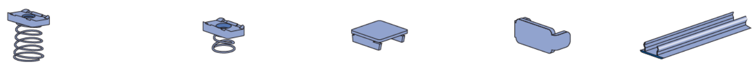


P7000 Series

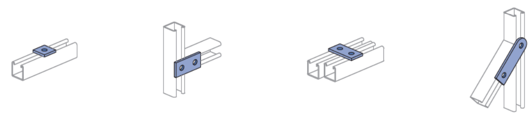
13⁄16" x 13⁄32"
19 Ga.

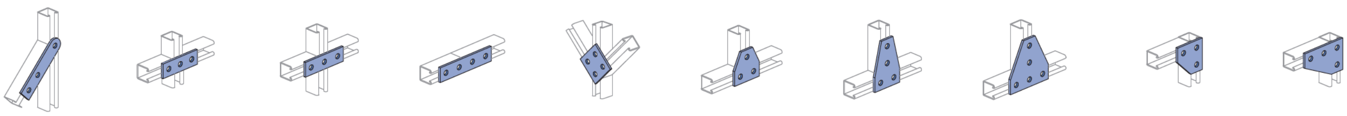


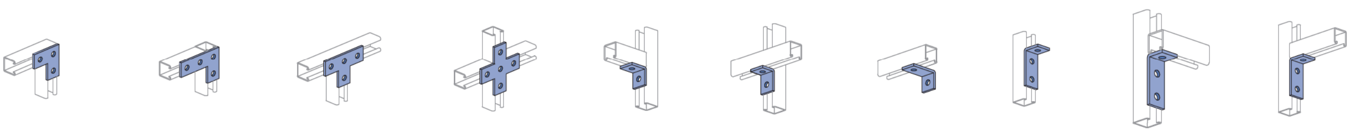
Channel Nuts & Closures

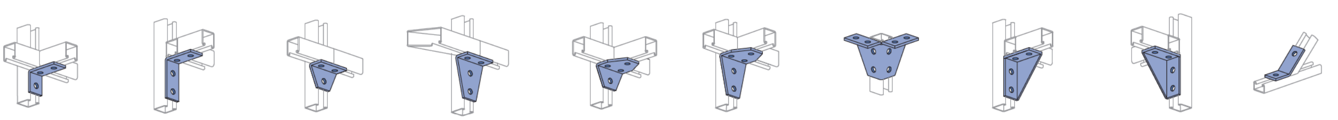


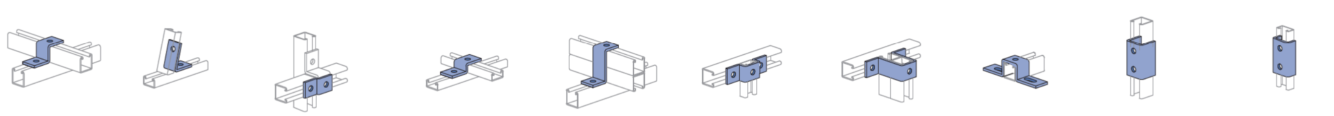
13⁄16" Series Fittings

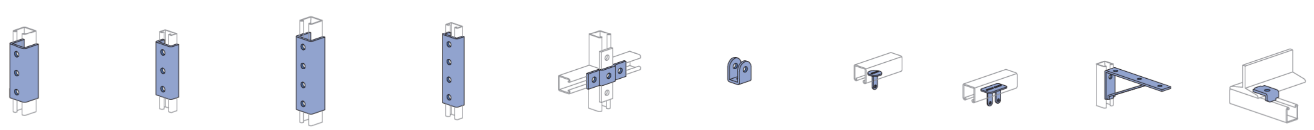


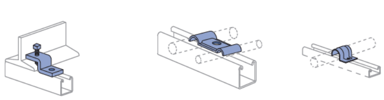






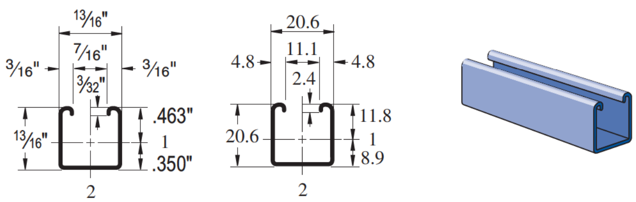






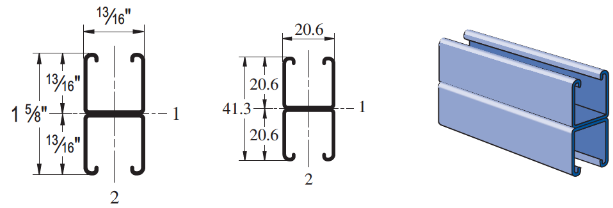
P6000

CPG



Wt/100 Ft: 36 Lbs (54 *kg*/100 m)
Allowable Moment 510 In-Lbs (60 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P6001



Wt/100 Ft: 73 Lbs (108 *kg*/100 m)
Allowable Moment 1,390 In-Lbs (160 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P6000 - Beam Loading

Span In	Max Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Deflection Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
18	230	0.06	230	230	180
24	170	0.11	170	150	100
30	140	0.18	130	100	70
36	110	0.24	90	70	50
42	100	0.35	70	50	30
48	80	0.42	50	40	30
54	80	0.60	40	30	20
60	70	0.72	30	20	20
66	60	0.82	30	20	10
72	60	1.06	20	20	10

P6001 - Beam Loading

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	620	0.04	620	620	620
24	460	0.06	460	460	460
30	370	0.10	370	370	320
36	310	0.14	310	310	220
42	270	0.20	270	240	160
48	230	0.25	230	180	120
54	210	0.32	190	150	100
60	190	0.40	160	120	80
66	170	0.48	130	100	70
72	150	0.55	110	80	50

P6000 - Column Loading

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	600	1,660	1,400	1,100	860
24	490	1,300	1,010	740	590
30	420	990	740	560	450
36	340	770	590	450	370
42	300	630	490	380	310
48	260	540	420	330	270
54	240	470	370	290	**
60	210	410	330	**	**
66	210	370	300	**	**
72	180	340	270	**	**

P6001 - Column Loading

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	1,210	4,320	4,080	3,770	3,500
24	1,170	3,980	3,680	3,330	3,060
30	1,130	3,650	3,330	3,000	2,460
36	1,070	3,370	3,060	2,460	1,800
42	1,020	3,140	2,690	1,900	1,320
48	900	2,930	2,230	1,460	1,010
54	820	2,550	1,800	1,150	800
60	700	2,180	1,460	930	**
66	700	1,830	1,210	770	**
72	550	1,530	1,010	**	**

P6000 & P6001 - Elements of Section

Parameter	P6000		P6001	
Area of Section	0.107	In^2	0.213	In^2
Axis 1-1				
Moment of Inertia (I)	0.009	In^4	0.045	In^4
Section Modulus (S)	0.020	In^3	0.055	In^3
Radius of Gyration (r)	0.295	In	0.460	In
Axis 2-2				
Moment of Inertia (I)	0.012	In^4	0.024	In^4
Section Modulus (S)	0.029	In^3	0.058	In^3
Radius of Gyration (r)	0.333	In	0.333	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in <u>*total*</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 186 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

1¼" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

P6000 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
300	1.5	1	1.5	1.5	1.5
450	1.0	2	1.0	1.0	0.8
600	0.8	3	0.8	0.7	0.5
750	0.6	4	0.6	0.4	0.3
1,000	0.4	7	0.4	0.3	0.2
1,250	0.4	11	0.2	0.2	0.1
1,500	0.3	17	0.1	0.1	0.1
1,750	0.3	24	0.1	0.1	0.0

P6001 - Beam Loading (Metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
300	2.9*	0	2.9*	2.9*	2.9*
450	2.8	1	2.8	2.8	2.8
600	2.1	2	2.1	2.1	2.1
750	1.7	2	1.7	1.7	1.5
1,000	1.2	4	1.2	1.2	0.8
1,250	1.0	7	1.0	0.8	0.5
1,500	0.8	10	0.7	0.5	0.4
1,750	0.7	13	0.5	0.4	0.3
2,000	0.6	17	0.4	0.3	0.2

P6000 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
300	3.1	9.2	8.4	7.3	6.3
450	2.7	7.5	6.3	5.0	3.9
600	2.2	5.9	4.6	3.4	2.7
750	1.8	4.5	3.4	2.5	2.0
1,000	1.4	3.0	2.4	1.8	1.5
1,250	1.1	2.3	1.8	1.4	1.2
1,500	0.9	1.9	1.5	1.2	**
1,750	0.8	1.6	1.2	**	**

P6001 - Column Loading (Metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kgN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
300	5.5	20.7	20.1	19.2	18.2
450	5.4	19.3	18.2	16.9	15.7
600	5.2	17.8	16.5	14.9	13.7
750	5.0	16.4	14.9	13.5	11.2
1,000	4.6	14.4	12.9	9.5	6.7
1,250	3.9	12.7	9.5	6.2	4.3
1,500	3.2	9.9	6.7	4.3	**
1,750	2.6	7.5	4.9	**	**
2,000	2.2	5.7	3.8	**	**

P6000 & P6001 - Elements of Section (Metric)

Parameter			P6000		P6001	
Area of Section			0.69	cm^2	1.38	cm^2
	Axis 1-1					
		Moment of Inertia (I)	0.39	cm^4	1.88	cm^4
		Section Modulus (S)	0.33	cm^3	0.91	cm^3
		Radius of Gyration (r)	0.75	cm	1.17	cm
	Axis 2-2					
		Moment of Inertia (I)	0.49	cm^4	0.99	cm^4
		Section Modulus (S)	0.48	cm^3	0.96	cm^3
		Radius of Gyration (r)	0.85	cm	0.85	cm

Notes:

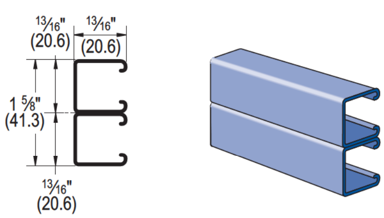
* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

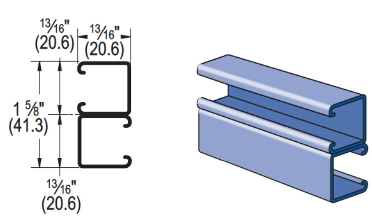
1. Beam loads are given in _total_ uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 186 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

P6001A



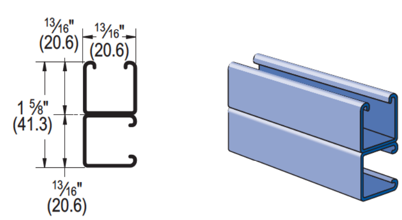
Wt/100 Ft: 73 Lbs (108 *kg*/100 m)
Allowable Moment 1,820 In-Lbs (210 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P6001B



Wt/100 Ft: 73 Lbs (108 *kg*/100 m)
Allowable Moment 1,820 In-Lbs (210 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

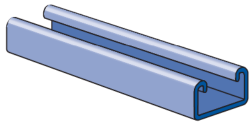
P6001C

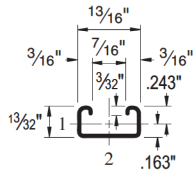


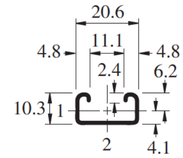
Wt/100 Ft: 73 Lbs (108 *kg*/100 m)
Allowable Moment 1,550 In-Lbs (180 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P7000

PG PL

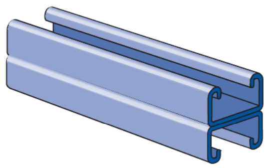


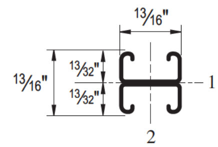


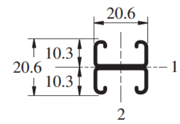


Wt/100 Ft: 25 Lbs (38 *kg*/100m)
Allowable Moment 170 In-Lbs (20 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P7001







Wt/100 Ft: 50 Lbs (75 *kg*/100m)
Allowable Moment 450 In-Lbs (50 N•m)
19 Gauge Nominal Thickness .040" (1.0 *mm*)

P7000 - Beam Loading

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

P7001 - Beam Loading

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	200	0.07	200	200	140
24	150	0.12	150	120	80
30	120	0.19	100	80	50
36	100	0.28	70	50	40
42	90	0.40	50	40	30
48	80	0.53	40	30	20

P7000 - Column Loading

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	420	1,200	990	720	510
24	330	900	640	410	280
30	260	620	410	**	**
36	200	430	280	**	**

P7001 - Column Loading

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	790	2,930	2,690	2,330	1,960
24	740	2,570	2,210	1,720	1,260
30	680	2,180	1,720	1,160	800
36	580	1,780	1,260	800	560
42	500	1,400	920	590	**
48	420	1,070	710	**	**
54	360	850	560	**	**

P7000 & P7001 - Elements of Section

Parameter			P7000		P7001	
Area of Section			0.074	In^2	0.148	In^2
	Axis 1-1					
		Moment of Inertia (I)	0.002	In^4	0.007	In^4
		Section Modulus (S)	0.007	In^3	0.018	In^3
		Radius of Gyration (r)	0.150	In	0.222	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)	0.307	In	0.307	In

Notes:

* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in <u>*total*</u> uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 186 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

P7000 - Beam Loading (metric)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection Span/180 kN	Span/240 kN	Span/360 kN
300	0.5	1	0.5	0.5	0.4
450	0.4	3	0.3	0.2	0.1
600	0.3	5	0.2	0.1	0.1
750	0.2	9	0.1	0.1	0.0
1,000	0.2	16	0.0	0.0	0.0
1,250	0.1	24	0.0	0.0	NR
1,500	0.1	28	0.0	NR	NR

P7001 - Beam Loading (metric)

Span *mm*	Max Allowable Uniform Load *kN*	Defl. at Uniform Load *mm*	Uniform Loading at Deflection Span/180 *kN*	Span/240 *kN*	Span/360 *kN*
300	1.4	1	1.4	1.4	1.4
450	0.9	2	0.9	0.9	0.7
600	0.7	3	0.7	0.5	0.4
750	0.5	5	0.5	0.4	0.2
1,000	0.4	8	0.3	0.2	0.1
1,250	0.3	13	0.2	0.1	0.1
1,500	0.3	19	0.1	0.1	NR

P7000 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
300	2.1	6.4	6.0	5.3	4.5
450	1.9	5.4	4.5	3.3	2.3
600	1.5	4.1	2.9	1.9	1.3
750	1.2	2.8	1.9	1.2	**

P7001 - Column Loading (metric)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G. K = 0.65 kN	K = 0.80 kN	K =1.0 kN	K = 1.2 kN
300	3.6	14.0	13.6	13.0	12.1
450	3.5	13.1	12.1	10.5	8.9
600	3.3	11.6	10.0	7.8	5.8
750	3.0	9.8	7.8	5.3	3.7
1,000	2.4	6.9	4.7	3.0	**
1,250	1.8	4.5	3.0	**	**

P7000 & P7001 - Elements of Section (metric)

Parameter	P7000		P7001	
Area of Section	0.48	cm^2	0.96	cm^2
Axis 1-1				
Moment of Inertia (I)	0.07	cm^4	0.31	cm^4
Section Modulus (S)	0.11	cm^3	0.30	cm^3
Radius of Gyration (r)	0.38	cm	0.57	cm
Axis 2-2				
Moment of Inertia (I)	0.29	cm^4	0.58	cm^4
Section Modulus (S)	0.28	cm^3	0.56	cm^3
Radius of Gyration (r)	0.78	cm	0.78	cm

Notes:

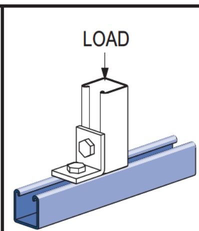
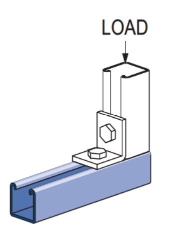
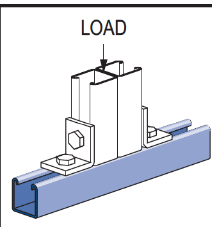
* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

1. Beam loads are given in *total* uniform load (W Lbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to table below for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

Bearing Loads on Unistrut Channel

Loads are calculated based on 2001 Specification For The Design Of Cold Formed Steel Structural Members published by AISI			
Channel	Bearing Length 13⁄16" (20.6 mm) Maximum Allowable Loads - Lbs *(kN)*	Bearing Length 13⁄16" (20.6 mm) Maximum Allowable Loads - Lbs *(kN)*	Bearing Length 1⅝" (41.3 mm) Maximum Allowable Loads - Lbs *(kN)*
P6000	1,000 *(4.45)*	500 *(2.22)*	1,200 *(5.34)*
P7000	1,000 *(4.45)*	500 *(2.22)*	1,200 *(5.34)*

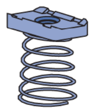
Lateral Bracing Load Reduction Charts

Span In. *(cm)*	Single Channel P6000	Single Channel P7000	Double Channel P6001	Double Channel P7001
24 *(61)*	0.80	0.95	0.99	1.00
36 *(91)*	0.63	0.90	0.89	0.93
48 *(122)*	0.52	0.87	0.79	0.86
60 *(152)*	0.45	0.83	0.70	0.80
72 *(183)*	0.40	0.80	0.60	0.73
84 *(213)*	0.37	0.76	0.51	0.67
96 *(244)*	0.34	0.73	0.44	0.60

Maximum Allowable Pull-Out And Slip Loads

Nut Size/ Thread	Max. Allowable Pull-Out Lbs *(kN)*	Resistance to Slip Lbs *(kN)*	Torque Ft-Lbs (N•m)
¼"-20	250 *1.11*	150 *0.67*	6 *8*

P6006-0832 THRU P6006-1420 CHANNEL NUT W/SPRING EG

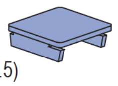


Part Number	Thread Size In	Wt/100 pcs Lbs *(kg)*
P6006-0836	#8 - 36	1 *(0.5)*
P6006-0832	#8 - 32	1 *(0.5)*
P6006-1032	#10 - 32	1 *(0.5)*
P6006-1024	#10 - 24	1 *(0.5)*
P6006-1420	¼"- 20	1 *(0.5)*

P7006-0832 THRU P7006-1420 CHANNEL NUT W/SPRING EG

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)*

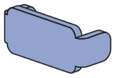
P6280 - END CAP FOR P6000



Material: .060" (1.5)

Wt/100 pcs: 3 Lbs (1.4 *kg*)

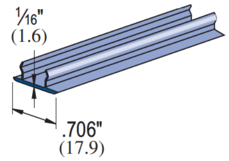
P7280 - END CAP FOR P7000



Material: .048" (1.2)

Wt/100 pcs: 1 Lbs (0.5 *kg*)

P6184 P - CLOSURE STRIP

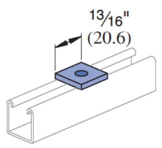


Material: PVC, Plastic.

Standard Length: 10 Feet (3.05 m).

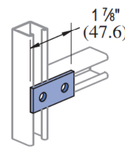
Wt/100 Ft: 4 Lbs (6.0 *kg*/100m)

P6062



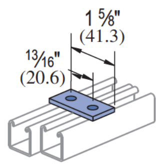
Wt/100 pcs: 2 Lbs (0.9 *kg*)

P6065



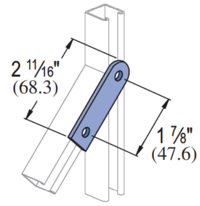
Wt/100 pcs: 5 Lbs (2.3 *kg*)

P6924



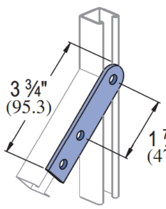
Wt/100 pcs: 5 Lbs (2.3 *kg*)

P7325



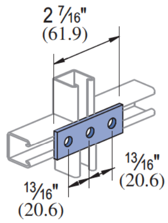
Wt/100 pcs: 7 Lbs (3.2 *kg*)

P7324



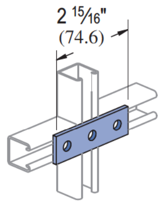
Wt/100 pcs: 10 Lbs (4.5 *kg*)

P6925



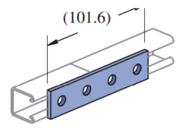
Wt/100 pcs: 7 Lbs (3.2 *kg*)

P6066



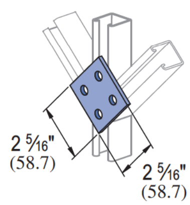
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6067



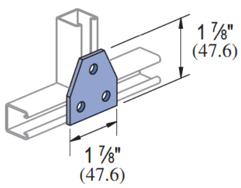
Wt/100 pcs: 11 Lbs (5.0 *kg*)

P6962



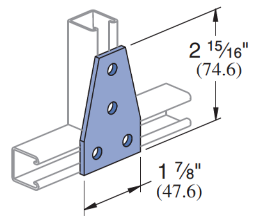
Wt/100 pcs: 19 Lbs (8.6 *kg*)

P6356A



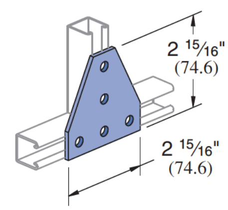
Wt/100 pcs: 10 Lbs (4.5 *kg*)

P6358A



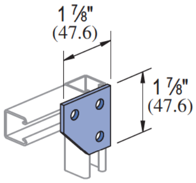
Wt/100 pcs: 15 Lbs (6.8 *kg*)

P6726A



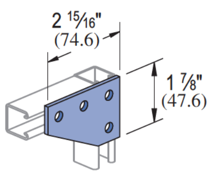
Wt/100 pcs: 22 Lbs (10.0 *kg*)

P6334



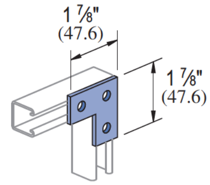
Wt/100 pcs: 11 Lbs (5.0 *kg*)

P6380



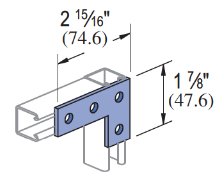
Wt/100 pcs: 15 Lbs (6.8 *kg*)

P6036



Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6380A



Wt/100 pcs: 11 Lbs (5.0 *kg*)

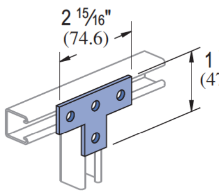
Standard Dimensions for 13/16" (20.6*mm*) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 9/32" (7.1mm); Hole Spacing - From End: 13/32" (10.3mm); Hole Spacing - On Center: 1 1/16" (27.0mm); Width: 13/16"(20.6mm); Thickness: 1/8" (3.2mm)

1¼" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

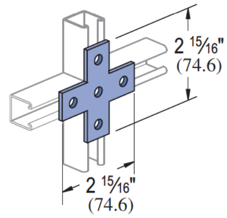
1 1/4" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

P6031



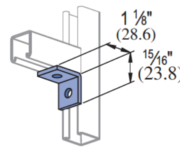
Wt/100 pcs: 11 Lbs (5.0 *kg*)

P6028



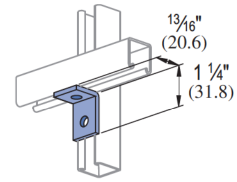
Wt/100 pcs: 14 Lbs (6.4 *kg*)

P6026



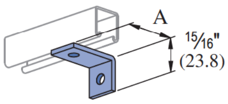
Wt/100 pcs: 5 Lbs (2.3 *kg*)

P6068



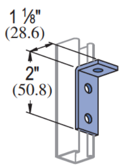
Wt/100 pcs: 5 Lbs (2.3 *kg*)

P6281 , P6282, P6283



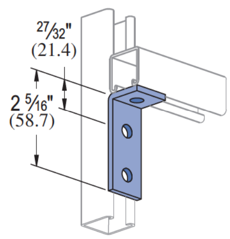
Part Number	A In *(mm)*	Wt/100 pcs Lbs *(kg)*
P6281	2 *50.8*	8 *3.6*
P6282	2½ *63.5*	9 *4.1*
P6283	3 *76.2*	10 *4.5*

P6069



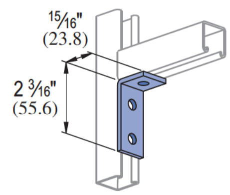
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6326



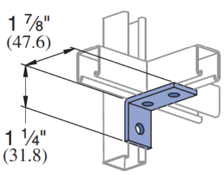
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6346



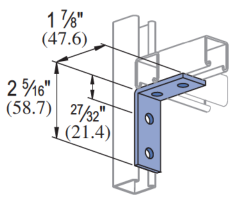
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6458



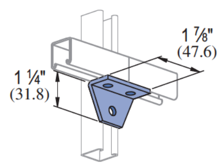
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6325



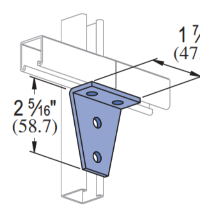
Wt/100 pcs: 11 Lbs (5.0 *kg*)

P6357



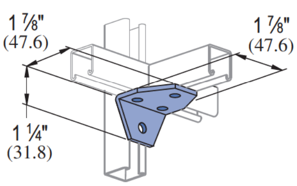
Wt/100 pcs: 10 Lbs (4.5 *kg*)

P6359



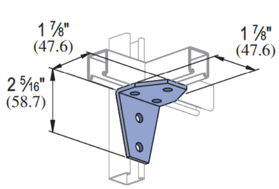
Wt/100 pcs: 15 Lbs (6.8 *kg*)

P6579



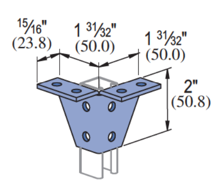
Wt/100 pcs: 15 Lbs (6.8 *kg*)

P7235



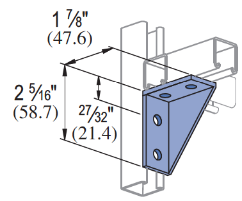
Wt/100 pcs: 18 Lbs (8.2 *kg*)

P6887



Wt/100 pcs: 28 Lbs (12.7 *kg*)

P6331

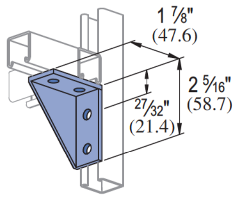


Wt/100 pcs: 19 Lbs (8.6 *kg*)

Standard Dimensions for 13/16" (20.6*mm*) width series channel fittings (Unless Otherwise Shown on Drawing)

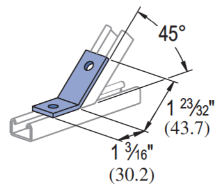
Hole Diameter: 9/32" (7.1mm); Hole Spacing - From End: 13/32" (10.3mm); Hole Spacing - On Center: 1 1/16" (27.0mm); Width: 13/16"(20.6mm); Thickness: 1/8" (3.2mm)

P6332



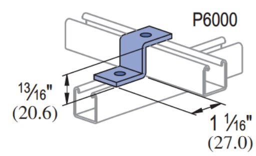
Wt/100 pcs: 19 Lbs (8.6 *kg*)

P6546



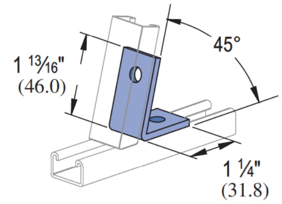
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6045



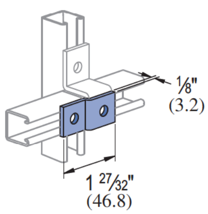
Wt/100 pcs: 7 Lbs (3.2 *kg*)

P6186



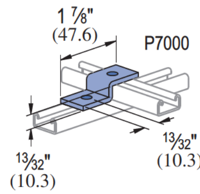
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6454



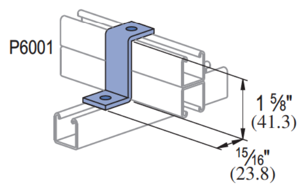
Wt/100 pcs: 5 Lbs (2.3 *kg*)

P7045



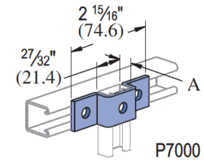
Wt/100 pcs: 6 Lbs (2.7 *kg*)

P6453



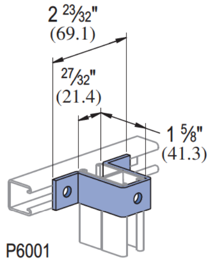
Wt/100 pcs: 9 Lbs (4.1 *kg*)

P6047, P7047



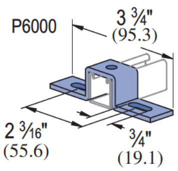
Part No.	A In *(mm)*	Wt/100 pcs Lbs *(kg)*	Use with Channel
P6047	13/16 *20.6*	12 *5.4*	P6000
P7047	13/32 *10.3*	10 *4.5*	P7000

P6737



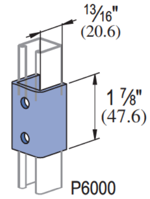
Wt/100 pcs: 16 Lbs (7.3 *kg*)

P6048



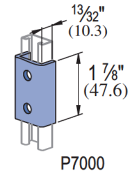
Wt/100 pcs: 14 Lbs (6.4 *kg*)

P6376



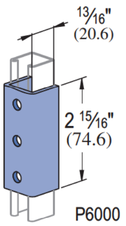
Wt/100 pcs: 17 Lbs (7.7 *kg*)

P7376



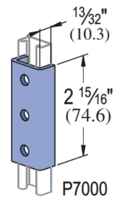
Wt/100 pcs: 11 Lbs (5.0 *kg*)

P6376A



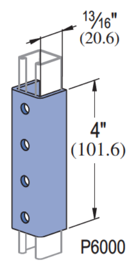
Wt/100 pcs: 26 Lbs (11.8 *kg*)

P7376A



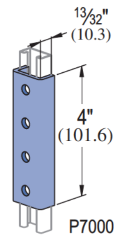
Wt/100 pcs: 16 Lbs (7.3 *kg*)

P6377



Wt/100 pcs: 36 Lbs (16.3 *kg*)

P7377

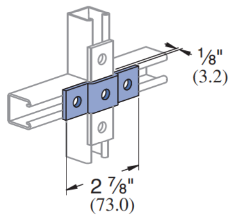


Wt/100 pcs: 24 Lbs (10.9 *kg*)

Standard Dimensions for 13/16" (20.6*mm*) width series channel fittings (Unless Otherwise Shown on Drawing)

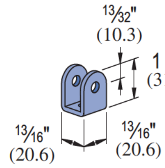
Hole Diameter: 9/32" (7.1mm); Hole Spacing - From End: 13/32" (10.3mm); Hole Spacing - On Center: 1 1/16" (27.0mm); Width: 13/16"(20.6mm); Thickness: 1/8" (3.2mm)

P6455



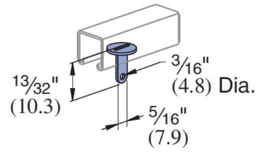
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6973



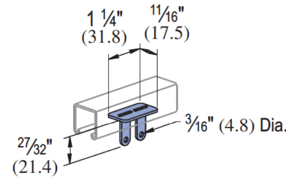
Wt/100 pcs: 8 Lbs (3.6 *kg*)

P6349 Acetal Slide



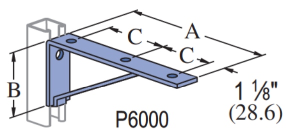
Wt/100 pcs: 1 Lbs (0.5 *kg*)

P6353 Acetal Slide



Wt/100 pcs: 1 Lbs (0.5 *kg*)

P6127 - P6129 Bracket

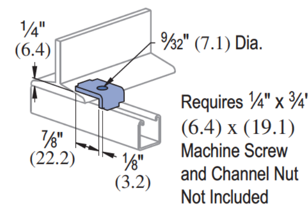


Part No.	Uniform Design Load Lbs *(kN)*	"A" In *(mm)*	"B" In *(mm)*	"C" In *(mm)*	Wt/100 pcs Lbs *(kg)*
P6127	150 *0.67*	6½ *165.1*	2½ *63.5*	2½ *63.5*	30 *13.6*
P6128	150 *0.67*	8½ *215.9*	3¼ *82.6*	3½ *88.9*	40 *18.1*
P6129	130.0 *0.58*	10½ *266.7*	4 *101.6*	4½ *114.3*	50 *22.7*

Safety Factor 2½

Wt/100 pcs: 4 Lbs (1.8 *kg*)

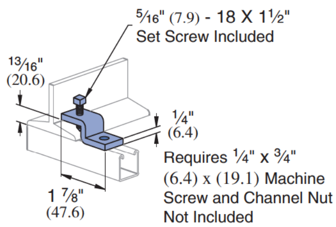
P6386 Beam Clamp



Use in pairs.

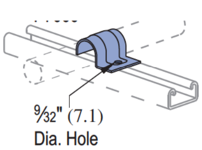
P6379 S Beam Clamp

Use in pairs.



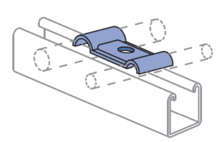
Wt/100 pcs: 13 Lbs (5.9 *kg*)

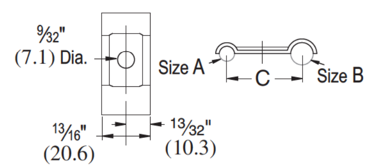
P7008 thru P7020 Tubing Clips



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 *22.2*	5 *2.3*
P7020	1 *25.4*	5 *2.3*

P6805 thru P6810 Tubing Clips



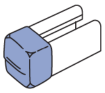
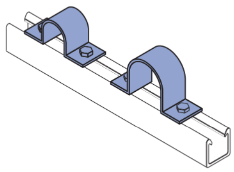
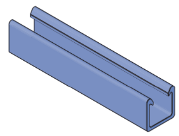
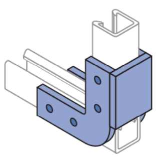
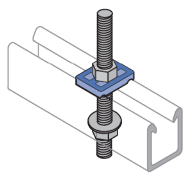
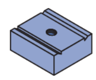


Material: 16 Gauge (1.5)

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*

Standard Dimensions for 13/16" (20.6*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" (27.0mm); Width: 13/16" (20.6mm); Thickness: ⅛" (3.2mm)

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

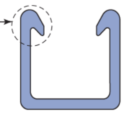
Temperature Ranges – Fiberglass parts are supplied in five different materials covering distinct temperature ranges. The temperature ranges indicated are meant to be used only as a general guideline. Continual exposure to elevated temperatures reduces the strength properties of plastics and glass-reinforced fiberglass. Actual resin test data confirms that a 50% reduction in strength occurs at the extreme high temperature levels.

Chemical Resistance – See the chart on page 204-205 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.

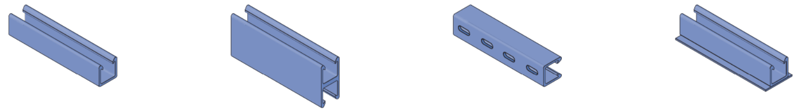
Material Temperature Ratings		
Material Code	Low Temp.	High Temp.
E - (Rigid PVC)	-25°F *(-31°C)*	130°F *(54°C)*
P - (Poly/Glass)	-35°F *(-37°C)*	200°F *(93°C)*
V - (Vinyl/Glass)	-35°F *(-37°C)*	200°F *(93°C)*
PU - (Poly)	-40°F *(-40°C)*	140°F *(60°C)*
N - (Nylon)	-20°F *(-29°C)*	150°F *(66°C)*

Channel - Aickinstrut Flange Profile



Unistrut fiberglass channels, except the SST series, incorporate the Aickinstrut 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 Aickinstrut Flange Profile 1⅝" x 1⅝"

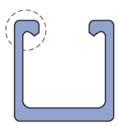


20P/V-2000-Pg 193 | 20P/V-2100-Pg 193 | 20P/V-2200-Pg 193 | 20P/V-2300-Pg 193

Light Duty Aickinstrut Flange Profile 1½" x 1⅛"

20P/V-1000-Pg 194 | 20P/V-1100-Pg 194 | 20P/V-1200-Pg 194 | 20P/V-1300-Pg 194

Channel - SST Profile



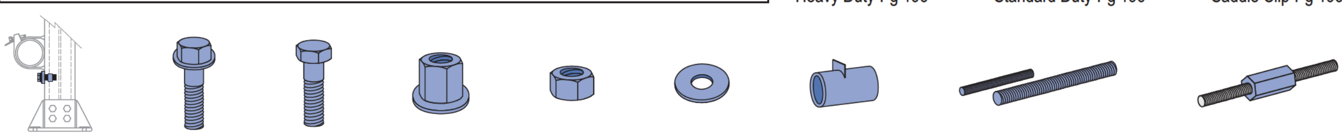
The Unistrut SST profile is similar to the profile of standard metal channel. The Unistrut SST profile will accommodate standard 1⅝" metal channel fittings and components. This profile is available in polyester or vinyl ester resin. The Unistrut SST profile is not compatible with the fiberglass pipe 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.

Heavy Duty SST Profile 1⅝" x 1⅝"

20P/V-2000 SST-Pg 195 | 20P/V-2100 SST-Pg 195 | 20P/V-2200 SST-Pg 195 | 20P/V-2300 SST-Pg 195

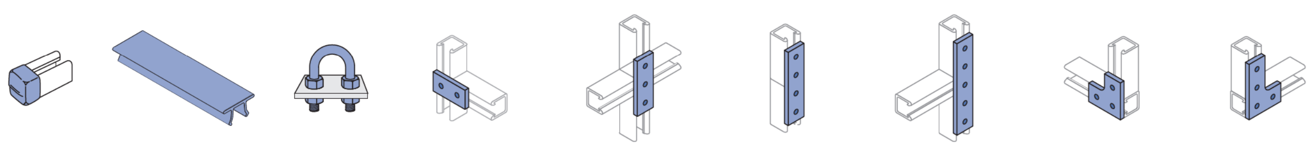
Hardware & Accessories

Heavy Duty-Pg 196 | Standard Duty-Pg 196 | Saddle Clip-Pg 196

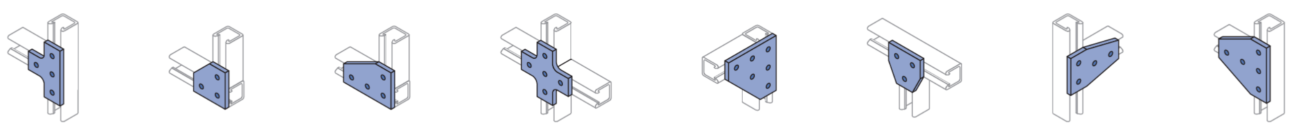


Stop Lock-Pg 196 | Hex Flange Bolt-Pg 196 | Hex Bolt-Pg 197 | Hex Flange Nut-Pg 197 | Hex Nut - Pg 197 | Flat Washer-Pg 197 | Spacer - Pg 197 | Threaded Rod-Pg 198 | Rod Coupler-Pg 198

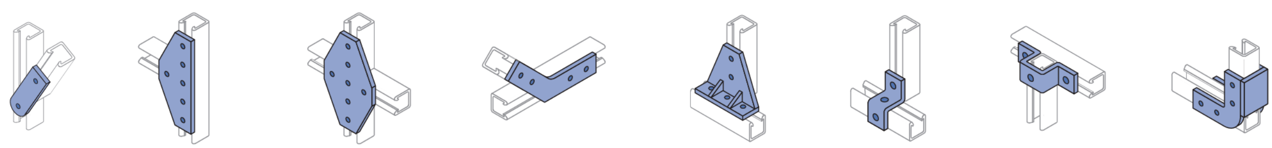
Fittings



End Cap-Pg 198 | Capping Strip-Pg 198 | U-Bolt-Pg 198 | 20P/V-2500-Pg 199 | 20P/V-2502-Pg 199 | 20P/V-2504-Pg 199 | 20P/V-2506-Pg 199 | 20P/V-2508-Pg 199 | 20P/V-2510-Pg 199

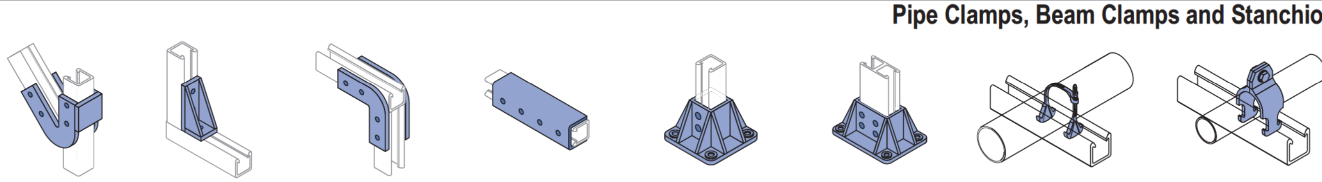


20P/V-2512-Pg 199 | 20P/V-2514-Pg 199 | 20P/V-2516-Pg 199 | 20P/V-2518-Pg 199 | 20P/V-2520-Pg 199 | 20P/V-2522-Pg 199 | 20P/V-2524-Pg 199 | 20P/V-2526-Pg 200

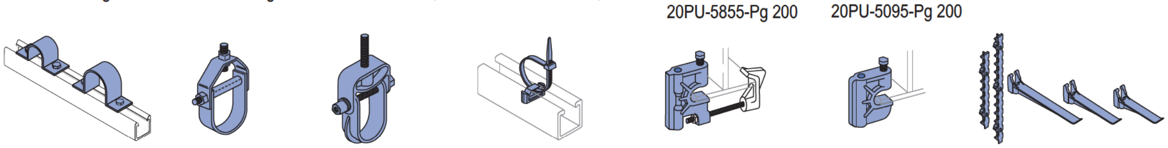


20P/V-2528-Pg 200 | 20P/V-2530-Pg 200 | 20P/V-2534-Pg 200 | 20P/V-2540-Pg 200 | 20PU-2538-Pg 200 | 20PU-2611-Pg 200 | 20PU-2613-Pg 200 | 50PU-1508 50PU-2008-Pg 200

Pipe Clamps, Beam Clamps and Stanchions

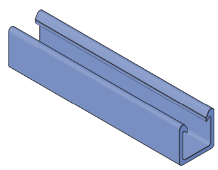


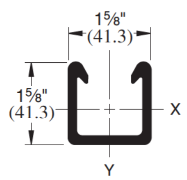
50PU-2045-Pg 200 | 50PU-2636-Pg 200 | 50PU-2090-Pg 200 | 50PU-2616-Pg 200 | 20PU-5853 20PU-5855-Pg 200 | 20PU-5903 20PU-5095-Pg 200 | Adj. Pipe Clamp-Pg 201 | Rigid Pipe Clamp-Pg 201



Pipe Strap-Pg 201 | Fabricated Clevis Hanger-Pg 202 | Molded Clevis Hanger-Pg 202 | Channel Insert-Pg 202 | Molded Beam Clamp Assembly-Pg 203 | Molded Beam Clamp-Pg 203 | Rack Stanchion-Pg 203

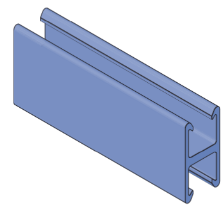
F20P-2000, F20V-2000
Heavy Duty Single Channel - Aickinstrut flange profile

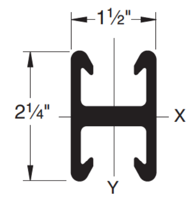




Wt/100 Ft: 82 Lbs(122 kg/100 m)

F20P-2100, F20V-2100
Heavy Duty Back-to-Back Channel - Aickinstrut flange profile





Wt/100 Ft: 164 Lbs (244 kg/100 m)

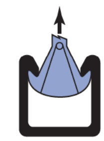
Section Properties

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-2000, F20V-2000	0.82 *1.2*	1.06 *6.8*	0.31 *12.9*	0.54 *13.7*	0.7 *17.8*	0.93 *23.622*	0.42 *17.5*	0.63 *16.0*	0.82 *20.8*
F20P-2100, F20V-2100	1.64 *2.4*	2.12 *13.7*	1.77 *73.7*	0.91 *23.1*	1.63 *41.4*	1.63 *41.402*	0.85 *35.4*	0.63 *16.0*	0.82 *20.8*

Flange Loading

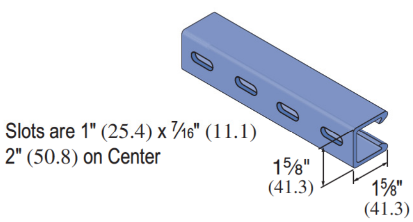
Part Number	Pull-Out Strength* Lbs *(kN)*
F20V-2000/2100	449 *2.0*
F20P-2000/2100	360 *1.6*

FLANGE LOAD



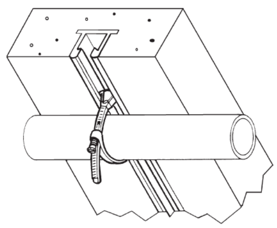
*Values shown represent a 3:1 safety factor

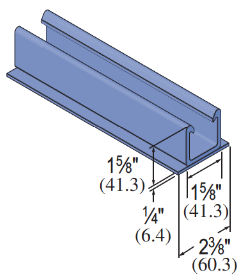
F20P-2200, F20V-2200
Slotted Channel



Wt/100 Ft: 82 Lbs (122 kg/100 m)

F20P-2300, F20V-2300
w/Concrete Insert





Wt/100 Ft: 88 Lbs (131 kg/100 m)

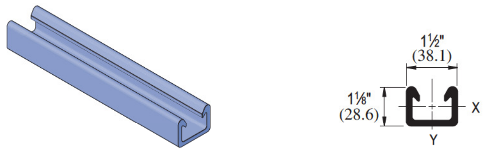
F20P-2000, F20V-2000
Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kN)*	Max. Uniform Beam Load Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kN)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kN)*
12 *304.8*	3,561 *15.8*	0.102 *2.6*	1,159 *5.2*	0.033 *0.8*	5,160 *23.0*
18 *457.2*	2,374 *10.6*	0.23 *5.8*	515 *2.3*	0.05 *1.3*	4,704 *20.9*
24 *609.6*	1,781 *7.9*	0.41 *10.4*	290 *1.3*	0.067 *1.7*	4,168 *18.5*
30 *762.0*	1,424 *6.3*	0.64 *16.3*	185 *0.8*	0.083 *2.1*	3,553 *15.8*
36 *914.4*	1,187 *5.3*	0.922 *23.4*	129 *0.6*	0.1 *2.5*	2,859 *12.7*
48 *1,219.2*	890 *4.0*	1.638 *41.6*	72 *0.3*	0.133 *3.4*	1,636 *7.3*
60 *1,524.0*	712 *3.2*	2.56 *65*	46 *0.2*	0.167 *4.2*	1,047 *4.7*
72 *1,828.8*	594 *2.6*	3.686 *93.6*	32 *0.1*	0.2 *5.1*	727 *3.2*

F20P-2100, F20V-21000
Channel Beam/Column Loading

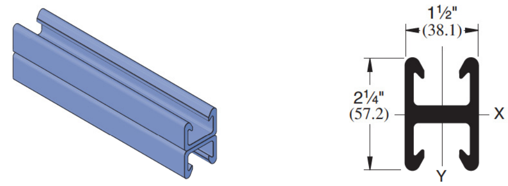
Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1) Load Lbs *(kN)*	Max. Uniform Beam Load Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span Load Lbs *(kN)*	Uniform Load at Deflection of 1/360 Span Deflection In *(mm)*	Maximum Column Load Lbs *(kN)*
12 *304.8*	5,559 *24.7*	0.028 *0.7*	5,559 *24.7*	0.033 *0.8*	9,454 *42.1*
18 *457.2*	3,706 *16.5*	0.064 *1.6*	2,914 *13.0*	0.05 *1.3*	8,866 *39.4*
24 *609.6*	2,780 *12.4*	0.113 *2.9*	1,639 *7.3*	0.067 *1.7*	8,181 *36.4*
30 *762.0*	2,224 *9.9*	0.177 *4.5*	1,049 *4.7*	0.083 *2.1*	7,405 *32.9*
36 *914.4*	1,853 *8.2*	0.254 *6.5*	730 *3.2*	0.1 *2.5*	6,451 *28.7*
48 *1,219.2*	1,390 *6.2*	0.452 *11.5*	410 *1.8*	0.133 *3.4*	4,534 *20.2*
60 *1,524.0*	1,112 *4.9*	0.707 *18.0*	262 *1.2*	0.167 *4.2*	2,902 *12.9*
72 *1,828.8*	927 *4.1*	1.018 *25.9*	182 *0.8*	0.2 *5.1*	2,015 *9.0*

F20P-1000, F20V-1000
Light Duty Single Channel - Aickinstrut flange Profile



Wt/100 Ft: 47 Lbs (70 kg/100 m)

F20P-1100, F20V-1100
Light Duty Back-to-Back Channel - Aickinstrut flange Profile



Wt/100 Ft: 94 Lbs (140 kg/100 m)

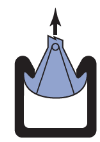
Section Properties

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-1000, F20V-1000	0.47 *0.7*	0.61 *3.9*	0.1 *4.2*	0.4 *10*	0.51 *13*	0.62 *16*	0.22 *9.2*	0.6 *15*	0.75 *19*
F20P-1100, F20V-1100	0.94 *1.4*	1.22 *7.9*	0.42 *17.5*	0.59 *15*	1.13 *29*	1.13 *28*	0.44 *18.3*	0.6 *15*	0.75 *19.1*

Flange Loading

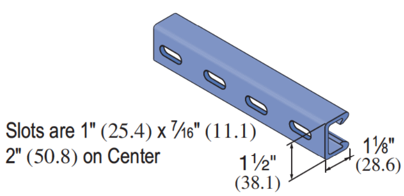
Part Number	Pull-Out Strength* Lbs *(kN)*
F20V-1000/1100	213 *1.0*
F20P-1000/1100	213 *1.0*

FLANGE LOAD



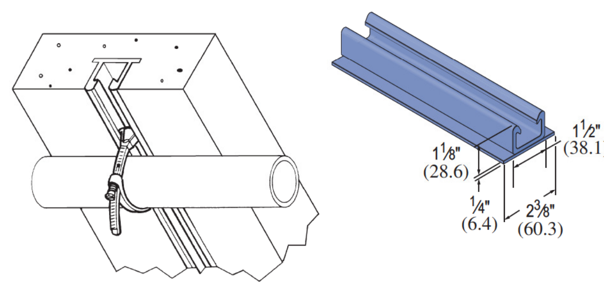
*Values shown represent a 3:1 safety factor

F20P-1200, F20V-1200 — Slotted Channel



Wt/100 Ft: 47 Lbs (70 kg/100 m)

F20P-1300, F20V-1300 — w/Concrete Insert



Wt/100 Ft: 53 Lbs (79 kg/100 m)

F20P-1000, F20V-1000 — Channel Beam/Column Loading

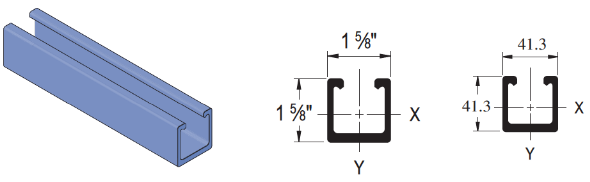
Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1): Load Lbs *(kN)*	Max. Uniform Beam Load (Safety Factor - 3:1): Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span: Load Lbs *(kN)*	Uniform Load at Deflection of 1/360 Span: Deflection In *(mm)*	Maximum Column Load Lbs *(kN)*
12 *304.8*	1,629 *7.2*	0.151 *3.8*	359 *1.6*	0.033 *0.8*	2,759 *12.3*
18 *457.2*	1,086 *4.8*	0.340 *8.6*	160 *0.7*	0.050 *1.3*	2,351 *10.5*
24 *609.6*	815 *3.6*	0.605 *15.4*	90 *0.4*	0.067 *1.7*	1,862 *8.3*
30 *762.0*	652 *2.9*	0.945 *24.0*	57 *0.3*	0.083 *2.1*	1,298 *5.8*
36 *914.4*	543 2.4	1.360 34.5	40 0.2	0.100 2.5	901 4.0
48 *1,219.2*	407 *1.8*	2.418 *61.4*	22 *0.1*	0.133 *3.4*	507 *2.3*
60 *1,524.0*	326 *1.5*	3.779 *96.0*	14 *0.1*	0.167 *4.2*	324 *1.4*
72 *1,828.8*	272 *1.2*	5.441 *138.2*	10 *0.0*	0.200 *5.1*	225 *1.0*

F20P-1100, F20V-1100 — Channel Beam/Column Loading

Span In *(mm)*	Max. Uniform Beam Load (Safety Factor - 3:1): Load Lbs *(kN)*	Max. Uniform Beam Load (Safety Factor - 3:1): Deflection In *(mm)*	Uniform Load at Deflection of 1/360 Span: Load Lbs *(kN)*	Uniform Load at Deflection of 1/360 Span: Deflection In *(mm)*	Maximum Column Load Lbs *(kN)*
12 *304.8*	3,804 *16.9*	0.082 *2.1*	1,556 *6.9*	0.033 *0.8*	5,961 *26.5*
18 *457.2*	2,536 *11.3*	0.183 *4.6*	691 *3.1*	0.05 *1.3*	5,509 *24.5*
24 *609.6*	1,902 *8.5*	0.326 *8.3*	389 *1.7*	0.067 *1.7*	4,979 *22.1*
30 *762.0*	1,522 *6.8*	0.509 *12.9*	249 *1.1*	0.083 *2.1*	4,375 *19.5*
36 *914.4*	1,268 *5.6*	0.734 *18.6*	173 *0.8*	0.1 *2.5*	3,698 *16.4*
48 *1,219.2*	951 *4.2*	1.304 *33.1*	97 *0.4*	0.133 *3.4*	2,254 *10.0*
60 *1,524.0*	761 *3.4*	2.038 *51.8*	62 *0.3*	0.167 *4.2*	1,442 *6.4*
72 *1,828.8*	634 *2.8*	2.935 *74.5*	43 *0.2*	0.2 *5.1*	1,001 *4.5*

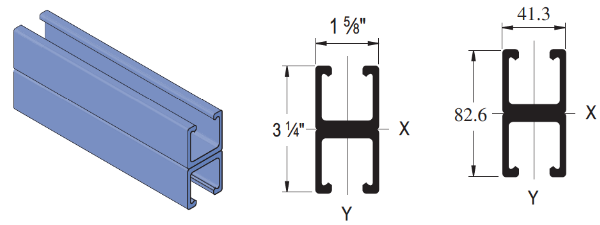
UNISTRUT®

F20P-2000 SST, F20V-2000 SST
Heavy Duty Single Channel - SST Profile



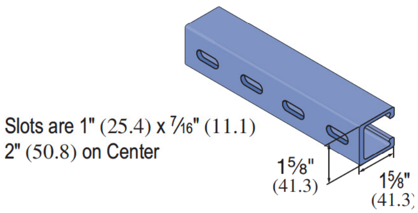
Wt/100 Ft: 82 Lbs (122 kg/100 m)

F20P-2100 SST, F20V-2100 SST
Heavy Duty Back-to-Back Channel - SST Profile



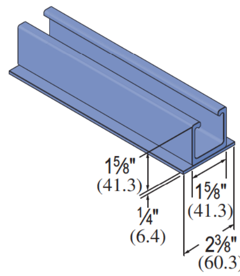
Wt/100 Ft: 164 Lbs (244 kg/100 m)

F20P-2200 SST, F20V-2200 SST — Slotted Channel



Wt/100 Ft: 82 Lbs (122 kg/100 m)

F20P-2300 SST, F20V-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-2000 SST, F20V-2000 SST
Channel Beam/Column Loading

	Maximum Uniform Beam Load (Safety Factor - 3:1)		Deflection @ Max. Allowable Beam Load		Deflection @ Max. Deflection = 0.25 In (Lbs)		Uniform Load @ Max. Deflection = 0.50 In (Lbs)		
Span In (mm)	Poly Lbs (kN)	Vinyl Lbs (kN)	Poly In (mm)	Vinyl In (mm)	Poly Lbs (kN)	Vinyl Lbs (kN)	Poly Lbs (kN)	Vinyl Lbs (kN)	Max. Column Load Lbs (kN)
12	1,720	2,150	0.07	0.07	—	—	—	—	3,650
304.8	*7.6*	*9.6*	*1.8*	*1.8*					*16.2*
18	1,150	1,440	0.15	0.17	—	—	—	—	3,370
457.2	*5.1*	*6.4*	*3.8*	*4.3*					*15.0*
24	860	1,080	0.27	0.3	810	910	—	—	2,960
609.6	*3.8*	*4.8*	*6.9*	*7.6*	*3.6*	*4.0*			*13.2*
30	690	870	0.42	0.48	410	460	—	—	2,450
762.0	*3.1*	*3.9*	*10.7*	*12.2*	*1.8*	*2.0*			*10.9*
36	580	730	0.61	0.69	240	270	480	540	1,800
914.4	*2.6*	*3.2*	*15.5*	*17.5*	*1.1*	*1.2*	*2.1*	*2.4*	*8.0*
48	430	540	1.07	1.2	100	115	200	230	1,010
1,219.2	*1.9*	*2.4*	*27.2*	*30.5*	*0.4*	*0.5*	*0.9*	*1.0*	*4.5*
60	350	440	1.7	1.91	60	70	120	135	260
1,524.0	*1.6*	*2.0*	*43.2*	*48.5*	*0.3*	*0.3*	*0.5*	*0.6*	*1.2*
72	290	370	2.44	2.78	30	34	60	70	NR
1,828.8	*1.3*	*1.6*	*62.0*	*70.6*	*0.1*	*0.2*	*0.3*	*0.3*	*NR*

F20P-2100 SST, F20V-2100 SST
Channel Beam/Column Loading

	Maximum Uniform Beam Load (Safety Factor - 3:1)		Deflection @ Max. Allowable Beam Load		Deflection @ Max. Deflection = 0.25 In (Lbs)		Uniform Load @ Max. Deflection = 0.50 In (Lbs)		
Span In (mm)	Poly Lbs (kN)	Vinyl Lbs (kN)	Poly In (mm)	Vinyl In (mm)	Poly Lbs (kN)	Vinyl Lbs (kN)	Poly Lbs (kN)	Vinyl Lbs (kN)	Max. Column Load Lbs (kN)
12	5,080	6,350	0.04	0.04	—	—	—	—	7,300
304.8	*22.6*	*28.2*	*1.0*	*1.0*					*32.5*
18	3,390	4,240	0.09	0.1	—	—	—	—	6,740
457.2	*15.1*	*18.9*	*2.3*	*2.5*					*30.0*
24	2,540	3,180	0.16	0.17	—	—	—	—	5,920
609.6	*11.3*	*14.1*	*4.1*	*4.3*					*26.3*
30	2,040	2,550	0.24	0.27	—	2,350	—	—	4,900
762.0	*9.1*	*11.3*	*6.1*	*6.9*		*10.5*			*21.8*
36	1,700	2,130	0.35	0.39	1,220	1,370	—	—	3,600
914.4	*7.6*	*9.5*	*8.9*	*9.9*	*5.4*	*6.1*			*16.0*
48	1,270	1,590	0.62	0.69	520	590	1,040	1,170	2,020
1,219.2	*5.6*	*7.1*	*15.7*	*17.5*	*2.3*	*2.6*	*4.6*	*5.2*	*9.0*
60	1,020	1,280	0.97	1.09	270	310	540	610	520
1,524.0	*4.5*	*5.7*	*24.6*	*27.7*	*1.2*	*1.4*	*2.4*	*2.7*	*2.3*
72	850	1,070	1.4	1.57	160	180	320	360	NR
1,828.8	*3.8*	*4.8*	*35.6*	*39.9*	*0.7*	*0.8*	*1.4*	*1.6*	*NR*

1¼" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
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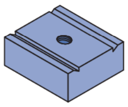
Index

Heavy Duty Channel Nuts

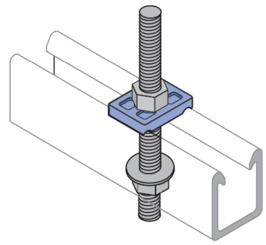


- Heavy duty channel nuts are designed to be used where high thread shear values or spring nuts are required. They can not be used with light duty 1000 series channel or SST profile channel.
- Material: glass-reinforced polyurethane.

Part Number	Size	Thread Shear Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-CNHD	⅜"-16	1,400 *6.23*	8 *11*	5.7 *2.6*
F500PU-CNHD	½"-13	1,400 *6.23*	8 *11*	5.3 *2.4*
F625PU-CNHD	⅝"-11	1,400 *6.23*	10 *14*	5.1 *2.3*
F750PU-CNHD	¾"-10	1,400 *6.23*	10 *14*	4.4 *2.0*
F10PU-CNMHD	10 mm	1,400 *6.23*	8 *11*	5.8 *2.6*
F12PU-CNMHD	12 mm	1,400 *6.23*	8 *11*	5.5 *2.5*
F16PU-CNMHD	16 mm	1,400 *6.23*	10 *14*	5.3 *2.4*
F20PU-CNMHD	20 mm	1,400 *6.23*	10 *14*	4.4 *2.0*

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

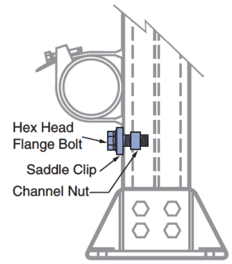
Saddle Clips



- 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



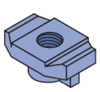
- Stop-Lock Assemblies reduce the chance of pipe slippage when running supports vertically and are recommended for applications that are subject to vibration, have regular contact with fluids or are vertically mounted. The Stop-Locks fit both sizes of channel.
- Material: glass-reinforced polyurethane.

Part Number	Size (in.)	Force Resistance Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F200-4227	⅜"	200 *0.9*	7 *9*	6.3 *2.9*
F200-4219	½"	220 *1.0*	12 *16*	6.4 *2.9*
F200-4343	⅝"**	250 *1.1*	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.

Standard Duty Channel Nuts

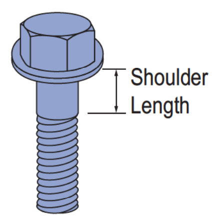


- Standard Duty channel nuts are designed for light duty applications that do not require high thread shear values. They can be used with both light duty series 1000 and heavy duty series 2000 fiberglass channel.
- Not for use with SST profile channel.
- Material: glass-reinforced polyurethane.

Part Number	Size	Thread Shear Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-CN	¼"-20	460 *2.05*	2 *3*	1.8 *0.8*
F312PU-CN	5/16"-18	460 *2.05*	2 *3*	1.7 *0.8*
F375PU-CN	⅜"-16	460 *2.05*	3 *4*	1.8 *0.8*
F500PU-CN	½"-13	460 *2.05*	3 *4*	1.4 *0.6*
F10PU-CN	10 mm	460 *2.05*	3 *4*	1.7 *0.8*
F12PU-CN	12 mm	460 *2.05*	3 *4*	1.4 *0.6*
F10PU-CNS	#10 Screw	460 *2.05*	N/A	1.9 *0.9*

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

Hex Flange Bolts

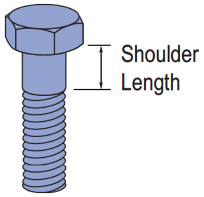


- Fiberfast bolts are ideal for mechanical connections that require a high degree of corrosion resistance. The ⅜" diameter fasteners are recommended for all channel fitting mechanical connections.
- Material: glass-reinforced polyurethane.

Part Number	Size (in.)	Thread Shear Lbs *(kN)**	Shank Shear Lbs *(kN)**	Shoulder Length In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-075	¼ x ¾	110 *0.49*	210 *0.93*	Full Thread	0.8 *1*	.4 *0.2*
F250PU-100	¼ x 1	110 *0.49*	210 *0.93*	Full Thread	0.8 *1*	.5 *.02*
F250PU-150	¼ x 1½	110 *0.49*	210 *0.93*	½ *12.7*	0.8 *1*	.6 *0.3*
F500PU-125	½ x 1¼	450 *2.00*	870 *3.87*	Full Thread	8 *11*	1.0 *0.5*
F500PU-150	½ x 1½	450 *2.00*	870 *3.87*	Full Thread	8 *11*	1.1 *.05*
F500PU-200	½ x 2	450 *2.00*	870 *3.87*	¾ *19.1*	8 *11*	1.3 *0.6*
F500PU-250	½ x 2½	450 *2.00*	870 *3.87*	Full Thread	8 *11*	1.6 *0.7*
F500PU-300	½ x 3	450 *2.00*	870 *3.87*	1 *25.4*	8 *11*	1.8 *0.8*
F500PU-350	½ x 3½	450 *2.00*	870 *3.87*	2 3/16 *55.6*	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.

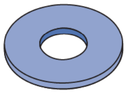
Part Number	Size (in.)	Thread Shear Lbs *(kN)**	Shank Shear Lbs *(kN)**	Shoulder Length In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-125	⅜ x 1¼	250 *1.11*	470 *2.09*	Full Thread	3 *4*	1.0 *0.5*
F375PU-150	⅜ x 1½	250 *1.11*	470 *2.09*	¼ *6.4*	3 *4*	1.1 *0.5*
F375PU-200	⅜ x 2	250 *1.11*	470 *2.09*	½ *12.7*	3 *4*	1.3 *0.6*
F375PU-250	⅜ x 2½	250 *1.11*	470 *2.09*	¾ *19.1*	3 *4*	1.6 *0.7*
F375PU-300	⅜ x 3	250 *1.11*	470 *2.09*	1 *25.4*	3 *4*	1.8 *0.8*
F625PU-125	⅝ x 1¼	700 *3.11*	1,360 *6.05*	¼ *6.4*	12 *16*	2.5 *1.1*
F625PU-150	⅝ x 1½	700 *3.11*	1,360 *6.05*	¼ *6.4*	12 *16*	2.8 *1.3*
F625PU-200	⅝ x 2	700 *3.11*	1,360 *6.05*	¼ *6.4*	12 *16*	3.2 *1.5*
F625PU-250	⅝ x 2½	700 *3.11*	1,360 *6.05*	¼ *6.4*	12 *16*	3.4 *1.5*
F625PU-300	⅝ x 3	700 *3.11*	1,360 *6.05*	¼ *6.4*	12 *16*	3.9 *1.8*
F625PU-350	⅝ x 3½	700 *3.11*	1,360 *6.05*	1¼ *6.4*	12 *16*	5.5 *2.5*

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

Flat Washers

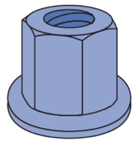
Material: PVC

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*	0.1 *0.05*
F375E-999	⅜	1.00 *25*	0.1 *0.05*
F500E-999	½	1.25 *32*	0.5 *0.2*
F625E-999	⅝	1.50 *38*	0.5 *0.2*
F750E-999	¾	1.50 *38*	1.0 *0.5*
F1000E-999	1	2.25 *57*	1.5 *0.7*

Hex Flange Nuts

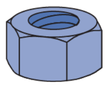


- The hex flange nut is preferred for applications that require additional thread engagement (such as with all-thread rod) or maximum thread shear strength.
- Material: glass-reinforced polyurethane.

Part Number	Size (in.)	Thread Shear Lbs *(kN)**	Height In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-FN-000	⅜-16	500 *2.22*	0.750 *19.1*	3 *4*	0.8 *0.4*
F500PU-FN-000	½-13	1,200 *5.34*	0.855 *21.7*	8 *11*	1.6 *0.7*
F625PU-FN-000	⅝-11	2,200 *9.79*	1.220 *31.0*	12 *16*	3.5 *1.6*
F750PU-FN-000	¾-10	2,900 *12.90*	1.590 *40.4*	15 *20*	5.5 *2.5*

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

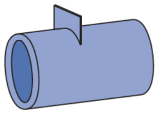
Hex Nuts



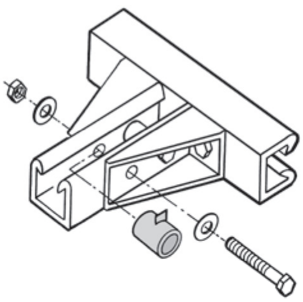
Part Number	Size (in.)	Thread Shear Lbs *(kN)**	Height In *(mm)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F250PU-000	¼-20	150 *0.67*	0.218 *5.5*	0.8 *1*	0.1 *0.05*
F375PU-000	⅜-16	460 *2.05*	0.328 *8.3*	3 *4*	0.3 *0.1*
F500PU-000	½-13	800 *3.56*	0.437 *11.1*	8 *11*	0.5 *0.2*
F625PU-000	⅝-11	1,000 *4.45*	0.546 *13.9*	12 *16*	1.5 *0.7*

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

F50PU-500SP Channel Spacers

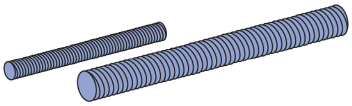


- Channel spacers are designed to prevent wall compression under heavy loading conditions. Such loading occurs during the torquing of hardware for channel fittings.
- The spacers are designed to be used only with 1⅝" channels and will accommodate ⅜" and ½" bolts.
- Material: molded from polyurethane



Wt/100 pcs: 2.0 Lbs (.91 kg)

Threaded Rod



Material: pultruded vinyl ester resin and is gray in color.

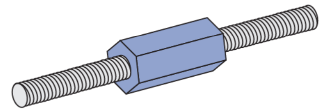
* Thread shear values shown represent a 3:1 safety factor.

** 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)

Part Number	Size (in.)	Weight Lbs *(kg)*	Thread Shear Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs 4' in Len. Lbs *(kg)*
F200-3827	⅜-16	0.07 *0.03*	415 *1.85*	5 *7*	35 *15.9*
F200-3828	½-13	0.12 *0.05*	570 *2.54*	10 *14*	57 *25.9*
F200-3829	⅝-11	0.18 *0.08*	1,260 *5.60*	40 *54*	91 *41.3*
F200-3830	¾-10	0.28 *0.13*	1,700 *7.56*	50 *68*	133 *60.3*
F200-3831	1-8	0.50 *0.23*	3,000 *13.34*	60 *81*	200 *90.7*

A-Konnector Rod Couplers

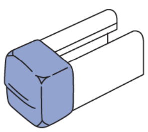
A-Konnectors provide an excellent means for extending FRP all-thread rods beyond their standard lengths. A-Konnectors are manufactured from glass-reinforced polyurethane and are colored gray. A-Konnectors are packaged in bags containing 25 pieces.



Part Number	Size (in.)	Length In (mm)	Thread Shear Lbs (kN)*	Wt/100 pcs Lbs (kg)
F200-3840	⅜-16	2¼ *57.2*	800 *3.56*	6.5 *2.9*
F200-3841	½-13	2¼ *57.2*	870 *3.87*	6.0 *2.7*
F200-3842	⅝-11	2¼ *57.2*	1,500 *6.67*	13.0 *5.9*
F200-3843	¾-10	2¼ *57.2*	1,500 *6.67*	11.0 *5.0*

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

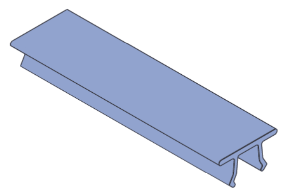
FAIC-EC – Channel End Cap



- 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.

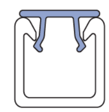
Wt/100 pcs: 3.4 Lbs (1.5 kg)

F20E-5000 – Channel Capping Strip



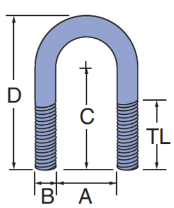
- Material: PVC
- Installs simply by pressing it onto the channel opening. It is designed to be used when a cover is desired for the channel opening (such as concrete embedment channel).

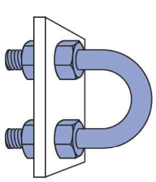
Supplied in 10 foot lengths.



Wt/100 Ft: 5 Lbs (7.4 kg/100 m)

Nonmetallic U-Bolts





Note: Plate not included.
Illustration purpose only

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

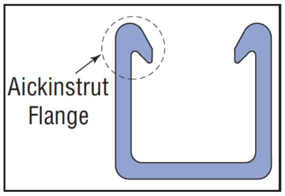
Part Number	Size In	"A" Dim. In *(mm)*	"B" Dim. In *(mm)*	"C" Dim. In *(mm)*	"D" Dim. In *(mm)*	"TL" Dim. In *(mm)*	Load Lbs *(kN)**	Torque In/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
FUB-050	½	0.937 *23.8*	0.375 *9.5*	1.568 *39.8*	2.412 *61.3*	1.25 *31.8*	135 *0.60*	40 *5*	3 *1.4*
FUB-075	¾	1.125 *28.6*	0.375 *9.5*	1.662 *42.2*	2.600 *66.0*	1.25 *31.8*	135 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	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 *0.60*	120 *14*	17 *7.7*

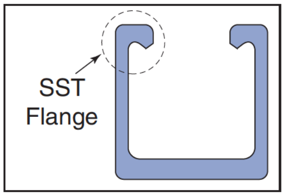
- Unistrut Nonmetallic U-Bolts provide a corrosion resistant alternative to traditional metallic U-Bolts. They have oversized diameters which allow them to hold steel conduit and plastic pipe. These bolts will outlast stainless steel in most corrosive applications.
- Each U-Bolt comes with two polyurethane hex nuts. Additional nuts and washers can be purchased separately.
- Material: glass-reinforced polyurethane

Channel Fittings

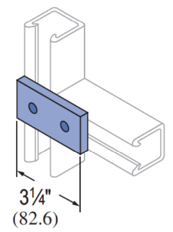
- Channel Fittings are required to fabricate structures and are easily attached to Channels with channel nuts and polyurethane fasteners. The fittings are offered in two types; fabricated (cut from flat stock) or molded.
- Material (Fabricated Fittings): Either polyester (P Series) or vinyl ester (V 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 Aickinstrut flange profile, however they can be used with either channel profile.



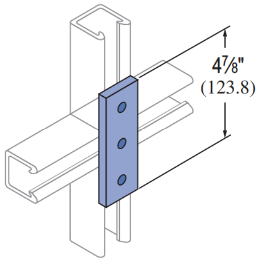


F20P-2500, F20V-2500



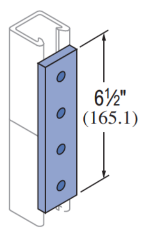
Wt/100 pcs: 12 Lbs (5.4 kg)

F20P-2502, F20V-2502



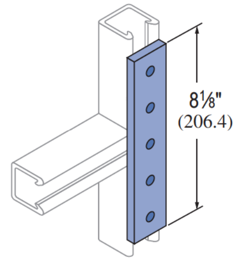
Wt/100 pcs: 17 Lbs (7.7 kg)

F20P-2504, F20V-2504



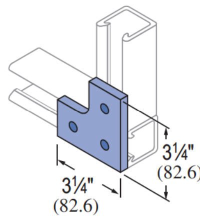
Wt/100 pcs: 24 Lbs (10.9 kg)

F20P-2506, F20V-2506



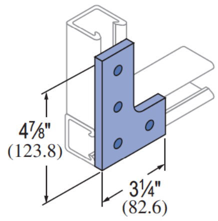
Wt/100 pcs: 32 Lbs (14.5 kg)

F20P-2508, F20V-2508



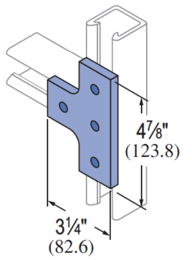
Wt/100 pcs: 17 Lbs (7.7 kg)

F20P-2510, F20V-2510



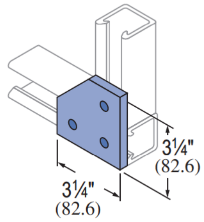
Wt/100 pcs: 25 Lbs (11.3 kg)

F20P-2512, F20V-2512



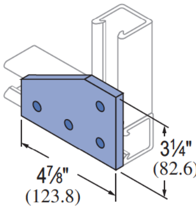
Wt/100 pcs: 26 Lbs (11.8 kg)

F20P-2514, F20V-2514



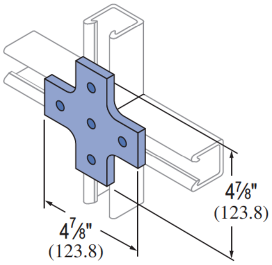
Wt/100 pcs: 20 Lbs (9.1 kg)

F20P-2516, F20V-2516



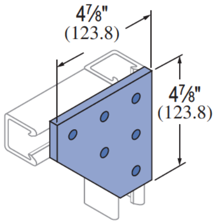
Wt/100 pcs: 32 Lbs (14.5 kg)

F20P-2518, F20V-2518



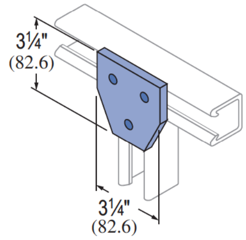
Wt/100 pcs: 33 Lbs (15.0 kg)

F20P-2520, F20V-2520



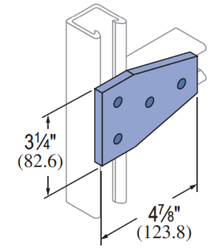
Wt/100 pcs: 45 Lbs (20.4 kg)

F20P-2522, F20V-2522



Wt/100 pcs: 21 Lbs (9.5 kg)

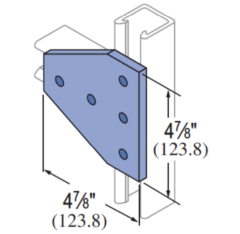
F20P-2524, F20V-2524



Wt/100 pcs: 32 Lbs (14.5 kg)

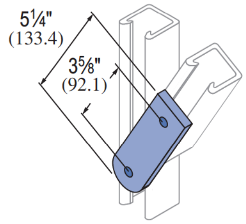
1¼" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

F20P-2526, F20V-2526



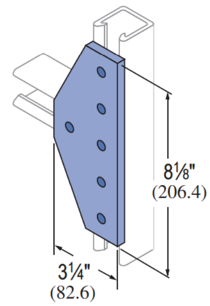
Wt/100 pcs: 45 Lbs (20.4 kg)

F20P-2528, F20V-2528



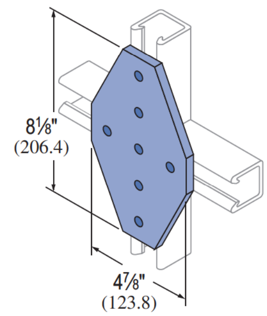
Wt/100 pcs: 20 Lbs (9.1 kg)

F20P-2530, F20V-2530



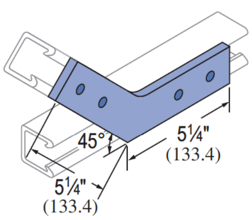
Wt/100 pcs: 50 Lbs (22.7 kg)

F20P-2534, F20V-2534



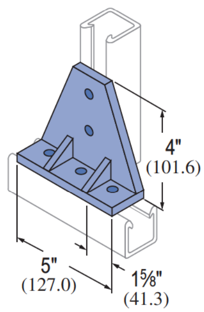
Wt/100 pcs: 77 Lbs (34.9 kg)

F20P-2540, F20V-2540



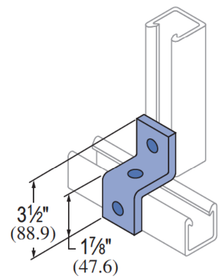
Wt/100 pcs: 41 Lbs (18.6 kg)

F50PU-2538



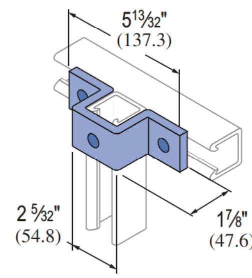
Wt/100 pcs: 57 Lbs (26.0 kg)

F50PU-2611



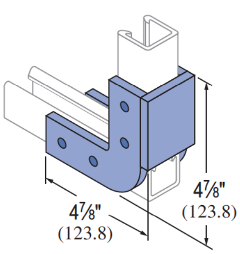
Wt/100 pcs: 9 Lbs (4.1 kg)

F50PU-2613



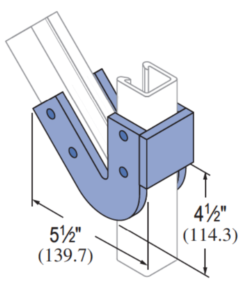
Wt/100 pcs: 16 Lbs (7.3 kg)

F50PU-1508 (1½"), F50PU-2008 (1⅝")



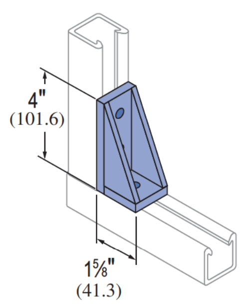
Wt/100 pcs: 27 Lbs (12.2 kg)

F50PU-2045 (1⅝")



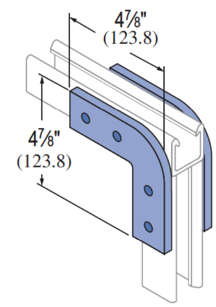
Wt/100 pcs: 35 Lbs (15.9 kg)

F50PU-2636



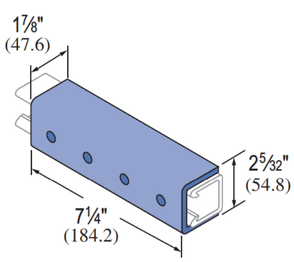
Wt/100 pcs: 14 Lbs (6.4 kg)

F50PU-2090 (1⅝")



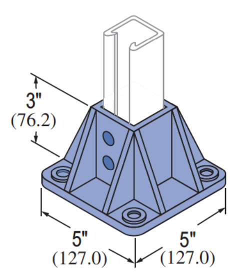
Wt/100 pcs: 35 Lbs (15.9 kg)

F50PU-2616



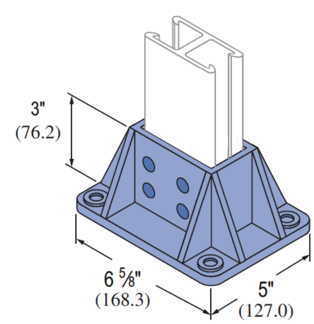
Wt/100 pcs: 51 Lbs (23.1 kg)

F20PU-5853 (1⅝"), F20PU-5855 (1⅛")



Wt/100 pcs: 71 Lbs (32.2 kg)

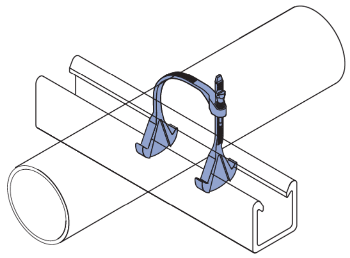
F20PU-5903 (3¼"), F20PU-5905 (2¼")



Wt/100 pcs: 86 Lbs (39.0 kg)

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.



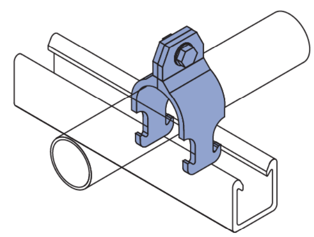
Part Number	O.D. Pipe Size (in.)	Design Load Type 1 Lbs *(kN)*	Design Load Type 2 Lbs *(kN)*	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
200-3100	½ – 1½	135 *(0.6)*	65 *(0.3)*	0.8 *(1)*	3 *(1.4)*
200-3110	1½ – 2¼	135 *(0.6)*	65 *(0.3)*	3 *(4)*	5 *(2.3)*
200-3120	2¼ – 3¼	145 *(0.6)*	70 *(0.3)*	3 *(4)*	5 *(2.3)*
200-3130	3 – 4	215 *(1.0)*	70 *(0.3)*	3 *(4)*	8 *(3.6)*
200-3140	4 – 6½	215 *(1.0)*	70 *(0.3)*	3 *(4)*	10 *(4.5)*

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

Rigid Pipe Clamps

Part Number	Nominal & Rigid Metal Size (in.)	Nominal & Rigid Metal In (mm)	PVC, Sch. 80 Design Loads* Type 1 Lbs (kN)	PVC, Sch. 80 Design Loads* Type 2 Lbs (kN)	FRP Bolt Size (in.)	FRP Bolt Torque Ft/Lbs (N•m)	Wt/100 pcs Lbs (kg)
FPCR-050	½	0.840 *(21.3)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		3 *(1.4)*
FPCR-075	¾	1.050 *(26.7)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		3 *(1.4)*
FPCR-100	1	1.315 *(33.4)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		4 *(1.8)*
FPCR-125	1¼	1.660 *(42.2)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		5 *(2.3)*
FPCR-150	1½	1.900 *(48.3)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		5 *(2.3)*
FPCR-200	2	2.375 *(60.3)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼	3 *(4)*	5 *(2.3)*
FPCR-250	2½	2.875 *(73.0)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		7 *(3.2)*
FPCR-300	3	3.500 *(88.9)*	225 *(1.0)*	90 *(0.4)*	⅜ x 1¼		10 *(4.5)*
FPCR-400	4	4.500 *(114.3)*	300 *(1.3)*	125 *(0.6)*	⅜ x 1¼		12 *(5.4)*
FPCR-600	6	6.625 *(168.3)*	300 *(1.3)*	125 *(0.6)*	⅜ x 1¼		15 *(6.8)*
FPCR-800	8	8.625 *(219.1)*	300 *(1.3)*	125 *(0.6)*	⅜ x 1¼		18 *(8.1)*

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

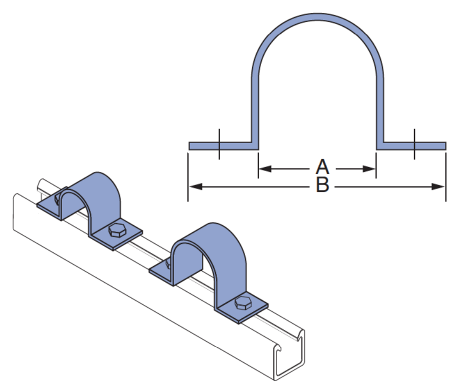


Rigid Pipe Clamps resemble the more traditional style of pipe clamps and are sized based on the pipe inside diameter or nominal size.
Polyurethane clamps are recommended for applications up to 160°F. For high temperature applications (up to 230°F).
Care should be taken not to exceed the recommended torque 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 (kN)	Design Load Type2 Lbs (kN)	Torque Ft/Lbs (N•m)	Wt/100 pcs Lbs (kg)
FPS200	2.375 *60.33*	6.375 *161.93*	½	¼ *6.4*	135 *0.60*	50 *0.22*	4 *5*	14 *6.4*
FPS250	2.875 *73.03*	6.875 *174.63*	½	¼ *6.4*	135 *0.60*	50 *0.22*	4 *5*	17 *7.7*
FPS300	3.500 *88.90*	7.500 *190.50*	½	¼ *6.4*	135 *0.60*	50 *0.22*	4 *5*	20 *9.1*
FPS350	4.000 *101.60*	8.000 *203.20*	½	¼ *6.4*	135 *0.60*	50 *0.22*	4 *5*	33 *15.0*
FPS400	4.500 *114.30*	8.500 *215.90*	½	¼ *6.4*	175 *0.78*	60 *0.27*	4 *5*	23 *10.4*
FPS500	5.563 *141.30*	9.563 *242.90*	½	¼ *6.4*	175 *0.78*	60 *0.27*	4 *5*	39 *17.7*
FPS600	6.625 *168.28*	10.625 *269.88*	½	¼ *6.4*	175 *0.78*	60 *0.27*	4 *5*	39 *17.7*
FPS800	8.625 *219.08*	12.625 *320.68*	½	¼ *6.4*	225 *1.00*	125 *0.56*	4 *5*	51 *23.1*
FPS1000	10.750 *273.05*	15.750 *400.05*	⅝	¼ *6.4*	225 *1.00*	125 *0.56*	10 *14*	77 *34.9*
FPS1200	12.750 *323.85*	16.250 *412.75*	⅝	¼ *6.4*	225 *1.00*	125 *0.56*	10 *14*	83 *37.6*
FPS1400	14.000 *355.60*	18.000 *457.20*	⅝	⅜ *9.5*	250 *1.11*	150 *0.67*	10 *14*	125 *56.7*
FPS1600	16.000 *406.40*	20.000 *508.00*	⅝	⅜ *9.5*	250 *1.11*	150 *0.67*	10 *14*	143 *64.9*
FPS1800	18.000 *457.20*	23.000 *584.20*	⅝	⅜ *9.5*	250 *1.11*	150 *0.67*	10 *14*	160 *72.6*

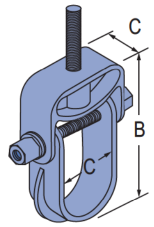
*Design loads shown represent a 3:1 safety factor.



- 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.

Notes:
(1) Bolts and channel nuts are sold separately.
(2) When bolting onto 1⅝" channel a 1¼" long bolt is req'd.

Molded Clevis Hangers

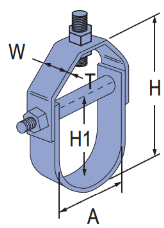


Material: glass-reinforced polyurethane.

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

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 *(kN)*	Wt/100 pcs Lbs *(kg)*
FCVHPU-100	½ - 1 *12.7 - 25.4*	1 *25.4*	1.500 *38.1*	4.25 *108*	1.25 *32*	½ *12.7*	670 *2.98*	29 *13.2*
FCVHPU-150	1¼- 1½ *31.8 - 38.1*	1½ *38.1*	2.000 *50.8*	5.14 *131*	1.25 *32*	½ *12.7*	670 *2.98*	40 *18.1*
FCVHPU-200	1½ - 2 *38.1 - 50.8*	2 *50.8*	2.500 *63.5*	6.52 *166*	1.25 *32*	½ *12.7*	730 *3.25*	43 *19.5*
FCVHPU-400	2½ - 4 *63.5 - 101.6*	4 *101.6*	5.125 *130.2*	10.00 *254*	1.50 *38*	½ *12.7*	1,150 *5.12*	129 *58.5*
FCVHPU-600	4½ - 6 *114.3 - 152.4*	6 *152.4*	6.750 *171.5*	12.33 *313*	1.50 *38*	½ *12.7*	1,170 *5.20*	168 *76.2*

Fabricated Clevis Hangers



Material: glass-reinforced polyester resin.

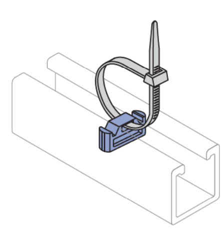
*Design load values shown represent a 3:1 safety factor.

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 *(kN)*	Wt/100 pcs Lbs *(kg)*
F100-1500	1–1½ *25.4 – 38.1*	⅛ *3.2*	2¾ *69.9*	1⅞ *47.6*	1 ½ *38.1*	½ *12.7*	⅜ *9.5*	½ *12.7*	60 *0.27*	21 *9.5*
F100-1501	1½ – 2 *38.1 – 50.8*	⅛ *3.2*	3½ *88.9*	2⅜ *60.3*	1 ½ *38.1*	½ *12.7*	⅜ *9.5*	½ *12.7*	60 *0.27*	25 *11.3*
F100-1502	2 – 2⅝ *50.8 – 66.7*	⅛ *3.2*	4¾ *120.7*	3 *76.2*	2 *50.8*	½ *12.7*	⅜ *9.5*	½ *12.7*	90 *0.40*	55 *24.9*
F100-1503	2½ – 3¼ *63.5 – 82.6*	⅛ *3.2*	5½ *139.7*	3⅝ *92.1*	2 *50.8*	½ *12.7*	⅜ *9.5*	½ *12.7*	120 *0.53*	57 *25.9*
F100-1504	3 – 3⅞ *76.2 – 98.4*	⅛ *3.2*	7 *177.8*	4¼ *108.0*	2 *50.8*	⅝ *15.9*	⅜ *9.5*	½ *12.7*	160 *0.71*	61 *27.7*
F100-1505	4 – 5⅛ *101.6 – 130.2*	¹³⁄₁₆ *20.6*	8½ *215.9*	5⅝ *142.9*	2 *50.8*	⅝ *15.9*	⅜ *9.5*	½ *12.7*	250 *1.11*	82 *37.2*
F100-1506	6 – 7⅛ *152.4 – 181.0*	¹³⁄₁₆ *20.6*	10⅞ *276.2*	7½ *190.5*	3 *76.2*	⅝ *15.9*	⅜ *9.5*	½ *12.7*	300 *1.33*	136 *61.7*
F100-1507	8 – 9¼ *203.2 – 235.0*	¼ *6.4*	14 *355.6*	9¾ *247.7*	3 *76.2*	⅝ *15.9*	⅜ *9.5*	½ *12.7*	350 *1.56*	189 *85.7*
F100-1508	10 – 11⅜ *254.0 – 288.9*	¼ *6.4*	18 *457.2*	12 *304.8*	4 *101.6*	⅝ *15.9*	½ *12.7*	¾ *19.1*	450 *2.00*	333 *151.0*
F100-1509	12 – 13½ *304.8 – 342.9*	¼ *6.4*	21½ *546.1*	14⅛ *358.8*	5 *127.0*	⅝ *15.9*	½ *12.7*	¾ *19.1*	600 *2.67*	350 *158.8*
F100-1510	14 – 15¾ *355.6 – 400.1*	¼ *6.4*	24½ *622.3*	16½ *419.1*	5 *127.0*	¾ *19.1*	½ *12.7*	¾ *19.1*	700 *3.11*	872 *395.5*
F100-1511	16 – 18 *406.4 – 457.2*	⅜ *9.5*	27⅜ *695.3*	19½ *495.3*	6 *152.4*	¾ *19.1*	¾ *19.1*	1 *25.4*	750 *3.34*	1,023 *464.0*
F100-1512	19 – 21 *482.6 – 533.4*	⅜ *9.5*	34½ *876.3*	22½ *571.5*	6 *152.4*	¾ *19.1*	¾ *19.1*	1 *25.4*	800 *3.56*	1,673 *758.9*
F100-1513	21 – 22 *533.4 – 558.8*	½ *12.7*	35½ *901.7*	24 *609.6*	6 *152.4*	¾ *19.1*	¾ *19.1*	1 *25.4*	850 *3.78*	2,323 *1,053.7*
F100-1514	22 – 24 *558.8 - 609.6*	½ *12.7*	41 *1,041.4*	28 *711.2*	6 *152.4*	¾ *19.1*	¾ *19.1*	1 *25.4*	900 *4.00*	2,973 *1,348.5*

F200-4101 — Unisert Channel Insert

- 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.

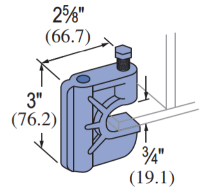
Note: For use only with metallic channel.



Wt/100 pcs: 1.0 Lbs (.5 kg)

F375PU & F500PU — Molded Beam Clamps

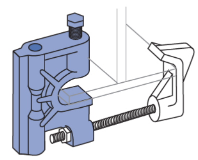
Material: glass-reinforced polyurethane



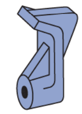
Assembly Part Number	Size In	Thread Shear Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
F375PU-BC	⅜	400 *1.78*	10 *14*	30 *13.6*
F500PU-BC	½	400 *1.78*	10 *14*	30 *13.6*

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

FRGBC — Molded Beam Clamp Assembly



F375PU-BCCLP (⅜")
Beam Clip Only



Note: Beam clamp clip must be purchased separately. Illustration purpose only

Material: glass-reinforced polyurethane.

Part Number	Size In	Thread Shear Lbs *(kN)**	Torque Ft/Lbs *(N•m)*	Wt/100 pcs Lbs *(kg)*
FRGBC-1	⅜	500 *2.22*	10 *14*	43 *19.5*
FRGBC-2	½	500 *2.22*	10 *14*	43 *19.5*
FRGBC-3	⅝	500 *2.22*	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 335⁄16" 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.

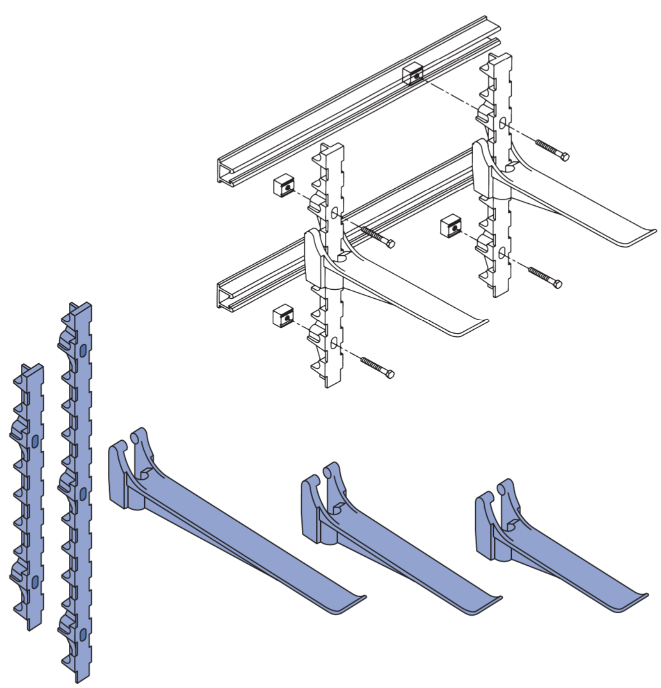
Loading – The recommended allowable loads on Power-Rack Stanchions vary depending upon the position of the arm. Use these guidelines for a safe, reliable installation:

- 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 *(kN)*
F20N-ARM08	Arm	8 *203.2*	100 *45.4*	800 *3.56*
F20N-ARM14	Arm	14¼ *362.0*	116 *52.6*	800 *3.56*
F20N-ARM17	Arm	17½ *444.5*	145 *65.8*	800 *3.56*
F20N-ARM23	Arm	23 ⅞ *606.4*	186 *84.4*	800 *3.56*
F20N-STA21	Stanchion	21⅜ *542.9*	149 *67.6*	N/A
F20N-STA33	Stanchion	335⁄16 *846.1*	231 *104.8*	N/A

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

Fiberglass Clamps Design Load Information

There are two types of piping system loadings:

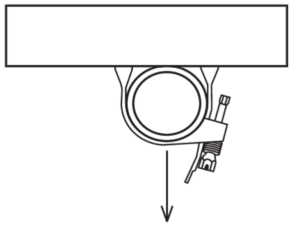
- overhead (Type 1) and
- vertical (Type 2)

as described below.

All pipe straps and clamps show the recommended loading for both types of loading.

Type 1 Overhead Design Load

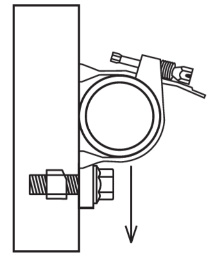
The design load shown represents pipes supported below the strut. The design loads shown are based on a minimum ultimate failure safety factor of 3:1.



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.



Chemical Compatibility Table

	Series									
	E		P		V		PU		N	
	Rigid PVC		Poly/Glass		Vinyl/Glass		Poly		Nylon	
Chemical	70°	160°F	70°	160°F	70°	160°F	70°	160°F	70°	160°F
Acetic Acid, 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	–	–	–
Ammonium Hydroxide (Aqueous Ammonia), 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
Fluosilicic Acid, Up to 32%	nr	nr	nr	nr	R	100°	–	–	–	–

Chemical Compatibility Table

Chemical	Series									
	E		P		V		PU		N	
	Rigid PVC		Poly/Glass		Vinyl/Glass		Poly		Nylon	
	70°	160°F	70°	160°F	70°	160°F	70°	160°F	70°	160°F
Formic Acid, Up to 10%	R	R	nr	nr	R	R	R	–	nr	nr
Formic Acid, 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	–	–	–
Hydrochloric Acid, Up to 37%	R	R	R	nr	R	R	R	–	–	–
Hydrofluoric Acid,Up to 10%	R	R	nr	nr	R	150°	–	–	–	–
Hydrofluoric Acid, 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	R	R	nr	nr	R	R	R	–	–	–
Nitric Acid, Up to 5%	R	R	nr	nr	R	150°	R	–	–	–
Nitric Acid, 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
Sulfuric Acid, Up to 70%	R	R	nr	nr	R	R	R	–	nr	nr
Sulfuric Acid, Up to 75%	nr	nr	nr	nr	R	120°	R	–	nr	nr
Sulfuric Acid, Up to 80%	nr	nr	nr	nr	nr	nr	nr	–	nr	nr
Sulfuric Acid, 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

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 Aickinstrut 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.

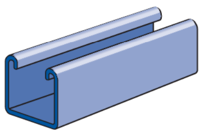
6.3 All components of the Unistrut Channel Framing System shall be nonmetallic except where type 316 stainless steel hardware is used as part of the assembly.

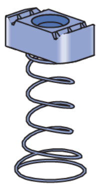
6.4 The manufacturer shall not have had less than 10 years experience in manufacturing strut systems.

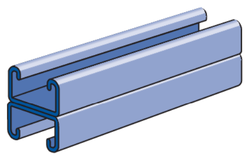
6.5 All products are manufactured in the United States of America.

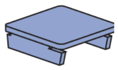
UNISTRUT

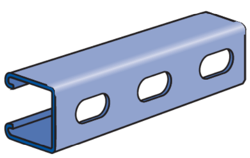
SPECIAL METALS

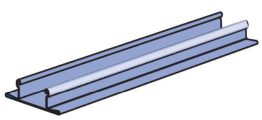


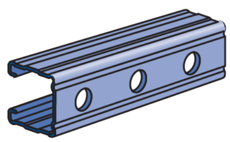












MATERIAL

STAINLESS STEEL

Channels:ASTM A 240 (Type 304)

Sintered nuts: ASTM B783 (Type SS316N1-25)

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: Stainless steel nuts are recommended for Aluminum change

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%	33%
Stainless Steel	100%	100%

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

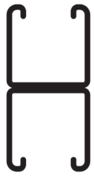
Most fittings and channels shown in this catalog, are available in aluminum or stainless steel. Consult factory for ordering information.

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.

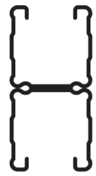
P1000 Series (12 gauge)


P1000 SS
Pg 209


P1001 SS
Pg 209

P1100 Series (14 gauge)


P1100 SS
Pg 209


P1101 SS
Pg 209

P3000 Series (12 gauge)


P3000 SS
Pg 209

P3300 Series (12 gauge)


P3300 SS
Pg 209


P3301 SS
Pg 209

P4000 Series (16 gauge)


P4000 SS
Pg 209

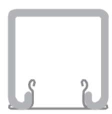
P6000 Series (19 gauge)


P6000 SS
Pg 209

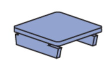
P7000 Series (19 gauge)


P7000 SS
Pg 209

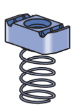
Closure Strips and End Caps

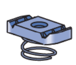

P1184 SS
Pg 210

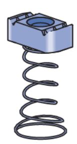

P3184 EA
Pg 212

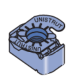

P1280 EA, P4280 EA,
P5580 EA Pg 212

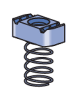
Stainless Steel Channel Nuts

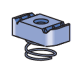

P1006 U - P1010U
Pg 210


P4006 U - P4010
Pg 210


P5506 U - P5510U
Pg 210

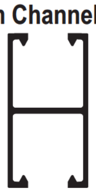

P4006T, P4008UT
Pg 210


A1006 SS, A1008 SS
Pg 210


A4006 SS, A4008 SS
Pg 210

Extruded Aluminum Channels

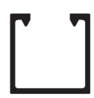

P1000 EA
Pg 211


P1001 EA
Pg 211


P4000 EA
Pg 211


P4001 EA
Pg 211

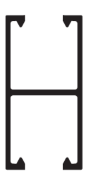

P5500 EA
Pg 211


A1000 EA
Pg 211


A4000 EA
Pg 211


A4001 EA
Pg 212


P6000 EA
Pg 212

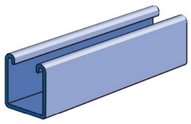

P6001 EA
Pg 212


P7000 EA
Pg 212


P7001 EA
Pg 212

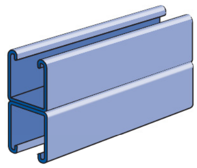
P1000 Series

P1000 SS



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

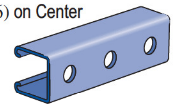
P1001 SS



Wt/100 Ft: 380 Lbs (566 kg/100m)

P1000HS SS

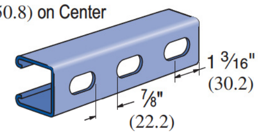
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



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

P1000T SS

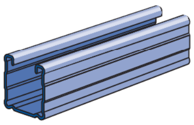
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



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

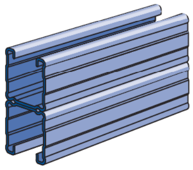
P1100 Series

P1100 SS



Wt/100 Ft :142 Lbs (211 kg/100m)

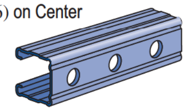
P1101 SS



Wt/100 Ft : 284 Lbs (422 kg/100m)

P1100HS SS

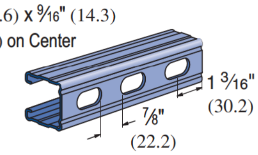
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



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

P1100T SS

Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center

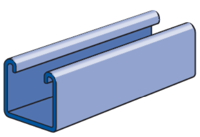


Wt/100 Ft: 136 Lbs (202 kg/100m)

P3000 Series

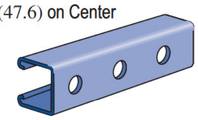
P3000 SS

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



P3000HS SS

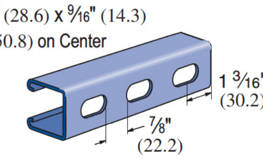
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



Wt/100 Ft: 165 Lbs (112 kg/100m)

P3000T SS

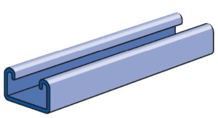
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



Wt/100 Ft: 165 Lbs (112 kg/100m)

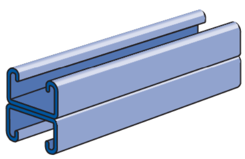
P3300 Series

P3300 SS



Wt/100 Ft: 135 Lbs (201 kg/100m)

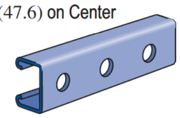
P3301 SS



Wt/100 Ft: 270 Lbs (402 kg/100m)

P3300HS SS

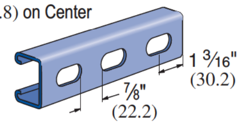
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



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

P3300T SS

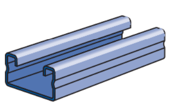
Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



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

P4000 Series

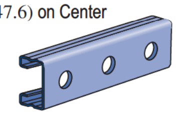
P4000 SS



Wt/100 Ft: 82 Lbs (122 kg/100m)

P4000HS SS

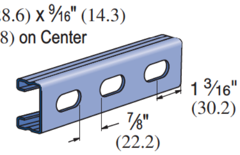
9/16" (14.3) Dia. Holes
1 7/8" (47.6) on Center



Wt/100 Ft: 79 Lbs (110 kg/100m)

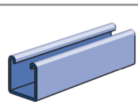
P4000T SS

Slots are
1 1/8" (28.6) x 9/16" (14.3)
2" (50.8) on Center



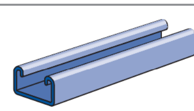
Wt/100 Ft: 79 Lbs (110 kg/100m)

P6000 SS



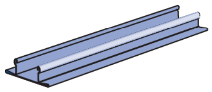
Wt/100 Ft: 37 Lbs (55 kg/100m)

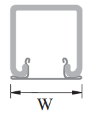
P7000 SS



Wt/100 Ft: 36 Lbs (54 kg/100m)

P1184 SS — CLOSURE STRIP

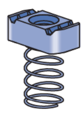
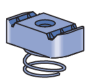




Standard length 10 Ft.
Material: Stainless steel type 304.

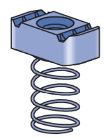
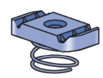
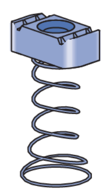
Part Number	Use With Channel	"W" In (mm)	Wt/100 Ft Lbs (kg/m)
P1184 SS	P1000 P1100 P3300 P4000	1⅝ *41.3*	27 *40.2*

CHANNEL NUT WITH SPRING– USE WITH 1¼" CHANNEL (C EG)

	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With
	A1006-1420 SS	¼" -20	6 *(2.7)*	A1000
	A1008 SS	⅜" -16	6 *(2.7)*	A1000
	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With
	A4006-1420 SS	¼" -20	5 *(2.3)*	A3300, A4000
	A4008 SS	⅜" -16	5 *(2.3)*	A3300, A4000

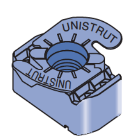
* All Springs are Pre-Galvanized

CHANNEL NUT WITH SPRING – USE WITH 1⅝" CHANNEL (C EG)

	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With 1⅝" Channel
	P1006U-1420 SS	¼" 20	7 *(3.2)*	P1000, P1100, P2000, P3000
	P1008U SS	⅜" 16	10 *(4.5)*	P1000, P1100, P2000, P3000
	P1010U SS	½" 13	12 *(5.4)*	P1000, P1100, P2000, P3000
	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With 1⅝" Channel
	P4006U-1420 SS	¼" 20	7 *(3.2)*	P3300, P4000, P4100
	P4008 SS	⅜" 16	9 *(4.1)*	P3300, P4000, P4100
	P4010 SS	½" 13	9 *(4.1)*	P3300, P4000, P4100
	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With 1⅝" Channel
	P5506U-1420 SS	¼" 20	7 *(3.2)*	P5500
	P5508U SS	⅜" 16	10 *(4.5)*	P5500
	P5510U SS	½" 13	10 *(4.5)*	P5500

* All Springs are Pre-Galvanized
The letter "U" in Part number = Sintered type 316 stainless steel

CHANNEL NUT WITHOUT SPRINGS – USE WITH 1⅝" CHANNEL (C EG)

	Part number	Nut Size Thread	Wt/100 pcs Lbs *(kg)*	Use With 1⅝" Channel
	P4006T-1420 SS	¼" 20	7 *(3.2)*	P1000, P1100, P2000, P3000 P5500
	P4008UT SS	⅜" 16	12 *(5.4)*	P1000, P1100, P2000, P3000 P5500

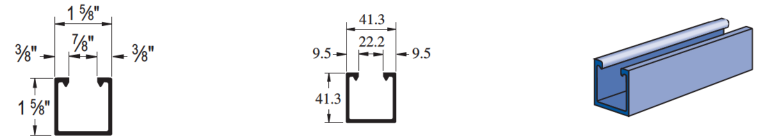
The letter "U" in Part number = Sintered type 316 stainless steel

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.

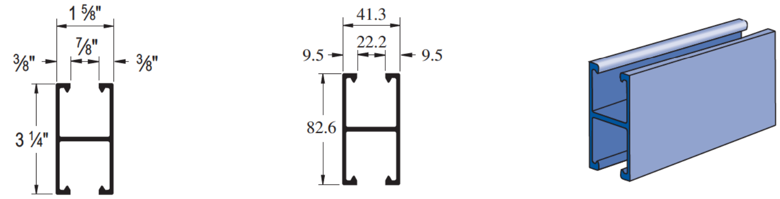
P1000 EA

When used with P3184 EA.



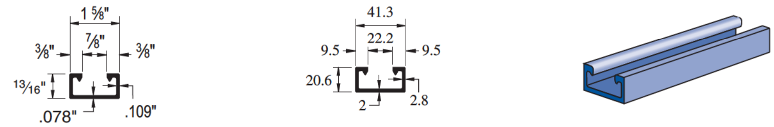
Wt/100 Ft: 76 Lbs (113 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .109" (2.8mm)

P1001 EA



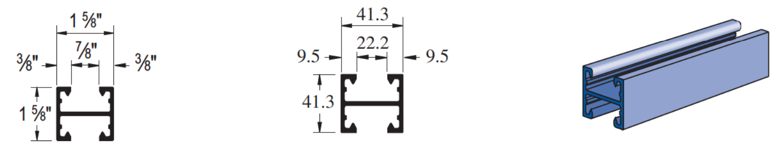
Wt/100 Ft: 134 Lbs (199 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .109" (2.8mm)

P4000 EA



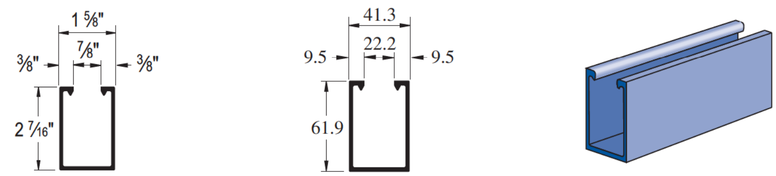
Wt/100 Ft: 45 Lbs (67 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)

P4001 EA



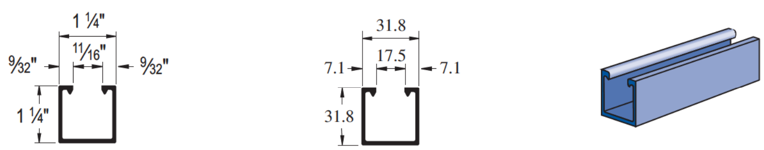
Wt/100 Ft: 66 Lbs (98 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)

P5500 EA



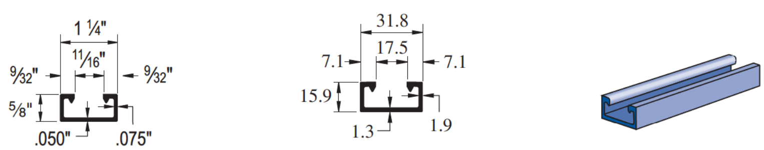
Wt/100 Ft: 97 Lbs (144 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .109" (2.8mm)

A1000 EA



Wt/100 Ft: 40 Lbs (60 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .075" (1.9mm)

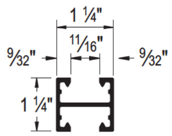
A4000 EA

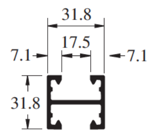


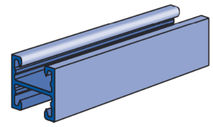
Wt/100 Ft: 25 Lbs (37 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .050" (1.3mm)
Standard Length 16 Ft.

1 1/4" System
13/16" System
Fiberglass System
Special Metals
PrimeAngle
Metal Grating
Roofwalk
Index

A4001 EA

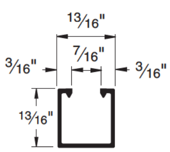


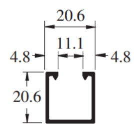


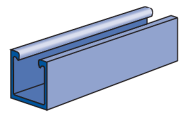


Wt/100 Ft: 40 Lbs (60 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .078" (2.0mm)
Standard Length 16 Ft.

P6000 EA

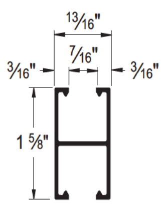


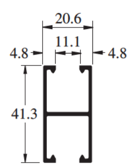


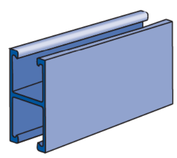


Wt/100 Ft: 12 Lbs (18 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 16 Ft.

P6001 EA

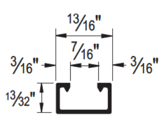


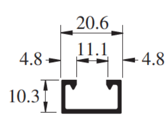


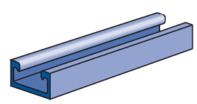


Wt/100 Ft: 20 Lbs (30 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 16 Ft.

P7000 EA

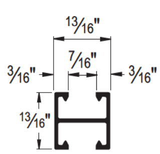


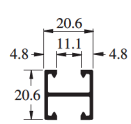


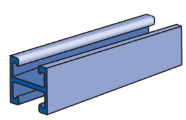


Wt/100 Ft: 9 Lbs (13 kg/100 m)
Aluminum Type 6063-T6
Nominal Thickness .040" (1.0mm)
Standard Length 10 Ft.

P7001 EA

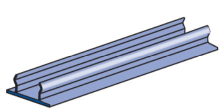


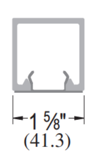




Wt/100 Ft: 17 Lbs (25 kg/100 m)
Aluminum Type 6063-T6
12 Gauge Nominal Thickness .040" (1.0mm)
Standard Length 10 Ft

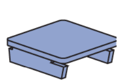
P3184 EA — Closure Strip



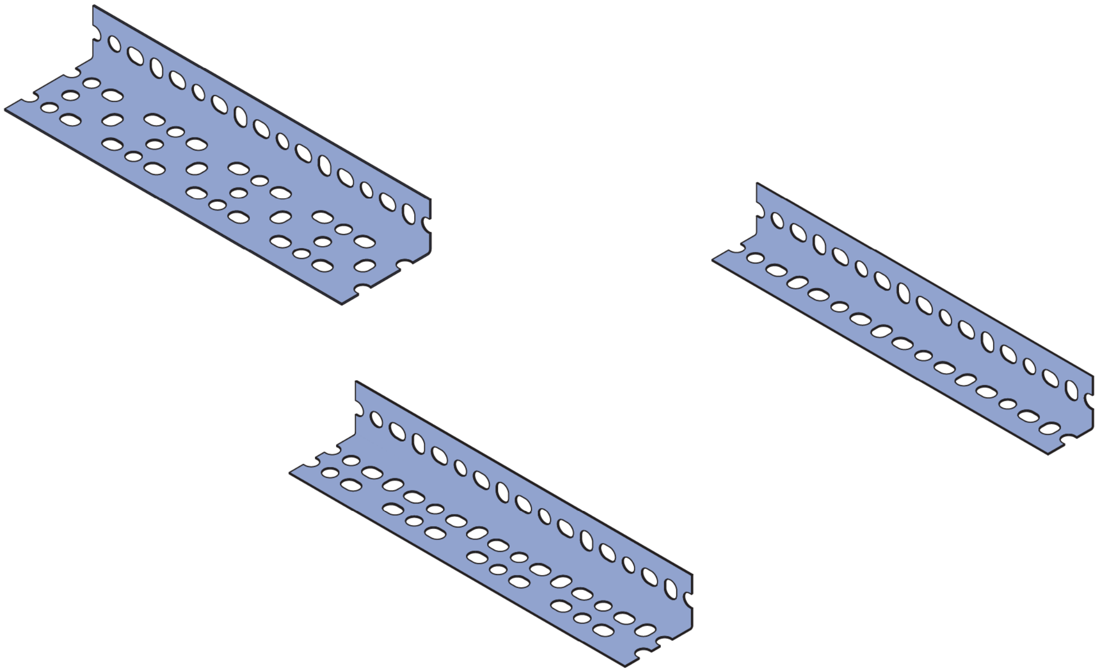


Wt/100 Ft: 21 Lbs (31 kg/100 m)
Aluminum Type 6063-T6
Standard Length 10 Ft

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)



MATERIAL

STEEL: PLAIN

12 Gauge (.105" 1.0 mm) ASTM 1011 SS GR 33,
14 Gauge (.076) ASTM 1011 SS GR 33

STEEL: PRE-GALVANIZED

12 Gauge (.105" 1.0 mm) ASTM A653 GR 33,
14 Gauge (.076) ASTM A653 GR 33

FINISHES

Available in two durable, long-lasting finishes:

Pre-Galvanized (PG) or

Perma–Green III (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:

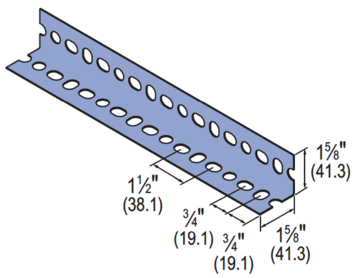
When ordering, add the length or size and finish to the part number.

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

(1⅝" x 1⅝" x 14 GA.) LIGHT DUTY PG



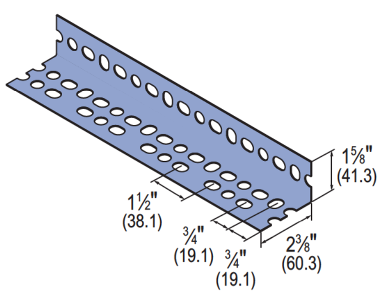
Wt/100 Ft.: 66 lbs (29.9 kg)

Note: Includes Serrated Nuts & Bolts

For those jobs where extra strength is not necessary. Ideal for light-duty shelving or racking.

PA 238

(1⅝" x 2⅜" x 14 GA.) MEDIUM DUTY PG



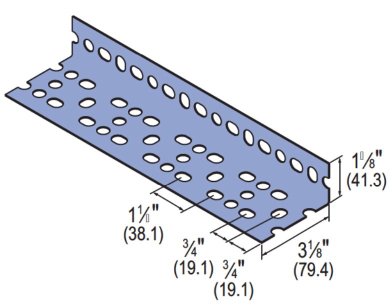
Wt/100 Ft: 80 lbs(36.3 kg)

Note: Includes Serrated Nuts & Bolts

Perfect for the majority of framing needs, including shelving, racking and electrical or mechanical support jobs.

PA 318

(1⅝" x 3⅛" x 12 GA.) HEAVY DUTY

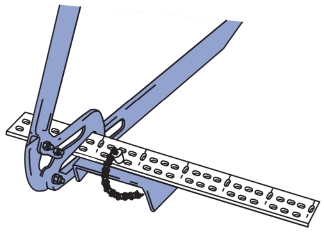


Wt/100 Ft: 130 lbs (59.0 kg)

Note: Includes Serrated Nuts & Bolts

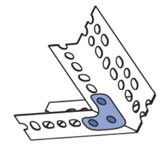
Suitable for balconies, ramps, large racks and shelving systems, as well as other structures with substantial load requirements.

PA 1HDC — PORTABLE CUTTER



Wt/100 pcs: 17 lbs (7.7 kg)

PA 1GP — GUSSET PLATE



Wt/100 pcs: 9 lbs (4.1 kg)

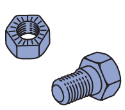
PA 1SC — SWIVEL CASTER

Wt/100 pcs: 170 lbs (77.1 kg)

PA 1RC — RIGID CASTER

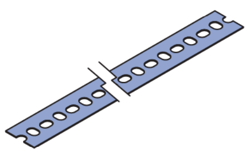
Wt/100 pcs: 110 lbs (49.9 kg)

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)

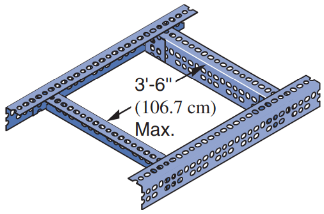
TRANSVERSE STIFFENERS

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

Beams that are 6' (182.9 cm) long or less require only one stiffener in the center of the span. Seven-foot beams need two stiffeners placed 2' (61.0 cm) from each end. Eight-foot beams require two stiffeners 2'6" (76.2 cm) from the ends. For beams with a nine-foot span, it is necessary to have three stiffeners at 2'3" (68.6 cm) intervals. Ten-foot beams need three stiffeners with 2'6" spacings.

For maximum effectiveness, transverse stiffeners should never be spaced more than 3'6" (106.7 cm) apart.

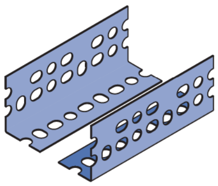
Note: All loads based on actual physical testing. Documentation available on request.



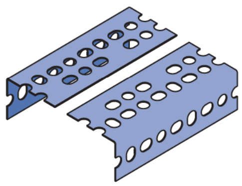
Beam Configurations

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

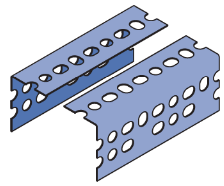
G – Two Single Pieces (Up)



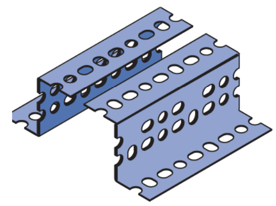
H – Two Single Pieces (Level)



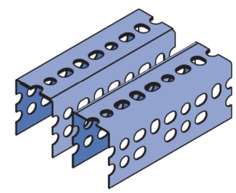
I – Two Single Pieces (Down)



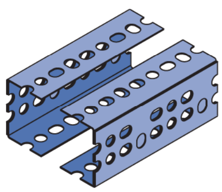
J – Two Z-Sections



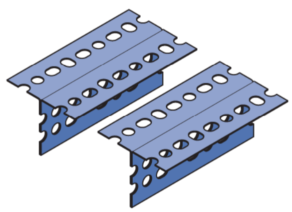
K – Two Narrow Channels



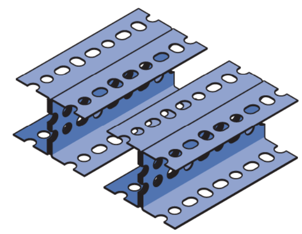
L – Two Broad Channels



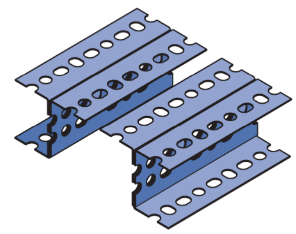
M – Two T-Sections



N – Two I-Sections



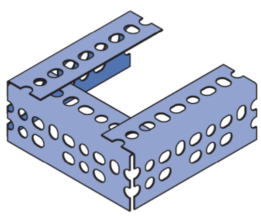
O – Two J-Sections



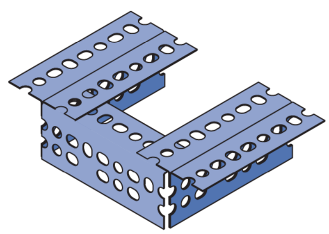
Beam Configurations With Stiffeners

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

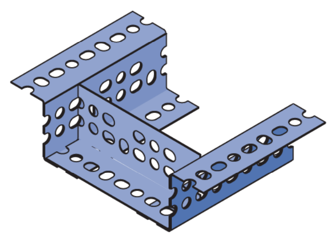
P – Single Pieces w/Stiffener



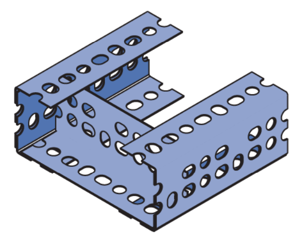
Q – T-Sections w/Stiffener



R – Z-Sections w/Stiffener



R – I-Sections w/Stiffener

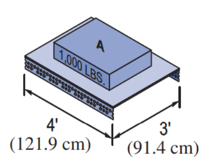


Beam Load Calculations

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

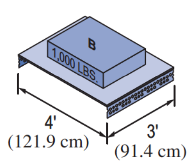
Example - Load "A"

Load "A" is supported by two 48" (121.9 cm) sections of PA-238 (1⅝" x 2⅜") (41.3mm x 60.3mm). The 48" row in the PA 238 table on next page indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "J" which will support 1,100 lbs (4.9 kN).



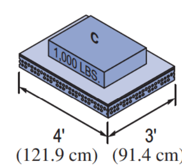
Example - Load "B"

Load "B" is supported by two 36" (91.4 cm) sections of PA-238 (1⅝" x 2⅜") (41.3mm x 60.3mm). The 36" row in the PA 238 table on next page indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "J" which will support 1,100 lbs (4.9 kN).



Example - Load "C"

Load "C" is supported by all four beam sections. The load is distributed uniformly on two 3' (91.4 cm) and two 4' (121.9 cm) beams which total 14' (426.7 cm) of supporting beam length. Dividing the 1,000 lbs. (4.5 kN) load by 14-feet equals 72 lbs. per foot (106.3 kg per meter). Using the two 4' (121.9 cm) longest (weakest) lengths, calculate the total weight as follows:



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

2 (beams) x 121.9cm (length) x 106.3 kg/M = 25,915 kg total wt.

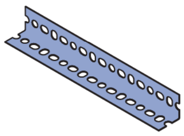
The 36" (91.4 cm) row in the PA 238 table on next page indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "J" which will support 830 lbs. (3.7 kN) and is adequate for this requirement. The 3-foot beams configured in the same manner will support the load because they are shorter and stronger.

Beam Loads

(See corresponding letters in table on previous page for configurations)

PA 158

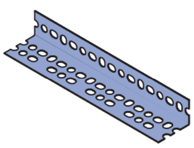
Light Duty, (1⅝" x 1⅝" x 14 ga.)



Span In. (cm)	G Lbs (kN)	H Lbs (kN)	I Lbs (kN)	P Lbs (kN)	L Lbs (kN)	R Lbs (kN)	M Lbs (kN)
24 *61.0*	550 *2.45*	830 *3.69*	830 *3.69*	920 *4.09*	1,600 *7.12*	1,700 *7.56*	1,840 *8.18*
36 *91.4*	370 *1.65*	560 *2.49*	560 *2.49*	610 *2.71*	1,070 *4.76*	1,130 *5.03*	1,230 *5.47*
48 *121.9*	280 *1.25*	420 *1.87*	420 *1.87*	460 *2.05*	800 *3.56*	850 *3.78*	920 *4.09*
60 *152.4*	220 *0.98*	330 *1.47*	330 *1.47*	370 *1.65*	640 *2.85*	680 *3.02*	740 *3.29*
72 *182.9*	180 *0.80*	280 *1.25*	280 *1.25*	310 *1.38*	530 *2.36*	570 *2.54*	610 *2.71*
84 *213.4*	•	240 *1.07*	240 *1.07*	260 *1.16*	460 *2.05*	490 *2.18*	530 *2.36*
96 *243.8*	•	210 *0.93*	210 *0.93*	230 *1.02*	400 *1.78*	430 *1.91*	460 *2.05*
108 *274.3*	•	•	•	•	360 *1.60*	380 *1.69*	410 *1.82*
120 *304.8*	•	•	•	•	320 *1.42*	340 *1.51*	370 *1.65*

PA 238

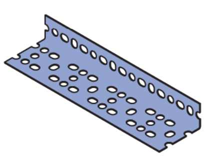
Medium Duty, (1⅝" x 2⅜" x 14 ga.)



Span In. (cm)	G Lbs (kN)	H Lbs (kN)	I Lbs (kN)	P Lbs (kN)	J Lbs (kN)	L Lbs (kN)	R Lbs (kN)	M Lbs (kN)	K Lbs (kN)	Q Lbs (kN)	O Lbs (kN)	N Lbs (kN)
24 *61.0*	700 *3.11*	1,020 *4.54*	1,660 *7.38*	1,740 *7.74*	2,220 *9.88*	3,170 *14.10*	3,230 *14.37*	3,490 *15.52*	3,590 *15.97*	3,630 *16.15*	6,060 *26.96*	7,560 *33.63*
36 *91.4*	460 *2.05*	680 *3.02*	1,100 *4.89*	1,160 *5.16*	1,480 *6.58*	2,110 *9.39*	2,150 *9.56*	2,320 *10.32*	2,390 *10.63*	2,420 *10.76*	4,040 *17.97*	5,040 *22.42*
48 *121.9*	350 *1.56*	510 *2.27*	830 *3.69*	870 *3.87*	1,110 *4.94*	1,580 *7.03*	1,620 *7.21*	1,740 *7.74*	1,800 *8.01*	1,810 *8.05*	3,030 *13.48*	3,780 *16.81*
60 *152.4*	280 *1.25*	410 *1.82*	660 *2.94*	700 *3.11*	890 *3.96*	1,270 *5.65*	1,290 *5.74*	1,390 *6.18*	1,440 *6.41*	1,450 *6.45*	2,420 *10.76*	3,020 *13.43*
72 *182.9*	230 *1.02*	340 *1.51*	550 *2.45*	580 *2.58*	740 *3.29*	1,060 *4.72*	1,080 *4.80*	1,160 *5.16*	1,200 *5.34*	1,210 *5.38*	2,020 *8.99*	2,520 *11.21*
84 *213.4*	•	290 *1.29*	470 *2.09*	500 *2.22*	630 *2.80*	910 *4.05*	920 *4.09*	1,000 *4.45*	1,030 *4.58*	1,040 *4.63*	1,730 *7.70*	2,160 *9.61*
96 *243.8*	•	260 *1.16*	410 *1.82*	440 *1.96*	550 *2.45*	790 *3.51*	810 *3.60*	870 *3.87*	900 *4.00*	910 *4.05*	1,520 *6.76*	1,890 *8.41*
108 *274.3*	•	•	•	•	490 *2.18*	700 *3.11*	720 *3.20*	770 *3.43*	800 *3.56*	810 *3.60*	1,350 *6.01*	1,680 *7.47*
120 *304.8*	•	•	•	•	440 *1.96*	630 *2.80*	650 *2.89*	700 *3.11*	720 *3.20*	730 *3.25*	1,210 *5.38*	1,510 *6.72*

PA 318

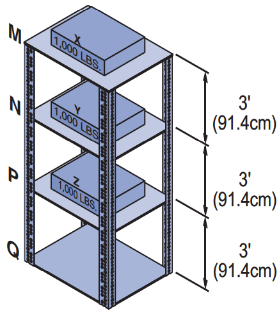
Heavy Duty, (1⅝" x 3⅛" x 12 ga.)



Span In. (cm)	G Lbs (kN)	H Lbs (kN)	I Lbs (kN)	P Lbs (kN)	J Lbs (kN)	L Lbs (kN)	R Lbs (kN)	M Lbs (kN)	K Lbs (kN)	Q Lbs (kN)	O Lbs (kg)	N Lbs (kg)
24 *61.0*	1,790 *7.96*	1,610 *7.16*	4,300 *19.13*	4,960 *22.06*	6,520 *29.00*	7,910 *35.19*	8,070 *35.90*	9,920 *44.13*	9,990 *44.44*	10,170 *45.24*	14,600 *64.94*	16,120 *71.71*
36 *91.4*	1,200 *5.34*	1,070 *4.76*	2,870 *12.77*	3,310 *14.72*	4,350 *19.35*	5,270 *23.44*	5,380 *23.93*	6,610 *29.40*	6,660 *29.63*	6,780 *30.16*	9,730 *43.28*	10,750 *47.82*
48 *121.9*	900 *4.00*	810 *3.60*	2,150 *9.56*	2,480 *11.03*	3,260 *14.50*	3,950 *17.57*	4,030 *17.93*	4,960 *22.06*	4,990 *22.20*	5,080 *22.60*	7,300 *32.47*	8,060 *35.85*
60 *152.4*	720 *3.20*	640 *2.85*	1,720 *7.65*	1,980 *8.81*	2,610 *11.61*	3,160 *14.06*	3,230 *14.37*	3,970 *17.66*	4,000 *17.79*	4,070 *18.10*	5,840 *25.98*	6,450 *28.69*
72 *182.9*	600 *2.67*	540 *2.40*	1,430 *6.36*	1,650 *7.34*	2,170 *9.65*	2,640 *11.74*	2,690 *11.97*	3,310 *14.72*	3,330 *14.81*	3,390 *15.08*	4,870 *21.66*	5,370 *23.89*
84 *213.4*	•	460 *2.05*	1,230 *5.47*	1,420 *6.32*	1,860 *8.27*	2,260 *10.05*	2,300 *10.23*	2,830 *12.59*	2,850 *12.68*	2,910 *12.94*	4,170 *18.55*	4,610 *20.51*
96 *243.8*	•	400 *1.78*	1,080 *4.80*	1,240 *5.52*	1,630 *7.25*	1,980 *8.81*	2,020 *8.99*	2,480 *11.03*	2,500 *11.12*	2,540 *11.30*	3,650 *16.24*	4,030 *17.93*
108 *274.3*	•	•	•	1,100 *4.89*	1,450 *6.45*	1,760 *7.83*	1,790 *7.96*	2,200 *9.79*	2,220 *9.88*	2,260 *10.05*	3,240 *14.41*	3,580 *15.92*
120 *304.8*	•	•	•	990 *4.40*	1,300 *5.78*	1,580 *7.03*	1,610 *7.16*	1,980 *8.81*	2,000 *8.90*	2,030 *9.03*	2,920 *12.99*	3,220 *14.32*

Column Loads

Column sections are calculated as described in the following example: (Assumes use of PA-238 1⅝" x 2⅜"(41.3mm x 60.3mm), material.)



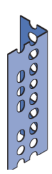
Since all load areas are supported equally by the 4-columns, the calculations are based on a single-column section.

Section MN is one-fourth of "X", or 250 pounds (1.1 kN). Column section NP supports one-fourth of "Y" (250 pounds) plus the load supported by MN, or a total of 500 pounds (2.2 kN). Section PQ supports one-fourth of "Z" (250 pounds) plus the 500 pound load on section NP, or a total of 750 (3.3kN) pounds.

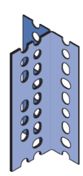
Column loads are based on free and unbraced column lengths. Since MN, NP and PQ are each 3' long, the load requirement is for a 36" section that will bear 750 pounds safely. A reference to the PA 238 table to the right indicates that all sections designated "A" will support 2,280 lbs. (10.1 kN) and meet the necessary requirements.

Note: To simplify assembly, we recommend using the same size material as for the horizontal members. This would be found in Table 2 to match the 14 gauge 1⅝" x 2⅜" (41.3mm x 60.3mm) material selected for the beams of this structure.

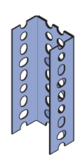
A – Single Piece



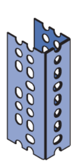
B – T-Section



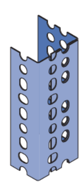
B – Broad Channel Section



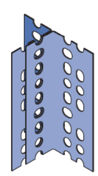
B – Narrow Channel Section



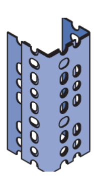
C – Uneven T-Section



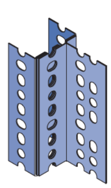
C – Uneven Channel Section



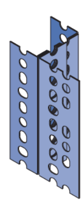
D – Dual Channel Section



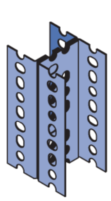
D – T-Channel Section



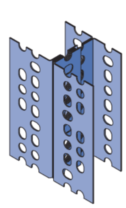
D – T-Channel Section



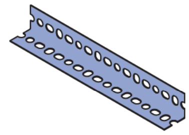
E – I-Section



F – Uneven I-Section

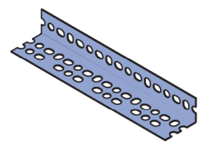


PA 158 (1⅝" x 1⅝" x 14 GA.)



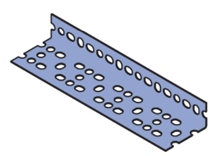
Span In. (cm)	A Lbs (kN)	B Lbs (kN)
36	1,450	3,850
91.4	6.45	17.13
48	1,150	3,500
121.9	5.12	15.57
60	950	3,000
152.4	4.23	13.34
72	750	2,500
182.9	3.34	11.12

PA 238 (1⅝" x 2⅜" x 14 GA.)



Span In. (cm)	A Lbs (kN)	B Lbs (kN)	C Lbs (kN)	D Lbs (kN)	E Lbs (kN)	F Lbs (kN)
36	2,280	4,760	4,940	7,270	9,520	9,865
91.4	10.14	21.17	21.97	32.34	42.35	43.88
48	1,970	4,490	4,680	6,920	8,970	9,330
121.9	8.76	19.97	20.82	30.78	39.90	41.50
60	1,520	3,995	4,310	6,370	7,990	8,620
152.4	6.76	17.77	19.17	28.34	35.54	38.34
72	1,070	3,140	3,870	5,840	6,280	7,715
182.9	4.76	13.97	17.21	25.98	27.93	34.32
84	660	2,340	3,665	4,930	4,660	6,740
213.4	2.94	10.41	16.30	21.93	20.73	29.98
96	•	1,750	2,700	3,850	3,500	5,365
243.8		7.78	12.01	17.13	15.57	23.86
108	•	•	2,060	2,870	•	4,115
274.3			9.16	12.77		18.30
120	•	•	1,610	2,690	•	3,210
304.8			7.16	11.97		14.28

PA 318 (1⅝" x 3⅛" x 12 GA.)



Span In. (cm)	A Lbs (kN)	B Lbs (kN)	C Lbs (kN)	D Lbs (kN)	E Lbs (kN)	F Lbs (kN)
36	3,470	7,970	8,770	12,560	15,940	17,550
91.4	15.44	35.45	39.01	55.87	70.90	78.07
48	2,870	7,360	8,580	11,970	14,750	17,150
121.9	12.77	32.74	38.17	53.25	65.61	76.29
60	1,970	6,570	8,180	11,360	13,160	16,360
152.4	8.76	29.22	36.39	50.53	58.54	72.77
72	1,280	5,270	7,690	10,480	10,560	15,360
182.9	5.69	23.44	34.21	46.62	46.97	68.32
84	•	3,670	6,970	9,470	7,370	13,970
213.3		16.32	31.00	42.12	32.78	62.14
96	•	2,580	6,260	8,370	5,170	12,570
243.8		11.48	27.85	37.23	23.00	55.91
108	•	•	5,460	6,880	•	10,970
274.3			24.29	30.60		48.80
120	•	•	4,460	5,370	•	8,960
304.8			19.84	23.89		39.86

UNITED INTERLOCK® GRATING

United Interlock Plank Grating System from Unistrut, commonly known as Interlock Grating, fills a multitude of needs including flooring and walkways, mezzanines, stair treads, maintenance and staging platforms, scaffolding planks, architectural wall coverings and more. United Interlock Grating Systems meets your needs for strength, durability, safety and aesthetics.

Customers choose United Interlock Grating Systems for many reasons:

- Cost-effectiveness
- Easy-to-install product
- Quality assurance that comes from extensive load testing
- Large inventories and fast delivery
- Strong design look of our plank grating

In addition to supplying the grating, Unistrut offers turnkey service for your project. This includes engineering, support structures, and installation.

United Interlock Grating Applications include:

- Architectural wall coverings
- Catwalks, walkways and pedestrian ramps
- Maintenance and inspection walkways
- Ventilation covers for tanks and wells
- Mining and quarry tower decking
- Pumping and drilling platforms
- Subflooring
- Mezzanines
- Shelving
- Stairs

Architectural Applications

Interlock Grating provides a functional and aesthetically appealing look to architectural applications. Aluminum gratings resist corrosion to give walls, ceilings, ledges, trim, flooring, and specialty projects a clean, lasting, high-tech look.

Interlocking plank grating works especially well in intensive-use areas. In addition to its durability, it is easy to clean and does not reflect sound like a solid surface.

Architects have often selected Interlock Grating because it protects lights, insulation support columns, wiring, and other fixtures. And, the panels allow authorized personnel to access the fixtures.

Contractors have reported installed cost savings of up to 75% with Interlock Grating. Many factors combine to make installation quick and easy:

1) The lightweight grating is easy to handle. One person can carry a 24' plank.
2) Interlock Grating is easy to install with a minimal number of laborers.
3) Interlock Grating's light weight reduces shipping costs.
4) The planks interlock with positive friction, eliminating costly welding and bolting.
5) Field modifications are easy. Interlock Grating can be cut to size, shape, and angle at the jobsite.
6) Interlock Grating requires fewer support structures.

Project Services

United Interlock distribution network provides local support for complete project administration as desired or required by our customers. This includes engineering, design, and installation of all the United Interlock Grating Systems.

Our engineers can design a grating system which will safely span the area using existing supports at your facility, perform load and deflection tests for unusual loading conditions, advise you of the most economical placement of grating and supports, and provide fabrication and erection drawings.

We can complete your project by coordinating all aspects of installation. Our local distribution network can coordinate shipping and staging of materials, provide and supervise local installation crews, and arrange for special erection equipment services.

United Interlock Grating strength-to-weight ratio allows it to withstand substantial loads while being easy to handle. The male-female legs of the roll-formed grating interlock securely, and double-male legs provide a safe finished edge for end planks.

Two standard surfaces are available: slotted-smooth and anti-skid. Anti-skid is the ideal choice when safe walking conditions are important. Die-formed teeth in the transverse ribs give you 360° of shoe-gripping traction even when the grating is wet, oily, muddy, or icy.

Punched Interlock Grating has an open area of 42% for 9" grating and 35% for 6" grating. This prevents dirt, debris, ice, and snow from building up on the surface and allows light and air to pass through. United Interlock steel grating is made from pre-galvanized steel which conforms to a G-90 thickness designation per ASTM A653. The aluminum grating is made from type 5052 aluminum with a thickness of 0.080".

Unpunched smooth surface grating is also available for special applications.

United Interlock Grating Systems are strong, economical, versatile, and easy to specify.

Variety of choices

- 6" and 9" standard-duty width
- 12" light-duty width
- 14 gauge and 18 gauge
- 1½", 2½", and 4" leg heights
- 20' and 24' stock lengths
- Anti-skid, slotted-smooth punched surfaces and solid unpunched surface
- Double male and male-female leg shapes
- Steel (6", 9" or 12") and aluminum (6"or 9")

Interlock Grating Features

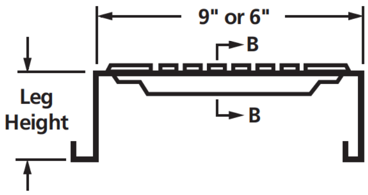
Maximizes performance and safety…

- Anti-skid surface provides 360° of slip resistance
- Superior ultimate-load performance tested in accordance with AISI standards
- All sections made from structural-grade steel
- Roll-formed design provides superior strength
- Optional heel-toe side and end plates
- Open design prevents build-up of water, grease, oil and small debris

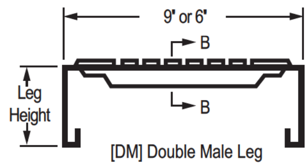
And gives you complete project versatility.

- 6", 9" and 12" plank widths allow design in 3" increments
- Standard lengths of 20' and 24', and special lengths up to 30', provide excellent design flexibility
- Choice of smooth punched, anti-skid punched or solid unpunched surfaces
- Three leg heights, and two material gauges meet a wide range of load, space and budget requirements

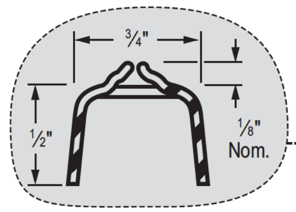
United Interlock® Grating Systems—6" and 9"



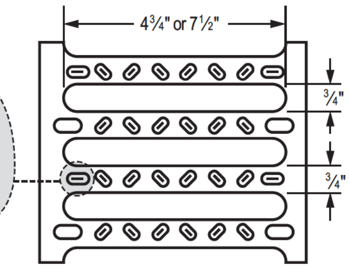
Male-Female Leg



[DM] Double-Male Leg



Anti-skid Rib



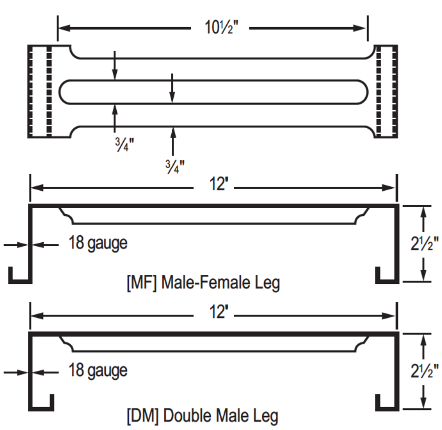
Anti-Skid Surface Shown

9" Wide Planks (14 Ga, 18 Ga, 0.080 Aluminum)							
Leg Height	Leg Shape	Finish Material	Slotted, Smooth	Anti-Skid	Un-punched	Wt. Lbs./Ft	Wt. Lbs./Ft²
1½"	DM	PG	G91141	G91142	G91143	3.5	4.7
	MF	14 Ga.	G92141	G92142	G92143	3.5	4.7
	DM	PG	G91181	G91182	G91183	2.3	3.1
	MF	18 Ga.	G92181	G92182	G92183	2.3	3.1
2½"	DM	PG	G91241	G91242	G91243	4.0	5.3
	MF	14 Ga.	G92241	G92242	G92243	4.0	5.3
	DM	PG	G91281	G91282	G91283	2.7	3.6
	MF	18 Ga.	G92281	G92282	G92283	2.7	3.6
	DM	AL	G91221	G91222	G91223	1.5	2.0
	MF	0.080"	G92221	G92222	G92223	1.5	2.0
4"	DM	PG	G91341	G91342	G91343	4.8	6.4
	MF	14 Ga.	G92341	G92342	G92343	4.8	6.4
	DM	PG	G91381	G91382	G91383	3.2	4.3
	MF	18 Ga.	G92381	G92382	G92383	3.2	4.3

6" Wide Planks (14 Ga, 18 Ga, 0.080 Aluminum)							
Leg Height	Leg Shape	Finish Material	Slotted, Smooth	Anti-Skid	Un-punched	Wt. Lbs./Ft	Wt. Lbs./Ft²
1½"	DM	PG	G61141	G61142	G61143	2.7	5.4
	MF	14 Ga.	G62141	G62142	G62143	2.7	5.4
	DM	PG	G61181	G61182	G61183	1.8	3.6
	MF	18 Ga.	G62181	G62182	G62183	1.8	3.6
2½"	DM	PG	G61241	G61242	G61243	3.4	6.8
	MF	14 Ga.	G62241	G62242	G62243	3.4	6.8
	DM	PG	G61281	G61282	G61283	2.2	4.4
	MF	18 Ga.	G62281	G62282	G62283	2.2	4.4
	DM	AL	G61221	G61222	G61223	1.2	2.3
	MF	0.080"	G62221	G62222	G62223	1.2	2.3
4"	DM	PG	G61341	G61342	G61343	4.2	8.4
	MF	14 Ga.	G62341	G62342	G62343	4.2	8.4
	DM	PG	G61381	G61382	G61383	2.8	5.6
	MF	18 Ga.	G62381	G62382	G62383	2.8	5.6

Note: Standard grating lengths are 20' or 24'; DM–Double Male, MF–Male-Female
Unpunched smooth surface grating is also available for special applications. Contact Unistrut for more information.

United Interlock® Grating Systems—12"



12" Wide Planks, 18 Gauge				
Leg Height	Leg Shape	Finish Material	Slotted, Smooth	Anti-Skid
2½"	DM	PG	G 11281	G 11282
	MF	18 Gauge	G 12281	G 12282

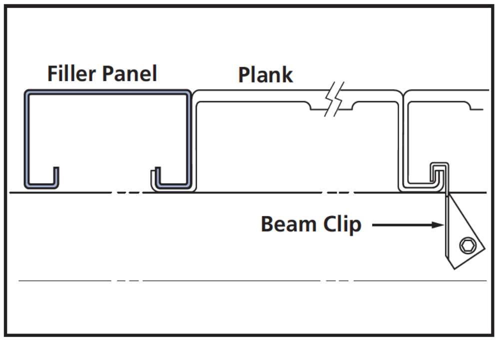
For Light Traffic Applications

Ideal for mezzanines and other large-area applications, extra-wide 12" interlocking plank grating is designed to simplify installation and reduce the cost of mezzanines, flooring, decking, staging platforms, Roofwalks® and similar applications. With a 43% open area, it allows water, light and air to pass through.

With its extra width, Unistrut 12" wide plank grating covers more area with fewer planks, lowering installation costs. Its high strength-to-weight ratio—18 gauge, 2½" leg height—makes it ideal for covering large, light-traffic areas. Its snap-together friction fit make it easy to install, with no welding or bolting required.

Made of pre-galvanized steel, it's maintenance-free and long lasting. Specifiers can choose a smooth or anti-skid surface to meet a wide variety of application needs.

Filler Panel



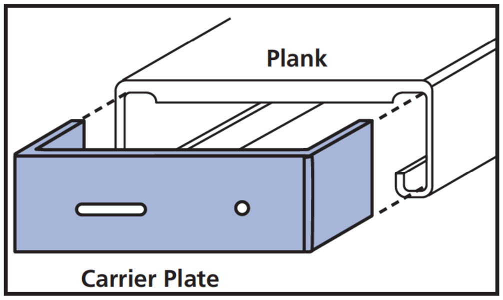
Part No.*	Description
G31183 PG	3" Wide x 1½" Leg Height
G31283 PG	3" Wide x 2½" Leg Height
G31383 PG	3" Wide x 4" Leg Height

Provided in standard lengths of 10' and 12'.

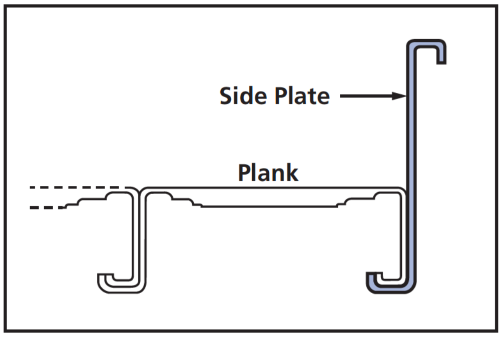
Carrier Plate

Part No.*	Description
G603 PG	10 ga.- for 9" wide heavy duty stair treads (⁹⁄₁₆" hole and 1½" x ⁹⁄₁₆" slot)
G618 PG	10 ga. for 10½" wide stair treads (⁹⁄₁₆" hole and 1½" x ⁹⁄₁₆" slot)
G642 PG	10 ga. for 11" wide stair treads (⁹⁄₁₆" hole and 1½" x ⁹⁄₁₆" slot)

Provides easy attachment of stair treads to support structures and stringers.



Heel/Toe Side Plates – 6½" and 8" Heights

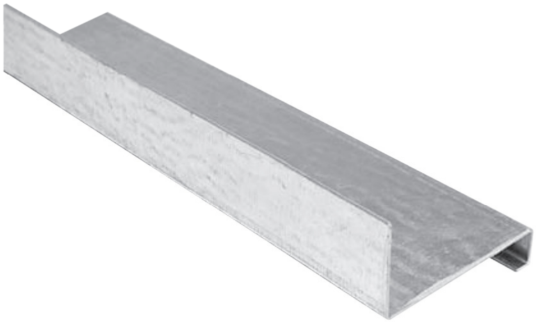


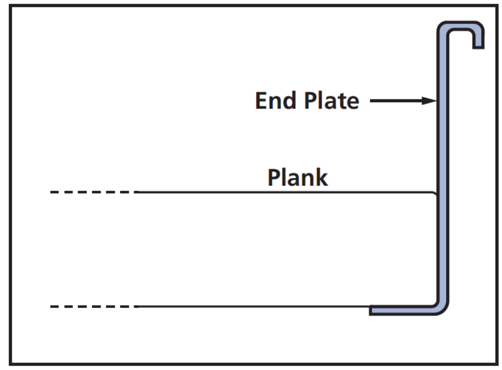
Part No.*	Description
G631 PG*	14 ga. x 6½" high x 12' long
G621 PG	14 ga. x 8" high x 12' long

Forms a curb along grating length that defines a structure's side edge, and helps contain loose objects.

*Part numbers shown are for galvanized. Most accessories are also available in aluminum.

Heel/Toe End Plates – 6½" and 8" Heights



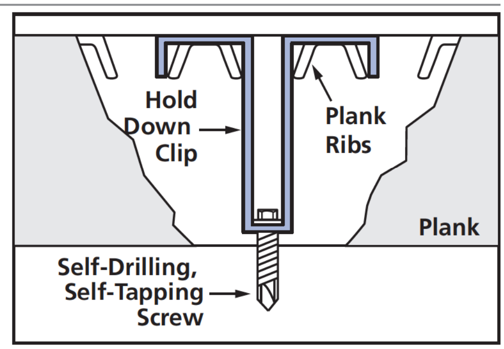


Part No.*	Description
G622 PG	14 ga. x 6½" high x 12' long
G623 PG	14 ga. x 8" high x 12' long

Forms a curb along grating ends that defines a structure's edge, and helps contains loose objects.

Hold Down Clip

Part No.	Description
G639 PG	1½" leg height
G607 PG*	2½" leg height
G620 PG	4" leg height

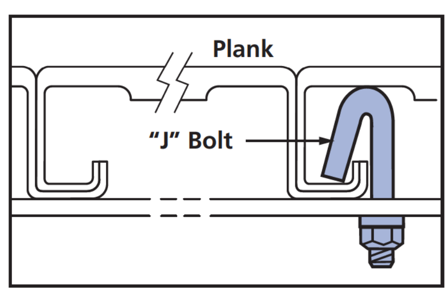


A 16 gauge attachment for fastening grating to support structure below. Attaches through top side of grating.

"J" Bolt/Nut Lock Washer

Part No.*	Description
G600 EG	5/16" x 2½"

Attachment for fastening panels to supporting members from underside of grating.

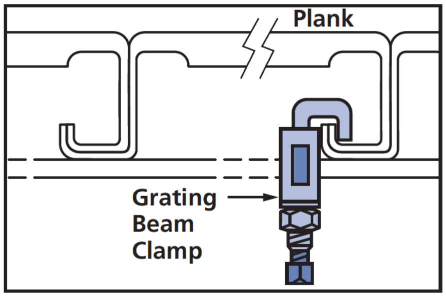


*Part numbers shown are for galvanized. Most accessories are also available in aluminum.

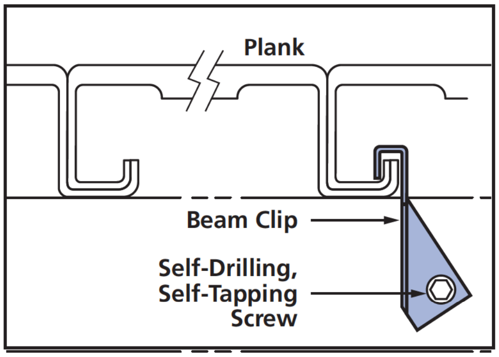
Grating Beam Clamp

Part No.*	Description
G640 EG	Beam clamp

Attaches grating to structural I-beams. Requires no welding or drilling.



Light Gauge Beam Clip



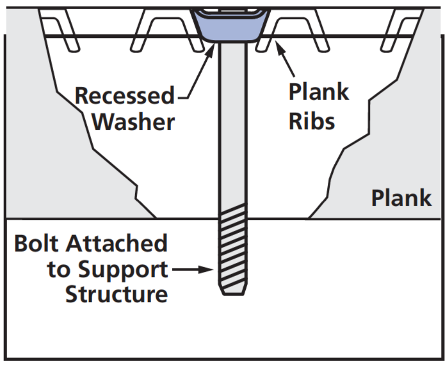
Part No.*	Description
G124 EG	Light Gauge Beam Clip

Quickly attaches grating to rack or shelving beams.

Requires self-drilling, self-tapping screw—GHTS 012075 EG (not included).

Recessed Washer

EG



Part No.*	Description
G714 EG	1⅛" x 1⅛" 12 gauge square washer

Holds down grating from above. Eliminates trip points.

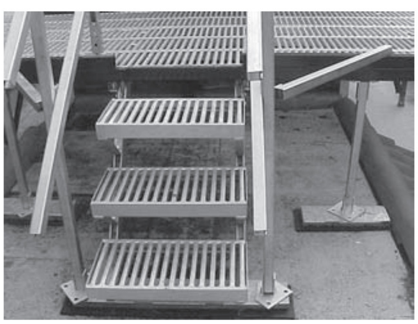
*Part numbers shown are for galvanized. Most accessories are also available in aluminum.

Anyone who has slipped on a stairway can appreciate the safety of the anti-skid stair treads. Those who have tried to clean solid-surface stairs can appreciate our maintenance-free slotted design, which is both rust-resistant and self-cleaning.

United's stair treads make it easy for you to meet OSHA regulations. Factors to consider when selecting stair treads include loads, impact, frequency of

use, and future use. Our 10½" and 11" tread features a checker-plate nosing that strengthens the tread and increases the width of the basic 9" tread.

The failure loading data shown below indicates ultimate failure in pounds at various spans. A 3½" diameter load was applied to the outer edge of a 9" wide stair tread at the center of the span. 6" wide stair treads are also available.

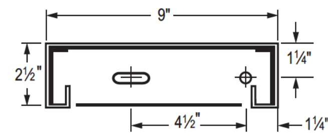


The stair treads can also be used with Unistrut Metal Framing as shown here to create a stair with guide rail

9" Stair Tread

14 gauge x 2½" x 9"
Completely galvanized,
welded 10 gauge
end plates

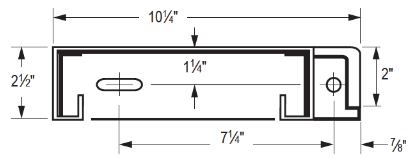
Part No.*	Length (in.)
G 900-24 PG	24
G 900-30 PG	30
G 900-36 PG	36
G 900-42 PG	42
G 900-48 PG	48
G 900-60 PG	60



10½" Stair Tread

14 gauge x 2½" x 10½",
Completely galvanized,
welded 10 gauge end plates

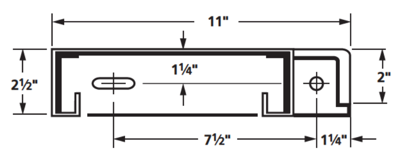
Part No.*	Len. (in.)
G 901-24 PG	24
G 901-30 PG	30
G 901-36 PG	36
G 901-42 PG	42
G 901-48 PG	48
G 901-60 PG	60



11" Stair Treads

14 gauge x 2½" x 11" Completely galvanized, welded 10-gauge end plates

Part No.*	Len. (in.)
G 904-24 PG	24
G 904-30 PG	30
G 904-36 PG	36
G 904-42 PG	42
G 904-48 PG	48
G 904-54 PG	54
G 904-60 PG	60



Ultimate Failure Loading (pounds): Interlock Grating Stair Treads—Galvanized Steel—3 Widths									
Width	Distance Between Supports (feet)								
	2	2.5	3	3.5	4	4.5	5	5.5	6
9"	2,200	2,050	1,900	1,750	1,600	1,450	1,300	1,150	1,000
10½"	4,325	3,900	3,400	2,950	2,550	2,200	1,950	1,800	1,700
11"	4,325	3,900	3,400	2,950	2,550	2,200	1,950	1,800	1,700

Note: This table represents failure loads, not design loads. Designers should apply their own safety factor to these values to determine maximum design loads.

Design Considerations

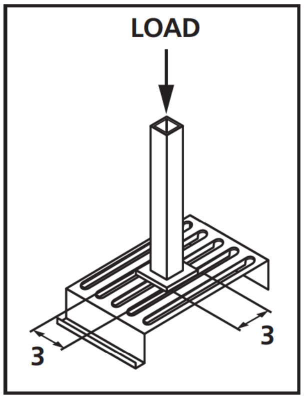
Designers must consider both uniform and concentrated loads. Design considerations are most critical where loads are concentrated on a small area. As the area of the application gets larger, the reactions approach those of uniform loads.

Although a plank of grating may take a considerable allowable load, there may be more deflection than the designer feels is comfortable for foot traffic. We believe dividing the number of inches in the span length by 240 produces a reasonable deflection.

Designing for overloads and future usage is generally a wise investment considering the costs of future maintenance, obsolescence and replacement, as well as the danger of accidents.

Point (Concentrated) Loads

Point loads should be distributed over a minimum of two transverse ribs, regardless of what size or gauge plank grating is utilized.



Good design practice for point loading plank grating employs a "foot" plate at the load point with a minimum dimension of 3" x 3". This plate will assure that the point load has been distributed over the two transverse-rib minimum.

Maximum point load per rib on 12" x 18 ga. steel plank grating is 185 lbs. As a result, through the use of the required 3" x 3" "foot" plate, a maximum design load for the minimum-dimension foot plate is 370 lbs. Higher loads can be supported by the transverse ribs. However, larger "foot" plates will then be required to distribute the higher loads over additional ribs.

Light Traffic Areas

Floor areas immediately adjacent to racks, shelves, conveyors, etc., are generally loaded by light traffic. Ends of aisles, single aisles, etc. are further examples of light-traffic areas. These and similar areas are satisfactorily covered by economical 12" grating.

Floor area beneath package conveyors or other material-handling devices are typically subject to little or no loading. However, for safety reasons, these areas must be covered. The use of 12" plank grating in these areas provides an economical floor covering that can also be used as a load-bearing floor if requirements change.

12" Plank Grating is designed to provide an economical lightweight floor surface for light-traffic areas. Maintenance platforms, access ways and rooftop walkway applications are examples of areas where 12" grating is the best economical choice.

High-Traffic Areas

Mezzanines and aisles for stock storage are typical high-traffic zones. As a result, grating in these areas must have higher fatigue strengths. High fatigue strengths are available utilizing narrow, high-strength 6" or mid-range 9" width grating.

Within these high traffic areas are floor sections that receive little or no traffic, but must be covered for safety reasons. Innovative designers employ 12" grating in this situation. Combining 12" grating with other grating widths and gauges lowers overall installed costs for high-traffic applications.

Testing

Unistrut is dedicated to the research, development and testing of all our manufactured products. The United Interlock Grating System has been tested in accordance with section 6 of the American Iron and Steel Institute's (AISI) Specifications for the Design of Cold Formed Steel Structural Members.

Tests for allowable loads were performed on product randomly selected from stock. These tests were run on simple spans with no end restrictions, over a 2" end bearing. Concentrated loads were applied across the plank with a 3" bearing, while uniform loads were applied by stacking narrow strips of sheet steel uniformly over the plank surface. Concentrated load tests for galvanized steel grating were run on all strength combinations for spans of 2', 3', 4', 5', 6', 7', 8', 10', 12', 14', 16' and 18'. Uniform load tests for galvanized steel were run on spans of 2', 3', 4', 6', 8' and 10'.

Concentrated load results are the same for 6" and 9" wide planks.

Allowable concentrated loads are found by reducing the ultimate load by 1½ times the weight of the grating and dividing the remaining load by two. This gives a safety factor of 2. Allowable uniform loads were calculated by standard formulas from the results found in the concentrated load tests.

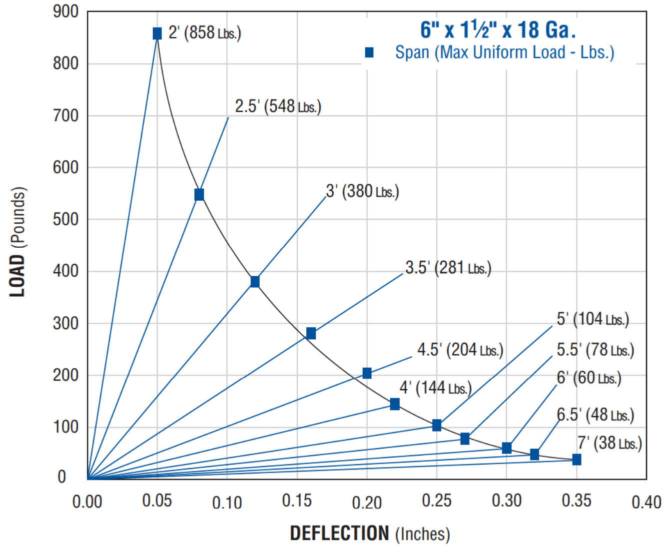
6" x 14 Gauge	Leg Height	Codes	Distance Between Supports (Feet)															
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10	12	14
	1½"	UL	1,232	788	548	402	293	204	150	113	86	68	54	–	–	–	–	
		UD	0.05	0.08	0.12	0.16	0.20	0.22	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
		CL	616	493	411	352	308	274	234	193	162	138	119	–	–	–	–	–
		CD	0.04	0.06	0.10	0.13	0.17	0.21	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
	2½"	UL	4,886	3,296	2,150	1,601	1,257	924	734	597	501	431	369	263	204	150	84	47
		UD	0.15	0.17	0.18	0.22	0.26	0.36	0.41	0.45	0.47	0.52	0.61	0.81	0.89	1.13	1.33	1.42
		CL	2,443	2,060	1,612	1,400	1,257	1,040	917	820	752	700	647	525	460	374	250	165
		CD	0.17	0.17	0.17	0.20	0.22	0.25	0.29	0.34	0.40	0.46	0.55	0.66	0.79	0.90	1.07	1.18
	4"	UL	5,261	4,016	3,147	2,321	1,755	1,520	1,307	1,019	858	738	648	548	420	342	215	165
		UD	0.08	0.10	0.11	0.13	0.16	0.16	0.17	0.23	0.27	0.33	0.40	0.52	0.65	0.82	1.07	1.18
		CL	2,630	2,510	2,360	2,080	1,755	1,710	1,633	1,400	1,288	1,200	1,134	1,094	980	854	643	577
		CD	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.23	0.26	0.30	0.33	0.45	0.57	0.69	0.91	1.26

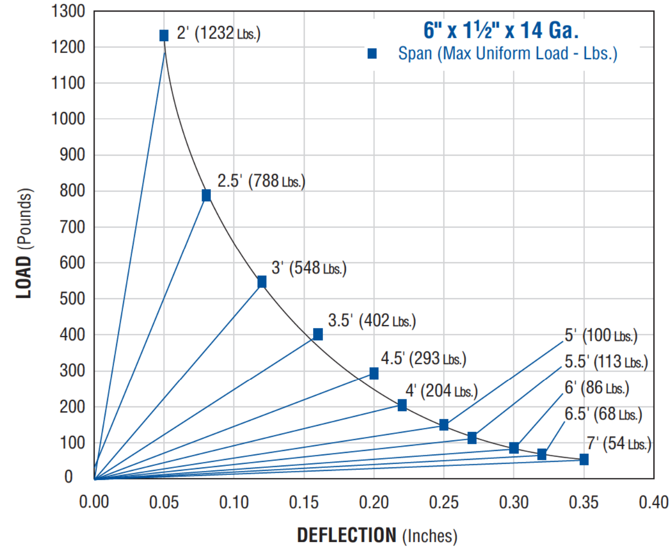
6" x 18 Gauge	Leg Height	Codes	Distance Between Supports (Feet)															
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10	12	14
	1½"	UL	858	548	380	281	204	144	104	78	60	48	38	–	–	–	–	–
		UD	0.05	0.08	0.12	0.16	0.20	0.22	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
		CL	429	343	286	245	214	190	163	135	113	96	83	–	–	–	–	–
		CD	0.04	0.06	0.10	0.13	0.17	0.21	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
	2½"	UL	2,472	1,664	1,220	881	663	516	414	342	284	237	197	164	134	102	66	41
		UD	0.14	0.15	0.16	0.21	0.26	0.31	0.36	0.38	0.44	0.47	0.49	0.79	0.89	1.12	1.37	1.58
		CL	1,236	1,040	915	770	663	580	518	470	426	385	344	327	300	255	200	140
		CD	0.12	0.14	0.16	0.18	0.21	0.24	0.28	0.29	0.30	0.37	0.46	0.61	0.74	0.91	1.20	1.50
	4"	UL	3,296	2,544	2,010	1,520	1,179	947	744	626	522	449	402	314	249	191	147	101
		UD	0.12	0.13	0.14	0.15	0.15	0.21	0.26	0.29	0.31	0.35	0.42	0.58	0.59	0.70	0.81	0.89
		CL	1,648	1,590	1,507	1,330	1,179	1,065	930	860	783	730	704	628	560	477	440	350
		CD	0.11	0.12	0.13	0.14	0.14	0.17	0.18	0.22	0.26	0.28	0.32	0.39	0.48	0.51	0.88	1.07

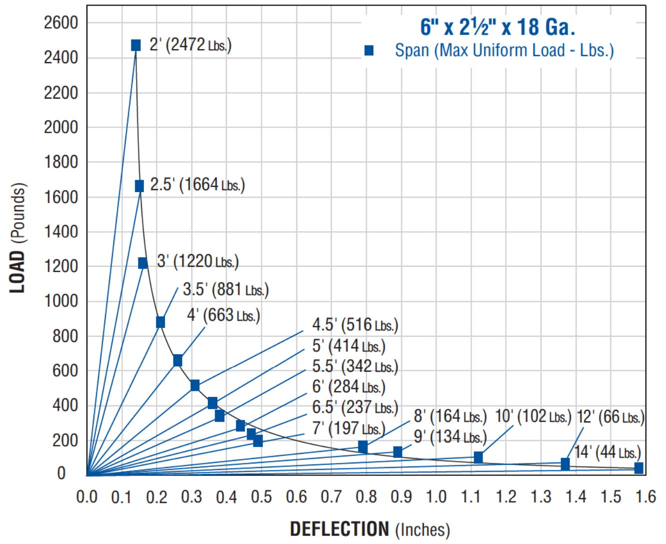
6" Aluminum (0.080)	Leg Height	Codes	Distance Between Supports (Feet)													
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	9	10
	2½"	UL	2,676	1,590	1,065	840	706	600	517	412	313	277	255	210	177	–	–
		UD	0.20	0.30	0.35	0.40	0.47	0.55	0.63	0.78	1.01	1.09	1.20	1.4	1.66	–	–
		CL	1,338	925	825	755	706	630	575	515	469	435	410	385	355	–	–
		CD	0.16	0.20	0.25	0.31	0.36	0.45	0.54	0.67	0.81	0.90	0.99	1.12	1.27	–	–

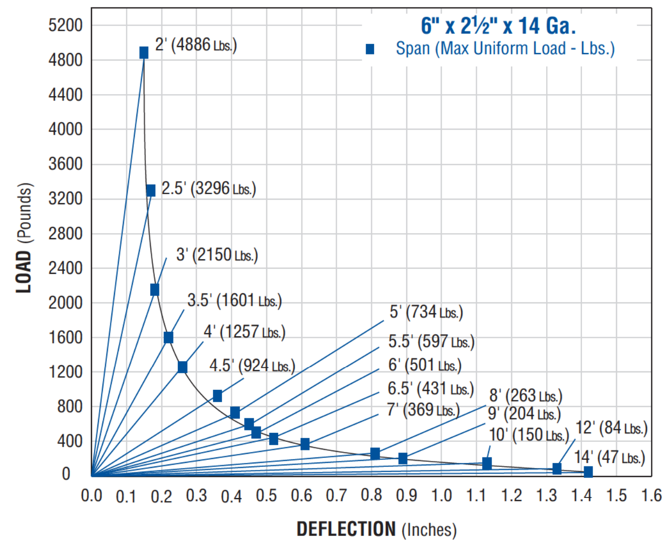
Code Key:
UL = Uniform Load (pounds per square foot)
UD = Deflection under uniform load (Inches)
CL = Concentrated Load (pounds)
CD = Deflection under concentrated load (Inches)

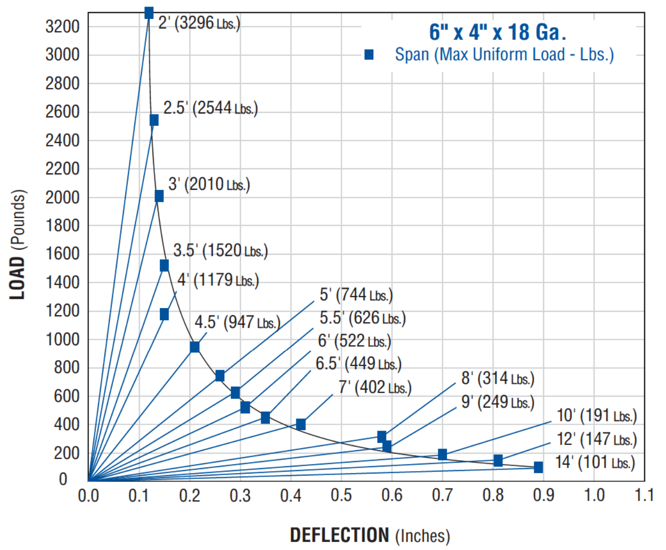
UNISTRUT

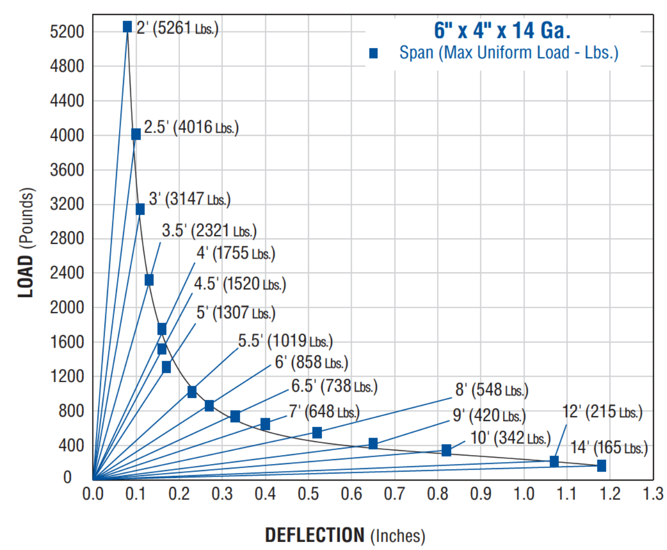

6" x 1½" x 18 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (858 Lbs.)
2.5' (548 Lbs.)
3' (380 Lbs.)
3.5' (281 Lbs.)
4' (144 Lbs.)
4.5' (204 Lbs.)
5' (104 Lbs.)
5.5' (78 Lbs.)
6' (60 Lbs.)
6.5' (48 Lbs.)
7' (38 Lbs.)


6" x 1½" x 14 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (1232 Lbs.)
2.5' (788 Lbs.)
3' (548 Lbs.)
3.5' (402 Lbs.)
4.5' (293 Lbs.)
4' (204 Lbs.)
5' (100 Lbs.)
5.5' (113 Lbs.)
6' (86 Lbs.)
6.5' (68 Lbs.)
7' (54 Lbs.)


6" x 2½" x 18 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (2472 Lbs.)
2.5' (1664 Lbs.)
3' (1220 Lbs.)
3.5' (881 Lbs.)
4' (663 Lbs.)
4.5' (516 Lbs.)
5' (414 Lbs.)
5.5' (342 Lbs.)
6' (284 Lbs.)
6.5' (237 Lbs.)
7' (197 Lbs.)
8' (164 Lbs.)
9' (134 Lbs.)
10' (102 Lbs.)
12' (66 Lbs.)
14' (44 Lbs.)


6" x 2½" x 14 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (4886 Lbs.)
2.5' (3296 Lbs.)
3' (2150 Lbs.)
3.5' (1601 Lbs.)
4' (1257 Lbs.)
4.5' (924 Lbs.)
5' (734 Lbs.)
5.5' (597 Lbs.)
6' (501 Lbs.)
6.5' (431 Lbs.)
7' (369 Lbs.)
8' (263 Lbs.)
9' (204 Lbs.)
10' (150 Lbs.)
12' (84 Lbs.)
14' (47 Lbs.)


6" x 4" x 18 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (3296 Lbs.)
2.5' (2544 Lbs.)
3' (2010 Lbs.)
3.5' (1520 Lbs.)
4' (1179 Lbs.)
4.5' (947 Lbs.)
5' (744 Lbs.)
5.5' (626 Lbs.)
6' (522 Lbs.)
6.5' (449 Lbs.)
7' (402 Lbs.)
8' (314 Lbs.)
9' (249 Lbs.)
10' (191 Lbs.)
12' (147 Lbs.)
14' (101 Lbs.)

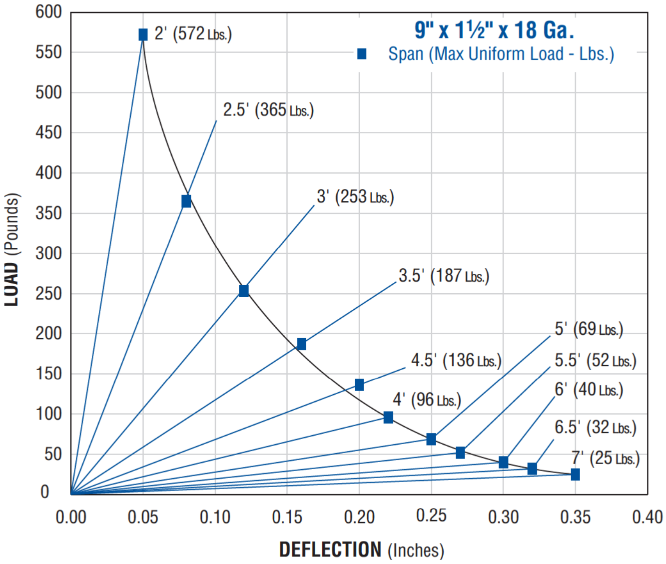

6" x 4" x 14 Ga.
Span (Max Uniform Load - Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)
2' (5261 Lbs.)
2.5' (4016 Lbs.)
3' (3147 Lbs.)
3.5' (2321 Lbs.)
4' (1755 Lbs.)
4.5' (1520 Lbs.)
5' (1307 Lbs.)
5.5' (1019 Lbs.)
6' (858 Lbs.)
6.5' (738 Lbs.)
7' (648 Lbs.)
8' (548 Lbs.)
9' (420 Lbs.)
10' (342 Lbs.)
12' (215 Lbs.)
14' (165 Lbs.)

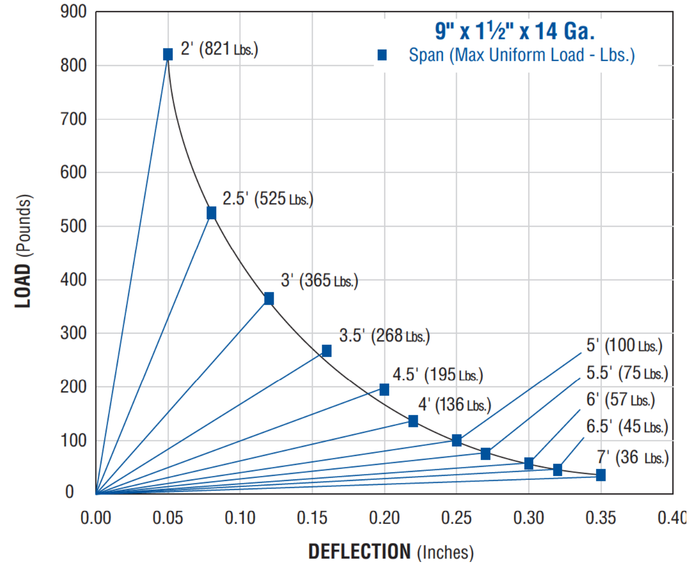
	Leg Height	Codes	Distance Between Supports (Feet)															
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10	12	14
9" x 14 Gauge	1½"	UL	821	525	365	268	195	136	100	75	57	45	36	–	–	–	–	–
		UD	0.05	0.08	0.12	0.16	0.20	0.22	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
		CL	616	493	411	352	308	274	234	193	162	138	119	–	–	–	–	–
		CD	0.04	0.06	0.10	0.13	0.17	0.21	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
	2½"	UL	3,257	2,197	1,433	1,067	838	616	489	398	334	287	246	175	136	100	56	31
		UD	0.15	0.17	0.18	0.22	0.26	0.36	0.41	0.45	0.47	0.52	0.61	0.81	0.89	1.13	1.33	1.42
		CL	2,443	2,060	1,612	1,400	1,257	1,040	917	820	752	700	647	525	460	374	250	165
		CD	0.17	0.17	0.17	0.20	0.22	0.25	0.29	0.34	0.40	0.46	0.55	0.66	0.79	0.90	1.07	1.18
	4"	UL	3,507	2,677	2,098	1,547	1,170	1,013	871	679	572	492	432	365	280	228	143	110
		UD	0.08	0.10	0.11	0.13	0.16	0.16	0.17	0.23	0.27	0.33	0.40	0.52	0.65	0.82	1.07	1.18
		CL	2,630	2,510	2,360	2,080	1,755	1,710	1,633	1,400	1,288	1,200	1,134	1,094	980	854	643	577
		CD	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.23	0.26	0.30	0.33	0.45	0.57	0.69	0.91	1.26

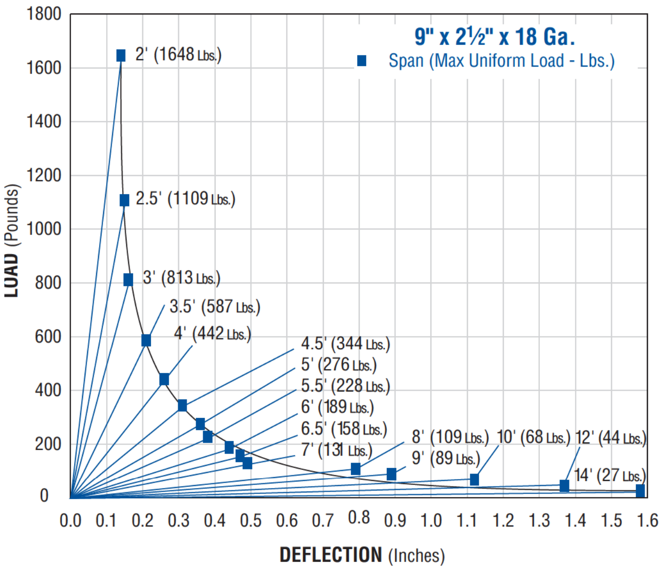
	Leg Height	Codes	Distance Between Supports (Feet)															
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10	12	14
9" x 18 Gauge	1½"	UL	572	365	253	187	136	96	69	52	40	32	25	–	–	–	–	–
		UD	0.05	0.08	0.12	0.16	0.20	0.22	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
		CL	429	343	286	245	214	190	163	135	113	96	83	–	–	–	–	–
		CD	0.04	0.06	0.10	0.13	0.17	0.21	0.25	0.27	0.30	0.32	0.35	–	–	–	–	–
	2½"	UL	1,648	1,109	813	587	442	344	276	228	189	158	131	109	89	68	44	27
		UD	0.14	0.15	0.16	0.21	0.26	0.31	0.36	0.38	0.44	0.47	0.49	0.79	0.89	1.12	1.37	1.58
		CL	1,236	1,040	915	770	663	580	518	470	426	385	344	327	300	255	200	140
		CD	0.12	0.14	0.16	0.18	0.21	0.24	0.28	0.29	0.30	0.37	0.46	0.61	0.74	0.91	1.2	1.5
	4"	UL	2,197	1,696	1,340	1,013	786	631	496	417	348	299	268	209	166	127	98	67
		UD	0.12	0.13	0.14	0.15	0.15	0.21	0.26	0.29	0.31	0.35	0.42	0.58	0.59	0.70	0.81	0.89
		CL	1,648	1,590	1,507	1,330	1,179	1,065	930	860	783	730	704	628	560	477	440	350
		CD	0.11	0.12	0.13	0.14	0.14	0.17	0.18	0.22	0.26	0.28	0.32	0.39	0.48	0.51	0.88	1.07

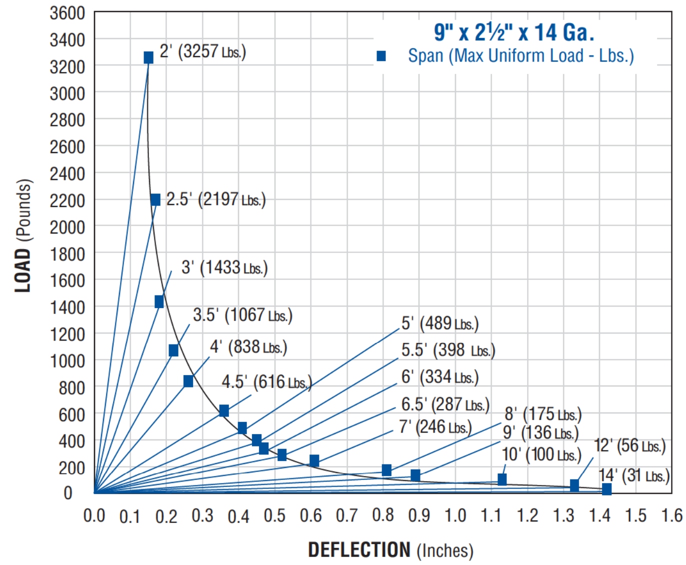
	Leg Height	Codes	Distance Between Supports (Feet)												
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
9" Aluminum (0.080)	2½"	UL	1,784	1,060	710	560	471	400	345	275	209	185	170	140	118
		UD	0.20	0.30	0.35	0.40	0.47	0.55	0.63	0.78	1.01	1.09	1.20	1.4	1.66
		CL	1,338	925	825	755	706	630	575	515	469	435	410	385	355
		CD	0.16	0.20	0.25	0.31	0.36	0.45	0.54	0.67	0.81	0.90	0.99	1.12	1.27

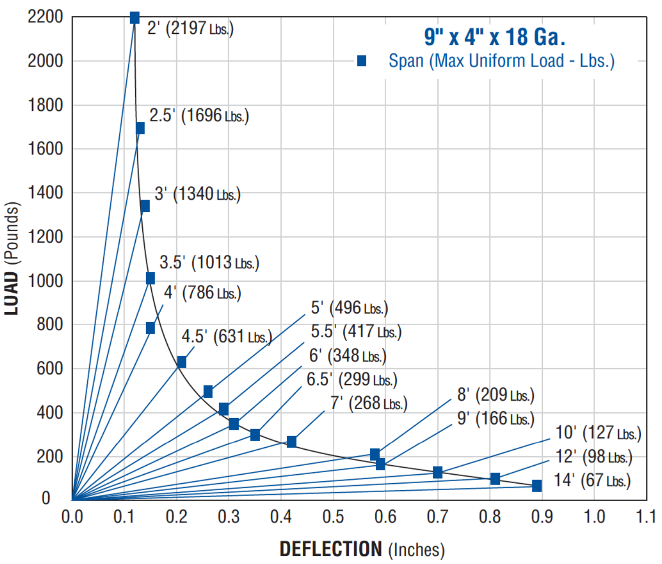
Code Key: UL = Uniform Load (pounds per square foot)
UD = Deflection under uniform load (Inches)
CL = Concentrated Load (pounds)
CD = Deflection under concentrated load (Inches)

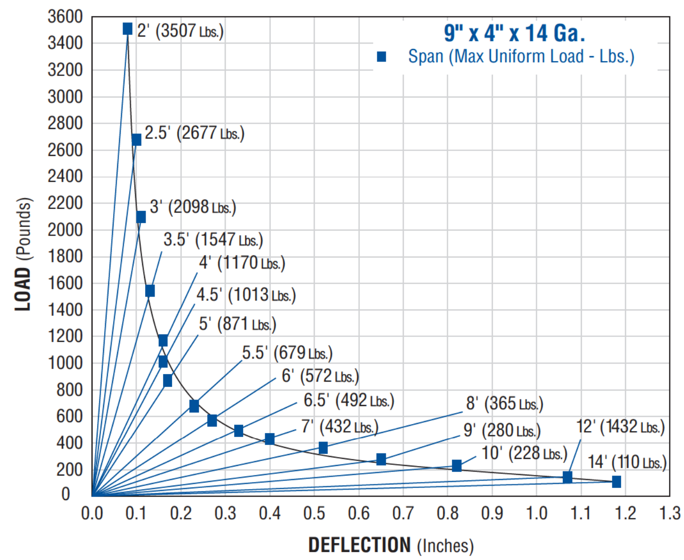

9" x 1½" x 18 Ga.
Span (Max Uniform Load - Lbs.)
2' (572 Lbs.)
2.5' (365 Lbs.)
3' (253 Lbs.)
3.5' (187 Lbs.)
4' (96 Lbs.)
4.5' (136 Lbs.)
5' (69 Lbs.)
5.5' (52 Lbs.)
6' (40 Lbs.)
6.5' (32 Lbs.)
7' (25 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

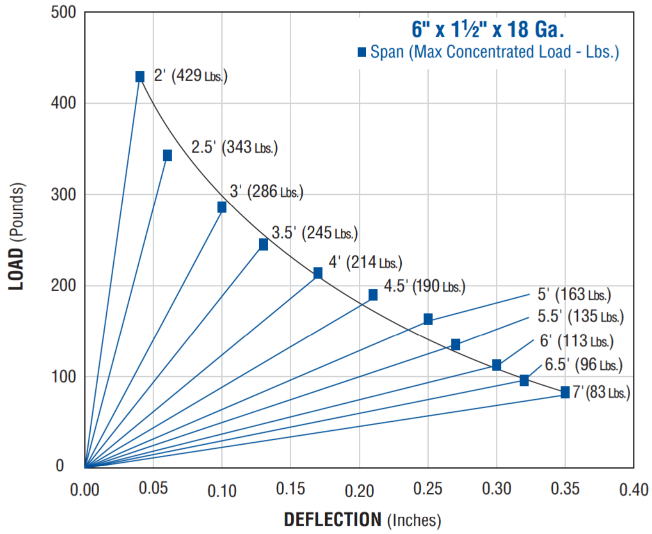

9" x 1½" x 14 Ga.
Span (Max Uniform Load - Lbs.)
2' (821 Lbs.)
2.5' (525 Lbs.)
3' (365 Lbs.)
3.5' (268 Lbs.)
4.5' (195 Lbs.)
4' (136 Lbs.)
5' (100 Lbs.)
5.5' (75 Lbs.)
6' (57 Lbs.)
6.5' (45 Lbs.)
7' (36 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

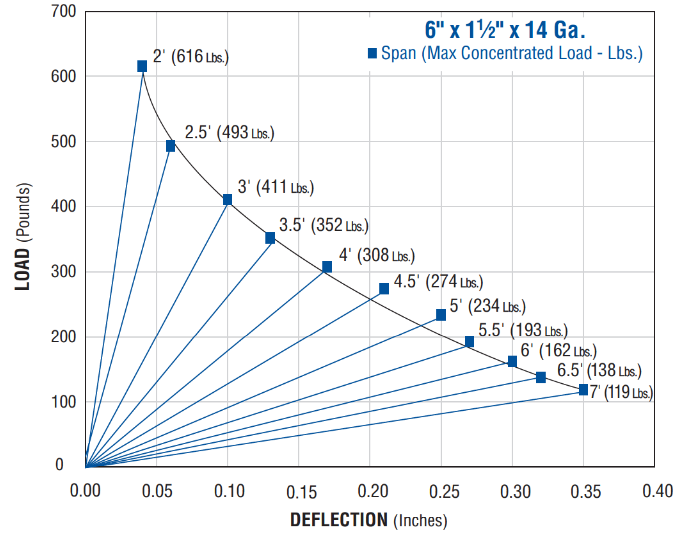

9" x 2½" x 18 Ga.
Span (Max Uniform Load - Lbs.)
2' (1648 Lbs.)
2.5' (1109 Lbs.)
3' (813 Lbs.)
3.5' (587 Lbs.)
4' (442 Lbs.)
4.5' (344 Lbs.)
5' (276 Lbs.)
5.5' (228 Lbs.)
6' (189 Lbs.)
6.5' (158 Lbs.)
7' (131 Lbs.)
8' (109 Lbs.)
9' (89 Lbs.)
10' (68 Lbs.)
12' (44 Lbs.)
14' (27 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

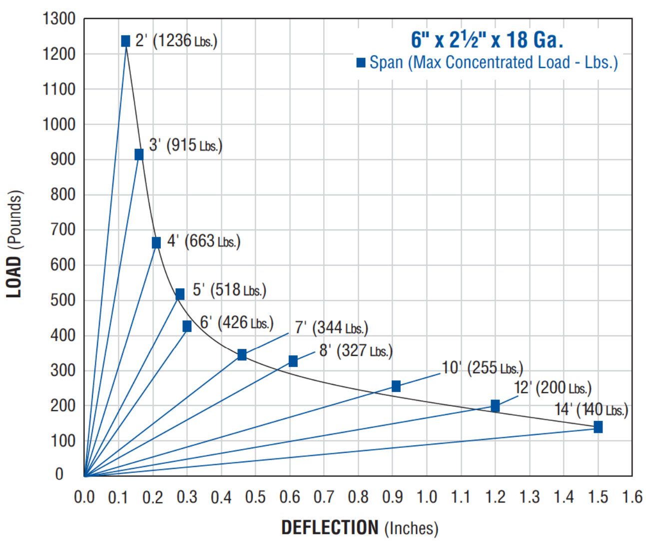

9" x 2½" x 14 Ga.
Span (Max Uniform Load - Lbs.)
2' (3257 Lbs.)
2.5' (2197 Lbs.)
3' (1433 Lbs.)
3.5' (1067 Lbs.)
4' (838 Lbs.)
4.5' (616 Lbs.)
5' (489 Lbs.)
5.5' (398 Lbs.)
6' (334 Lbs.)
6.5' (287 Lbs.)
7' (246 Lbs.)
8' (175 Lbs.)
9' (136 Lbs.)
10' (100 Lbs.)
12' (56 Lbs.)
14' (31 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

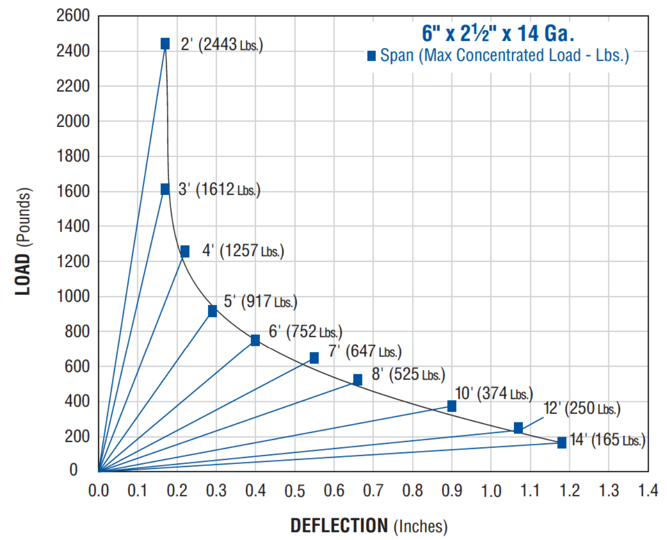

9" x 4" x 18 Ga.
Span (Max Uniform Load - Lbs.)
2' (2197 Lbs.)
2.5' (1696 Lbs.)
3' (1340 Lbs.)
3.5' (1013 Lbs.)
4' (786 Lbs.)
4.5' (631 Lbs.)
5' (496 Lbs.)
5.5' (417 Lbs.)
6' (348 Lbs.)
6.5' (299 Lbs.)
7' (268 Lbs.)
8' (209 Lbs.)
9' (166 Lbs.)
10' (127 Lbs.)
12' (98 Lbs.)
14' (67 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

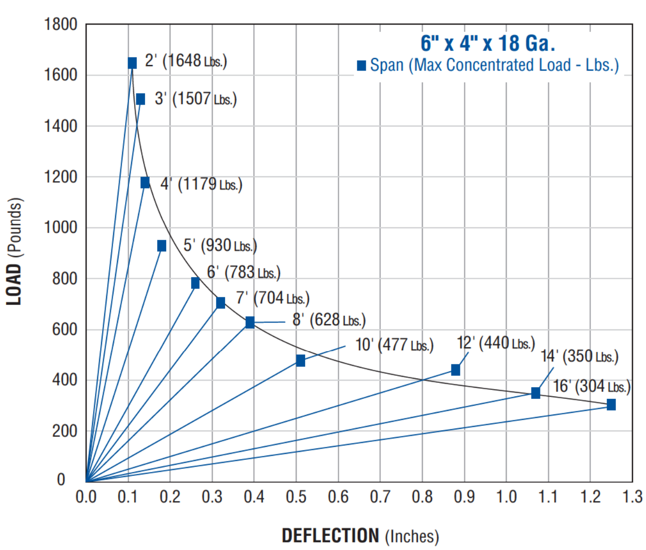

9" x 4" x 14 Ga.
Span (Max Uniform Load - Lbs.)
2' (3507 Lbs.)
2.5' (2677 Lbs.)
3' (2098 Lbs.)
3.5' (1547 Lbs.)
4' (1170 Lbs.)
4.5' (1013 Lbs.)
5' (871 Lbs.)
5.5' (679 Lbs.)
6' (572 Lbs.)
6.5' (492 Lbs.)
7' (432 Lbs.)
8' (365 Lbs.)
9' (280 Lbs.)
10' (228 Lbs.)
12' (1432 Lbs.)
14' (110 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

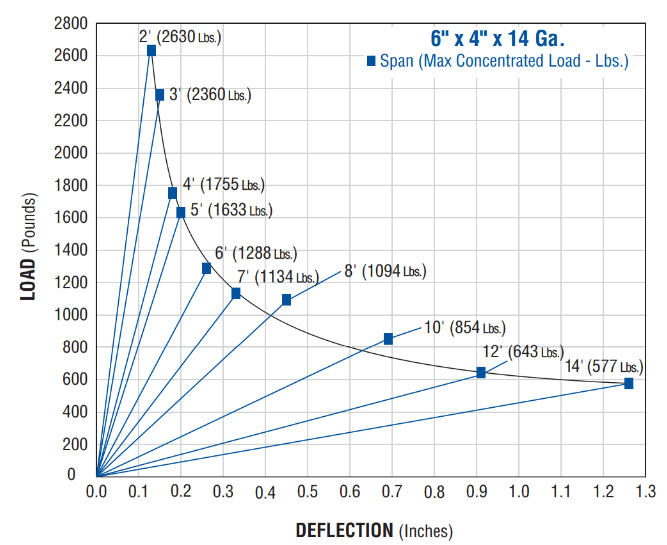

6" x 1½" x 18 Ga.
Span (Max Concentrated Load - Lbs.)
2' (429 Lbs.)
2.5' (343 Lbs.)
3' (286 Lbs.)
3.5' (245 Lbs.)
4' (214 Lbs.)
4.5' (190 Lbs.)
5' (163 Lbs.)
5.5' (135 Lbs.)
6' (113 Lbs.)
6.5' (96 Lbs.)
7' (83 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)


6" x 1½" x 14 Ga.
Span (Max Concentrated Load - Lbs.)
2' (616 Lbs.)
2.5' (493 Lbs.)
3' (411 Lbs.)
3.5' (352 Lbs.)
4' (308 Lbs.)
4.5' (274 Lbs.)
5' (234 Lbs.)
5.5' (193 Lbs.)
6' (162 Lbs.)
6.5' (138 Lbs.)
7' (119 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)


6" x 2½" x 18 Ga.
Span (Max Concentrated Load - Lbs.)
2' (1236 Lbs.)
3' (915 Lbs.)
4' (663 Lbs.)
5' (518 Lbs.)
6' (426 Lbs.)
7' (344 Lbs.)
8' (327 Lbs.)
10' (255 Lbs.)
12' (200 Lbs.)
14' (140 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

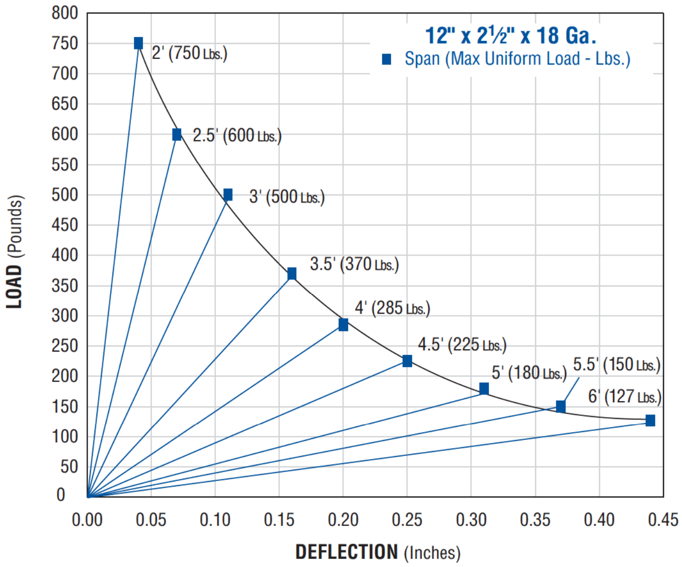

6" x 2½" x 14 Ga.
Span (Max Concentrated Load - Lbs.)
2' (2443 Lbs.)
3' (1612 Lbs.)
4' (1257 Lbs.)
5' (917 Lbs.)
6' (752 Lbs.)
7' (647 Lbs.)
8' (525 Lbs.)
10' (374 Lbs.)
12' (250 Lbs.)
14' (165 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

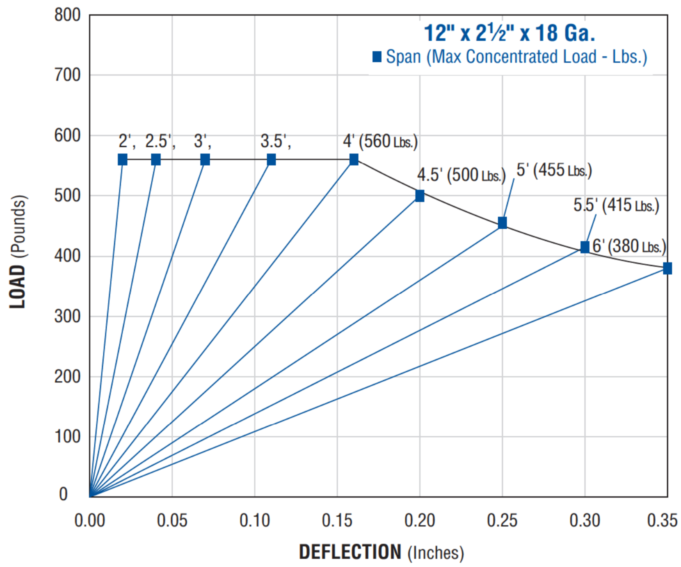

6" x 4" x 18 Ga.
Span (Max Concentrated Load - Lbs.)
2' (1648 Lbs.)
3' (1507 Lbs.)
4' (1179 Lbs.)
5' (930 Lbs.)
6' (783 Lbs.)
7' (704 Lbs.)
8' (628 Lbs.)
10' (477 Lbs.)
12' (440 Lbs.)
14' (350 Lbs.)
16' (304 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)


6" x 4" x 14 Ga.
Span (Max Concentrated Load - Lbs.)
2' (2630 Lbs.)
3' (2360 Lbs.)
4' (1755 Lbs.)
5' (1633 Lbs.)
6' (1288 Lbs.)
7' (1134 Lbs.)
8' (1094 Lbs.)
10' (854 Lbs.)
12' (643 Lbs.)
14' (577 Lbs.)
LOAD (Pounds)
DEFLECTION (Inches)

12" x 18 Gauge	Leg Height	Codes	Distance Between Supports (Feet)														
			2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	9	10
	2½"	UL	750	600	500	370	285	225	180	150	127	–	–	–	–	–	–
		UD	0.04	0.07	0.11	0.16	0.20	0.25	0.31	0.37	0.44	–	–	–	–	–	–
		CL	560	560	560	560	560	500	455	415	380	–	–	–	–	–	–
		CD	0.02	0.04	0.07	0.11	0.16	0.20	0.25	0.30	0.35	–	–	–	–	–	–

Code Key: UL = Uniform Load (pounds per square foot)
UD = Deflection under uniform load (Inches)
CL = Concentrated Load (pounds)
CD = Deflection under concentrated load (Inches)





1. GENERAL

1.1 Scope of Work

A. Provide all material and labor required for the interlocking plank grating as indicated in the contract documents.

1.2 Related Work Specified Elsewhere

A. Structural Steel

B. Cold Formed Metal Framing

C. Metal Fabrications

1.3 Quality Assurance

A. Material shall be provided by a qualified contractor with at least five (5) years experience in the manufacture of interlock grating. Contractor shall demonstrate experience in projects of similar scope.

B. Anti-Skid surfaced grating shall conform to Federal Specification RR-G-1602A.

C. The Grating shall be designed to withstand the following load criteria:

1. Uniform Live Load ________________ psf.
2. Concentrated Load ________________ lbs.

D. Contractor shall certify that grating has been tested, indicating maximum allowable uniform and concentrated loads, with a factor of safety of 2, per AISC, Section 6.

E. If product is required in nuclear and/or safety related application, it shall be supplied under the requirements of nuclear specification 10CFR 50 appendix B.

1.4 Submittals

A. Contractor shall submit shop drawings showing grating layout, support structure and detailed sections depicting assembly.

2. PRODUCTS

2.1 Acceptable Manufacturer

A. In order to define the requirements for quality, function, sizes, gauges, surfaces, etc., these material specifications designate manufacturers, brands and other pertinent data that describe the minimum product standards of the products that conform to the project's requirements.

B. Products of other manufacturers may also be acceptable, provided that such products are equivalent to, or better than, those specified and, further, that use of such substitute products will not involve additional cost to owner due to possible required changes to accommodate them.

C. The alternate (substitute) product must be a proven equivalent to that specified by submitting technical data, test reports, samples, typical details, comparative layout and engineering calculations for evaluation.

D. The acceptance of an alternate (substitute) product is at the discretion of the owner or his agents, whose decision shall be final.

2.2 Products

A. Grating shall be United Interlock Plank Grating System, as manufactured by Unistrut, 16100 S. Lathrop Ave., Harvey, IL 60426 (U.S.A.), Phone (800) 882-5543.

B. Materials shall conform to ASTM A653, Grade A with a Class G-90 coating.

C. Material shall be ________ gauge. With a leg height of ________inches.

D. The surface pattern shall provide a minimum of 35% but not more than 42% open area. Openings shall be a minimum of 4" long and a maximum of ¾" width. The surface shall be ________.

1. Anti-Skid surface shall provide 360° positive traction and be made of tapered self-cleaning teeth, approximately ⅛" high.
2. Anti-Skid surface teeth shall have slots approximately 1⁄16" wide by ⅜" long, uniformly spaced with a minimum of 60 and a maximum of 80 teeth per square foot.

3. INSTALLATION

3.1 Site Examination

A. Contractor shall examine the support structure, work area and conditions for the grating installation. If the supports, area or conditions are not satisfactory, installation shall not commence until satisfactory conditions are present.

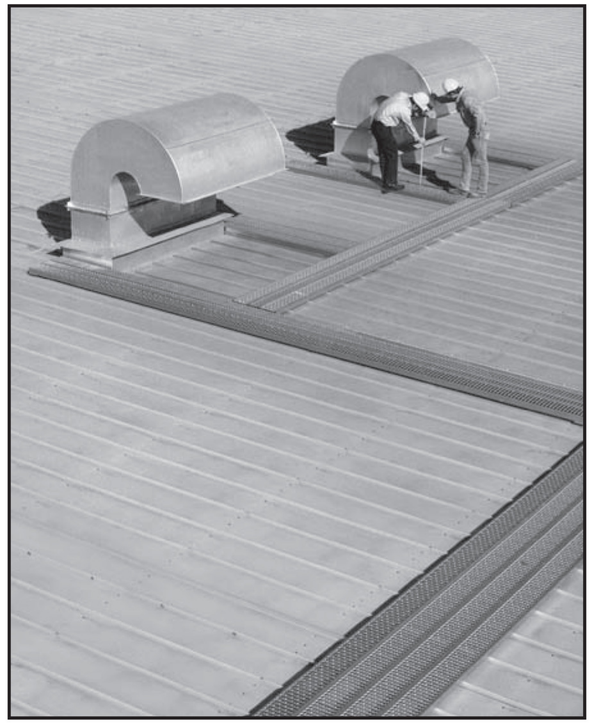
3.2 Erection

A. Grating shall be installed as detailed on the approved shop drawings.

B. Grating shall be installed in single, unspliced sections for all requirements to 20' lengths.

C. Grating shall interlock, with male-female legs providing a lock prohibiting horizontal movement. The outside leg of all members shall be male.

D. Connections of grating to support elements shall be by bolting, clamping, screwing, welding or use of a manufacturers approved hold-down clip.



PROTECT ROOFS FROM BIGFOOT WITH ROOFWALKS® ROOFTOP WALKWAYS

Roofwalks walkways are your low-cost solution to damage caused by rooftop foot traffic. On membrane, built-up, foam and coated roofs, they protect against puncture, abrasion and wear. On standing-seam metal roofs, workers of all sizes – even the Bigfoots of the world – can walk safely on the anti-skid surface without causing seam distortion, "dishing" or harmful stress to roof panels. Steel planks are strong yet light-weight, making installation quick and easy. Thanks to special system hardware, no roof penetration is required for anchoring. Roofwalks are versatile and adapt to any roofing system.

ROOFWALKS® SYSTEMS WILL…

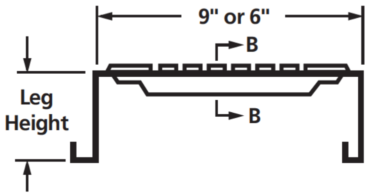
- Provide a safe walkway for rooftop traffic
- Protect the roof from foot traffic
- Resist weather in either galvanized steel or aluminum finish
- Attach to all metal standing-seam roofs (including metric)

ROOFWALKS® SYSTEMS WILL NOT…

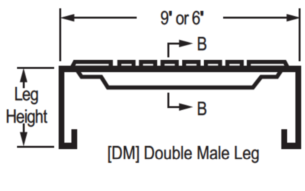
- Penetrate rooftop surface (except on rib roofs)
- Trap water …like rubber pads will
- Curl causing trip hazards …like rubber pads will
- Disappear in snow …like rubber pads will
- Rot or disintegrate …like wood or patio blocks will

Roofwalk Grating Planks

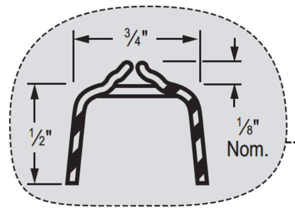
18 gauge



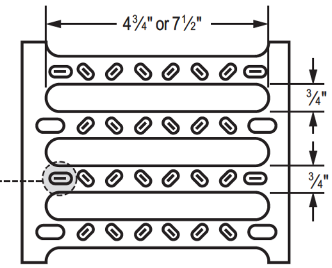
Male-Female Leg



Double-Male Leg

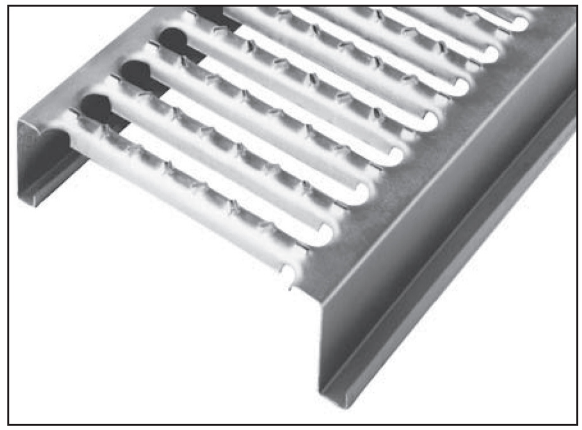


Anti-Skid Rib



Anti-Skid Surface Shown

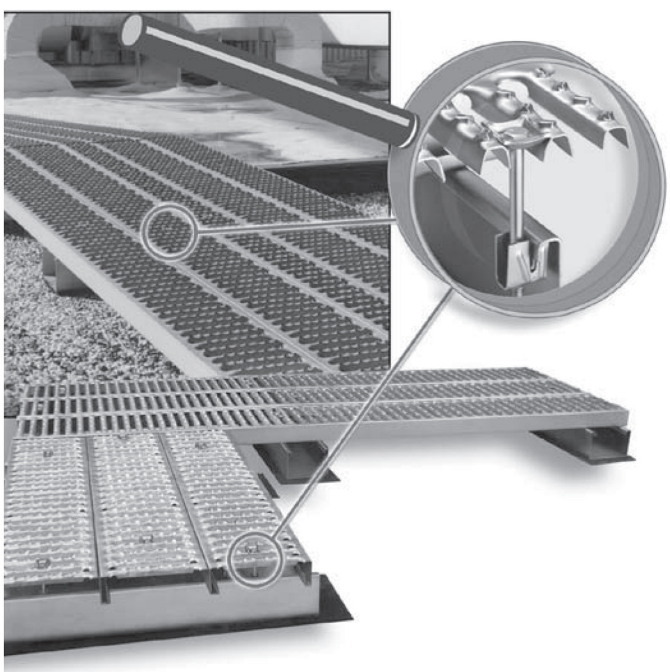
Interlocking Planks 20' or 24' planks in 6", 9" or 12" widths roll formed from 18 gauge galvanized steel (G-90 coating). Planks available with double-male or male-female leg shapes. Anti-Skid surface and 2½" leg height, standard.



Roofwalk Grating (20' & 24' Stock Lengths)
Leg Height: 2½"; Finish: PG; Surface: Anti-Skid

Part No.	Plank Width	Leg Shape	Weight Lbs./Ft.
G 91282	9"	DM	2.7
G 92282		MF	2.7
G 61281	6"	DM	2.3
G 62281		MF	2.3
G 11282	12"	DM	3.2
G 12282		MF	3.2

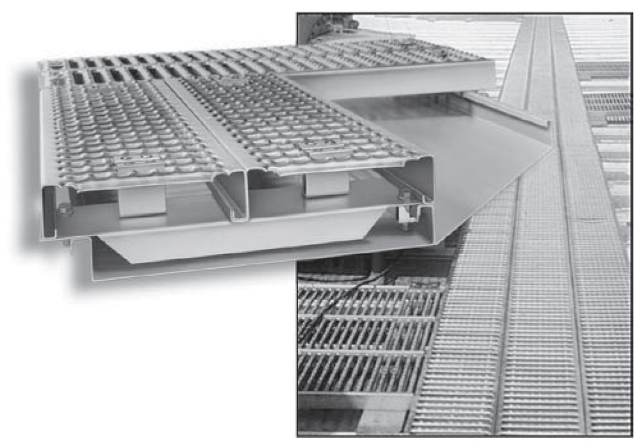
Membrane / Composite Installation



Installation on a membrane roof uses the support stands or the Unipier® sleeper support as a mounting platform.

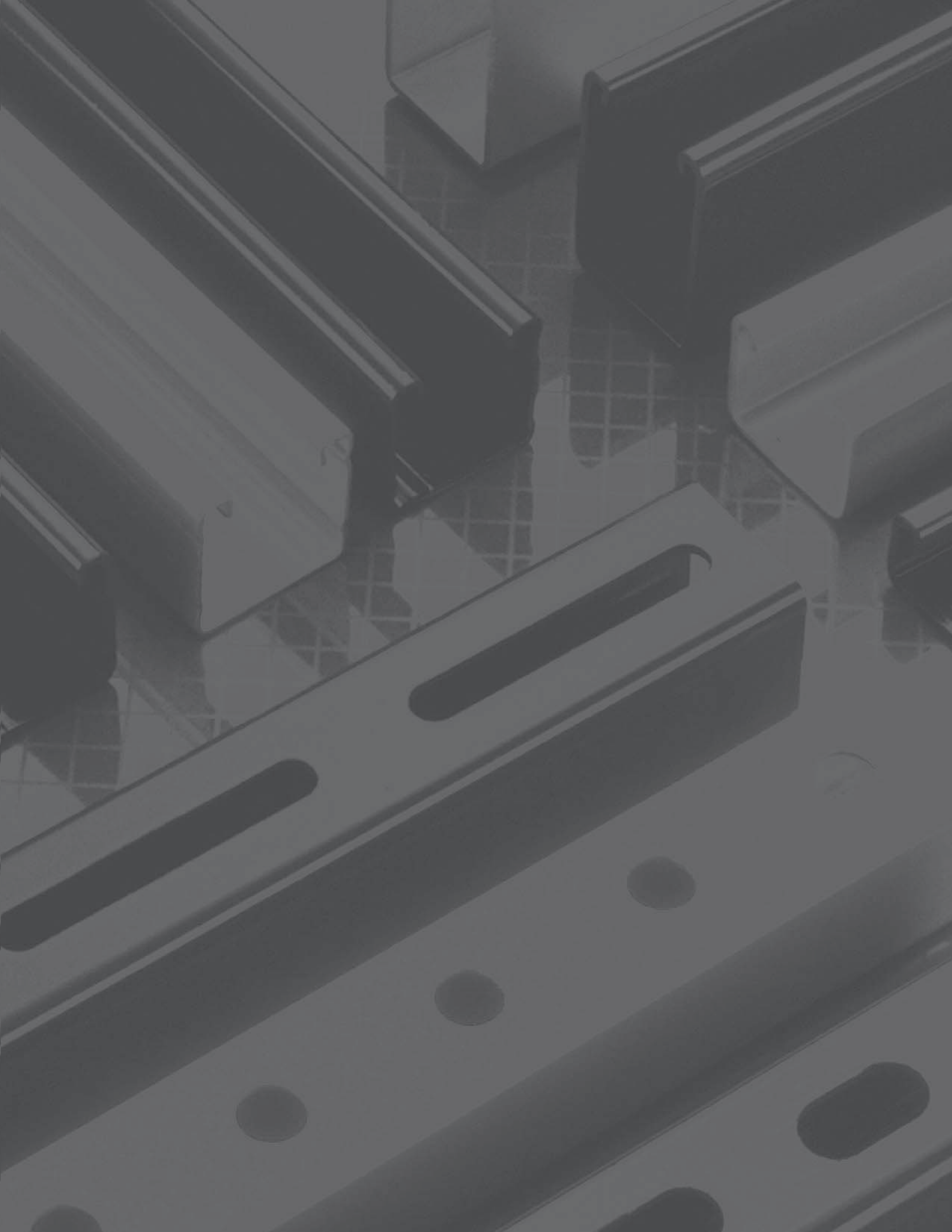
Refer to our website (www.unistrut.com) for detailed installation instructions and a description of the mounting hardware used.

Standing Seam Installation



Installation on a standing seam room uses a custom support plate specifically designed for each manufacturers standing seem roof to form a mounting platform.

The mounting hardware also depends on the specific standing seem room. Refer to our website (www.unistrut.com) for detailed installation instructions and a description of the mounting hardware used.



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www.unistrut.com

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Ajax, Ontario, L1S 2E4 Canada
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