



Strut Systems

Channels, Hardware, Fittings. Mechanical & Electrical Accessories,
Special Materials (Aluminum, Stainless Steel, Fiberglass),
Mini Channel, Concrete Inserts, Slotted Angle,
Kwik-Wire™, Roof-Top Supports

SS-08R

 **COOPER B-Line**



INTRODUCTION

Cooper B-Line, Inc. is a leading manufacturer and fabricator of steel and aluminum products which are used in support of equipment for industrial, commercial, utility, and OEM installations. Cooper B-Line is proud of the exacting standards of research, design, engineering, and manufacturing that go into each and every product that comprise our metal framing product line. Our customers have access to the most complete support systems offered in the industry, including metal framing, cable tray, pipe hangers, slotted angle, and fasteners.

Many of Cooper B-Line's products are listed by the Underwriters Laboratories, Inc. All Cooper B-Line products are manufactured to meet or exceed MFMA and other industry standards set for their design and manufacture.

The majority of Cooper B-Line products are produced in four modern plants consisting of approximately 900,000 square feet. These facilities are located in Highland, Illinois; Troy, Illinois; Reno, Nevada; and Sherman, Texas. Regional sales and distribution centers are located throughout the United States stocking standard Cooper B-Line products for quick service and delivery.

This catalog is designed to be helpful to engineers and contractors in the application and selection of strut products for construction and maintenance.

If a unique application requires a special product not included in this catalog, Cooper B-Line engineering personnel are ready to furnish design consultation and realistic cost estimates. In addition, sales representatives with engineering know-how are located throughout the United States and abroad for your convenience.



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**DURA-BLOK™
ROOFTOP SUPPORTS**
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DB Series



DB6 Series



DB10 Series



DBE10 Series



DBR10-12



DBM Series



DB_DS Series



DBR Series

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WASHDOWN SUPPORTS**
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U-Bolts



Dura Clean™ Channel



**Dura Clean™
Wall Mount Rails**



Hardware



Threaded Rod



Spacers

New Products

ARMAFIX® CLAMPS & ACCESSORIES Pg. 120



Clamp & Insert Assembly
Includes: Insert, Clamp, and Hardware

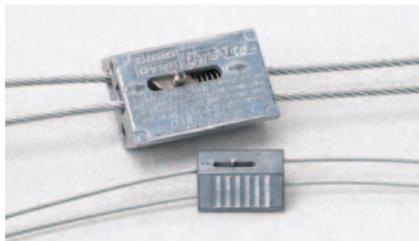


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Insulation
Tape**



Insert Only
Used with B-Line
Pipe Hangers
(Sold Separately)

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Wire Rope**



KwikPak™
(Includes clamps & wire rope)



KwikWire™ Clamps

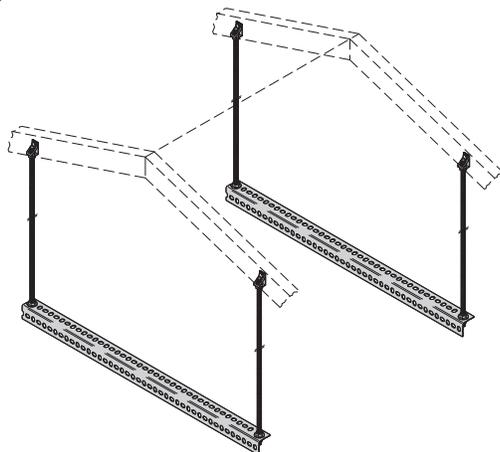


KwikWire™ Cutter



Air Duct Corner Protector

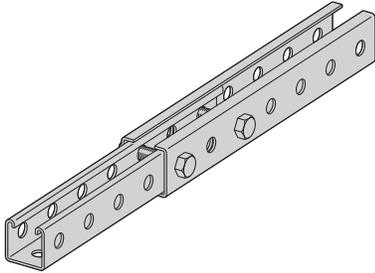
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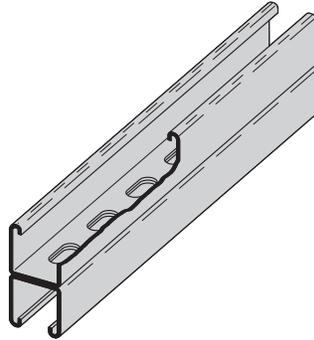
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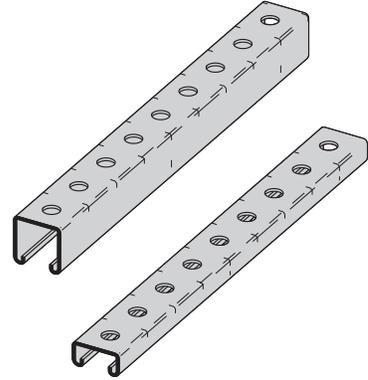
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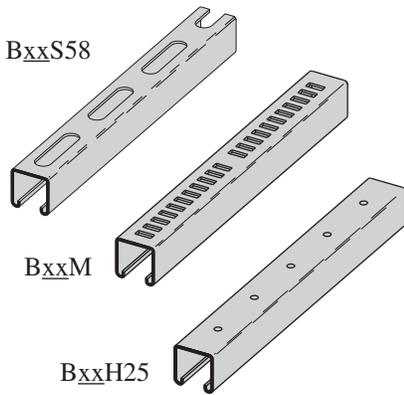
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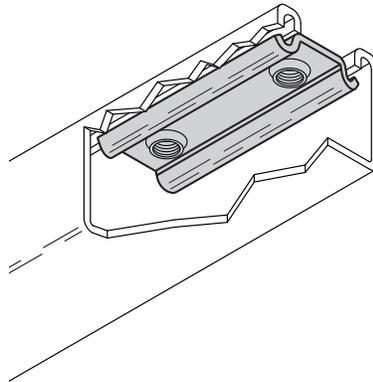
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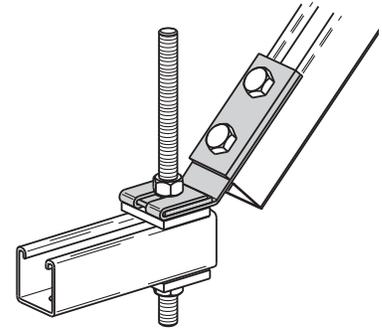
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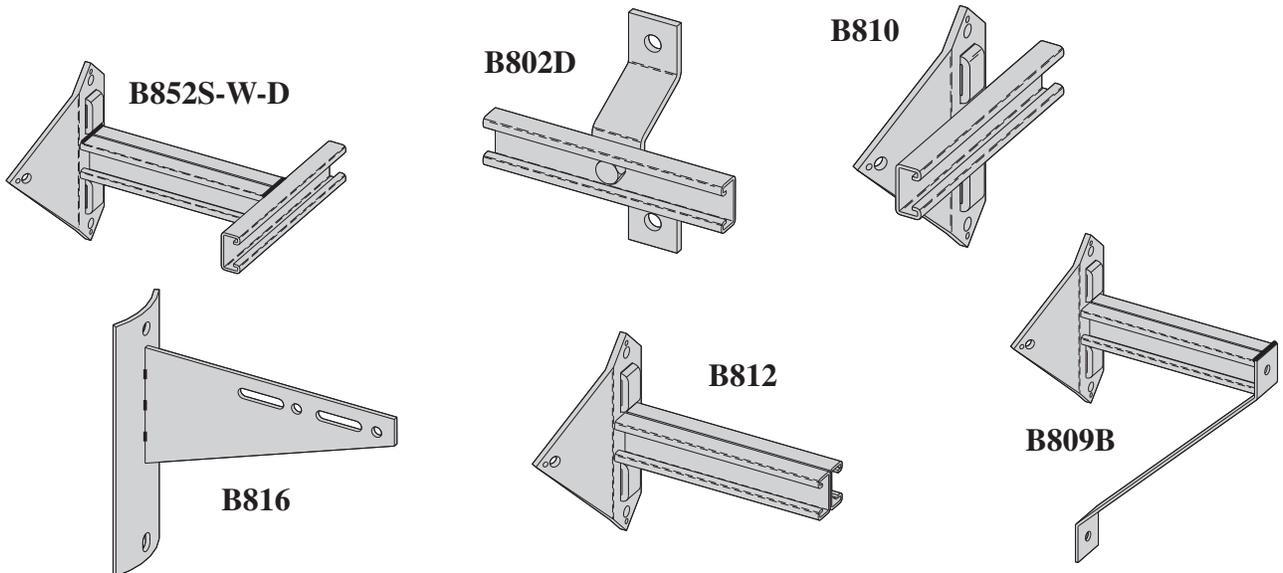
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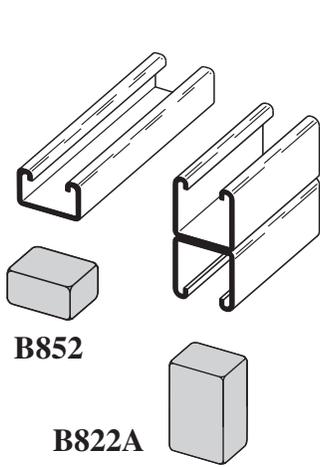


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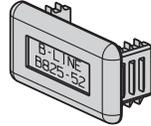
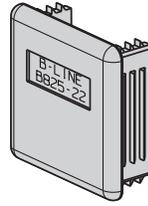


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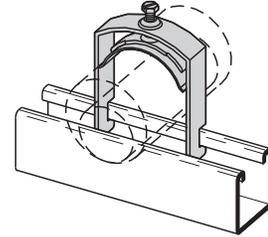


B823 Series

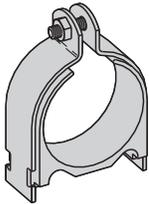


B825 Series

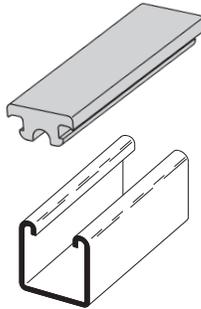
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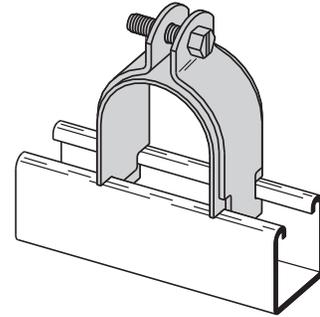
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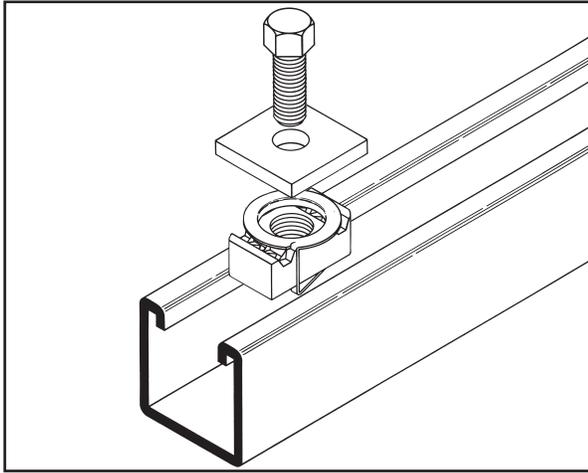
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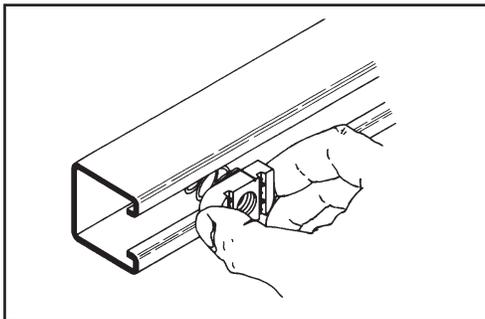
Introduction

B-Line's metal framing support system is designed with many time-saving features. They are fully adjustable and reusable, with a complete line of channels, fittings and accessories for multi-purpose applications.

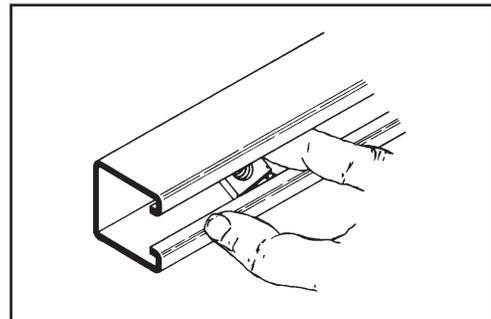


- No Welding
- No Drilling
- Use Your Imagination

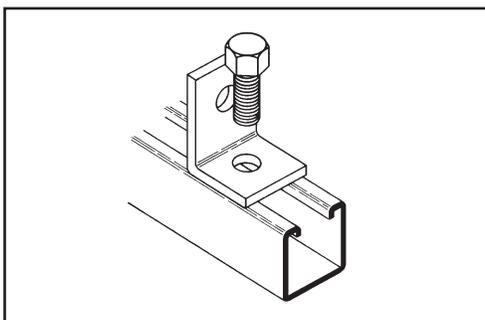
B-Line metal framing installs quickly. There is no need for special tools. All you need is a wrench and hacksaw. Channels and parts can be taken apart for reuse as quickly as they were assembled, yet they provide the strength of welded construction. Eliminating welding and drilling produces substantial savings in time and labor.



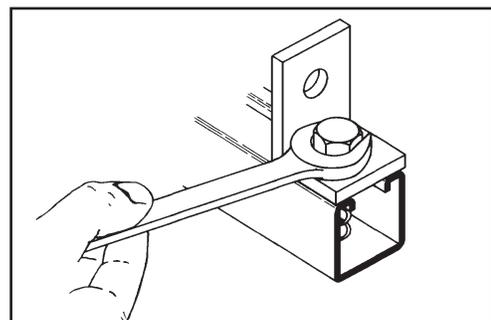
1. Tite-Grip channel nut may be inserted anywhere along continuous slot. Designed for easy insertion and self-alignment.



2. A 90 degree turn aligns channel nut grooves with inturred lips of the channel.



3. Position fitting over channel nut and insert bolt to start any connection.

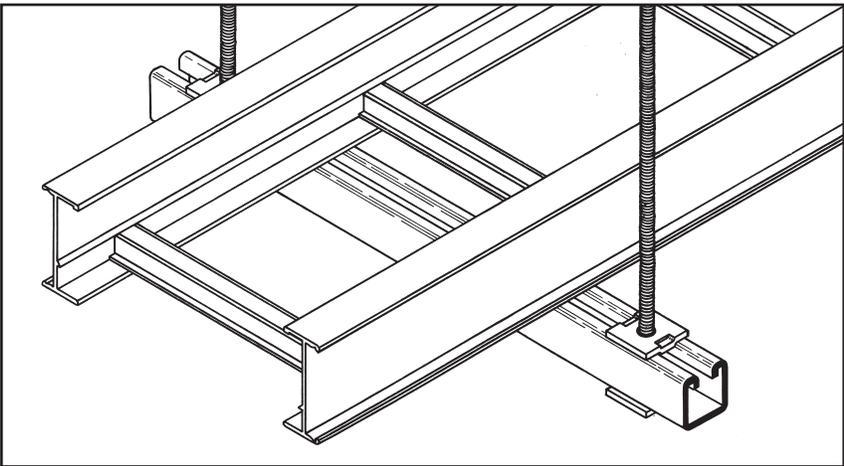
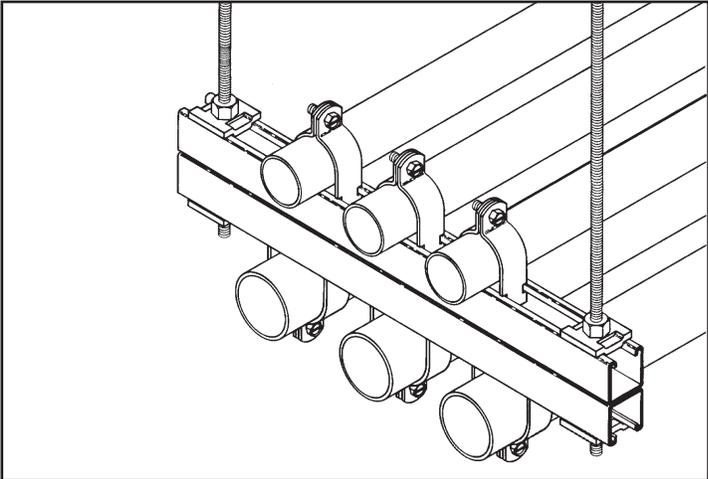


4. With the twist of a wrench, channel nut locks its teeth firmly against inturred lips.

B-Line's Metal Framing system provides an economical solution for electrical, mechanical and industrial supports with an unlimited variety of applications in the construction industry.

Metal Framing Electrical Applications

- Lighting Fixture Supports
- Raceway Systems
- Trapeze Hangers
- Pipe & Conduit Supports
- Cable Tray Supports
- Beam Adjustments

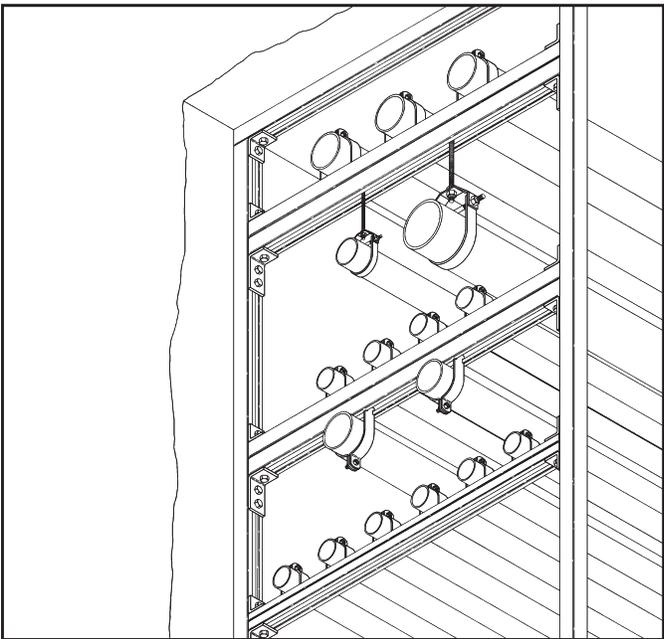


Metal Framing Mechanical Applications

- Piping Racks
- Tunnel Pipe Stanchions
- Concrete Inserts
- Beam Attachments
- Pipe Risers

Metal Framing Industrial Applications

- Racks and Shelving
- Partitions
- Production Line Supports
- Trolley Systems
- Wall Framing



MATERIALS

Carbon Steel

Channels made from high-quality carbon steel are continuously roll formed to precise dimensions. By cold working the steel mechanical properties are increased, allowing lightweight structures to carry the required load. Corrosion resistance of carbon steel varies widely with coating and alloy. See "Finishes" for more detailed information.

Stainless Steel

Stainless steel channel is available in AISI Type 304 or 316 material. Both are non-magnetic and belong to the austenitic stainless steels group, based on alloy content and crystallographic structure. Like carbon steel, stainless steel exhibits increased strength when cold worked by roll-forming.

Several conditions make the use of stainless steel ideal. These include reducing long term maintenance costs, high ambient temperatures, appearance, and stable structural properties such as yield strength, and high creep strength.

Type 304 resists most organic chemicals, dyestuffs and a wide variety of inorganic chemicals at elevated or cryogenic temperatures. Type 316 contains slightly more nickel and adds molybdenum to give it better corrosion resistance in chloride and sulfuric acid environments. More specific information concerning the differences between types 304 and 316 is available from B-Line.

Aluminum

B-Line's standard aluminum channel is extruded from aluminum alloy 6063-T6. Strut fittings are made from aluminum alloy 5052-H32.

The high strength to weight ratio of channel made of aluminum greatly reduces the overall cost of installation through ease of handling and field cutting.

Aluminum owes its excellent corrosion resistance to its ability to form an aluminum oxide film that immediately reforms when scratched or cut. In most outdoor applications, aluminum has excellent resistance to "weathering". The resistance to chemicals, indoor or outdoor, can best be determined by tests conducted by the user with exposure to the specific conditions for which it is intended. The corrosion resistance of aluminum to some commonly known chemicals is shown in the Corrosion Chart. For further information, contact B-Line Systems, Inc. or the Aluminum Association.

Fiberglass

B-Line offers two fire retardant (FR) resins for strut systems, polyester and vinyl ester. Both resins are ideal for corrosive environments or nonconductive applications with moderate strength requirements. Some common types of environments where Vinyl Ester Resins are recommended, that Poly Esters are not, are paper mills, most any metal plating operation and any

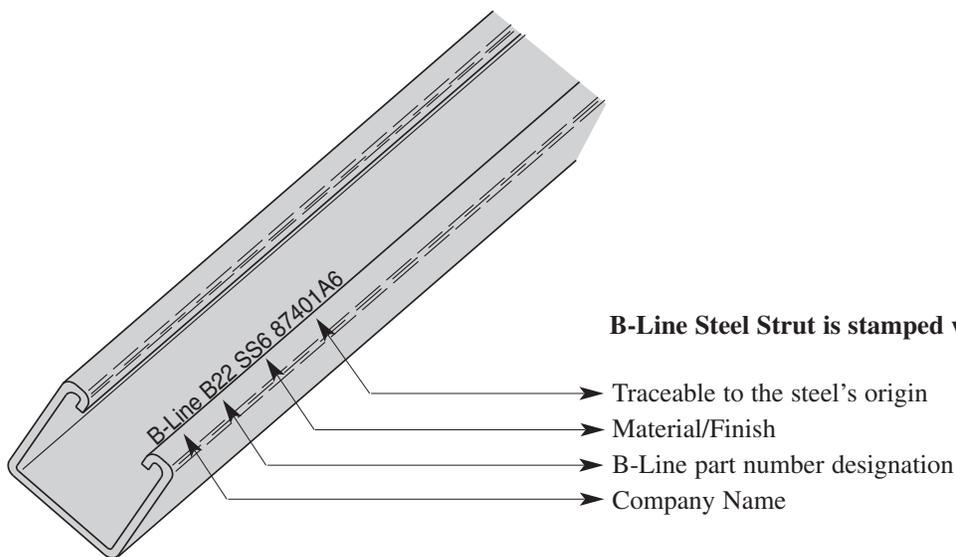
condition with concentrated levels of Chlorine, [Cl⁻]. Please consult our fiberglass corrosion resistance charts on pg. 173 for specific chemical recommendation data.

Unlike other base materials depicted in this catalog, fiberglass exhibits unique physical property changes when operating in elevated temperature conditions, that are a fraction of increase compared to steel or aluminum. This being true, B-Line advises against using fiberglass in temperatures greater than 200° F.

Please refer to the "Corrosion Resistance Guide" below for specific applications.

B-Line Fiberglass Strut systems are manufactured from glass fiber-reinforced plastic shapes that meet ASTM E-84, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to insure a resin-rich surface and ultraviolet resistance.

While polyester is sufficient for most uses, vinyl ester is suitable for a broader range of environments.



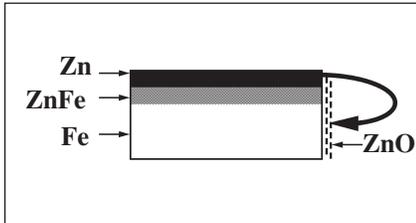
B-Line Steel Strut is stamped with:

FINISHES

Zinc Coatings

Zinc protects steel in two ways. First it protects the steel as a coating and second as a sacrificial anode to repair bare areas such as cut edges, scratches, and gouges. The corrosion protection of zinc is directly related to its thickness and the environment. This means a .2 mil coating will last twice as long as a .1 mil coating in the same environment.

Galvanizing also protects cut and drilled edges.



Electrogalvanized Zinc

Electrogalvanized Zinc (also known as zinc plated or electroplated) is the process by which a coating of zinc is deposited on the steel by electrolysis from a bath of zinc salts.

A rating of SC3, B-Line's standard, provides a minimum zinc coating thickness of .5 mils (excluding hardware, which is SC1 = .2 mils).

When exposed to air and moisture, zinc forms a tough, adherent, protective film consisting of a mixture of zinc oxides, hydroxides, and carbonates. This film is in itself a barrier coating which slows subsequent corrosive attack on the zinc. This coating is usually recommended for indoor use in relatively dry areas, as it provides ninety-six hours protection in salt spray testing per ASTM B117.

Chromium/ Zinc

Chromium/ Zinc is a corrosion resistant composition, which was developed to protect fasteners and small bulk items for automotive use. The coating applications have since been extended to larger parts and other markets.

Chromium/Zinc composition is an aqueous coating dispersion containing chromium, proprietary organics, and zinc flake.

This finish provides 500 hours protection in salt spray testing per ASTM B117.

Pre-Galvanized Zinc

(Mill galvanized, hot dip mill galvanized or continuous hot dip galvanized) Pre-galvanized steel is produced by coating coils of sheet steel with zinc by continuously rolling the material through molten zinc at the mills. This is also known as mill galvanized or hot dip mill galvanized. These coils are then slit to size and fabricated by roll forming, shearing, punching, or forming to produce B-Line pre-galvanized strut products.

The G90 specification calls for a coating of .90 ounces of zinc per square foot of steel. This results in a coating of .45 ounces per square foot on each side of the sheet. This is important when comparing this finish to hot dip galvanized after fabrication.

During fabrication, cut edges and welded areas are not normally zinc coated; however, the zinc near the uncoated metal becomes a sacrificial anode to protect the bare areas after a short period of time.

Hot Dip Galvanized After Fabrication (Hot dip galvanized or batch hot dip galvanized)

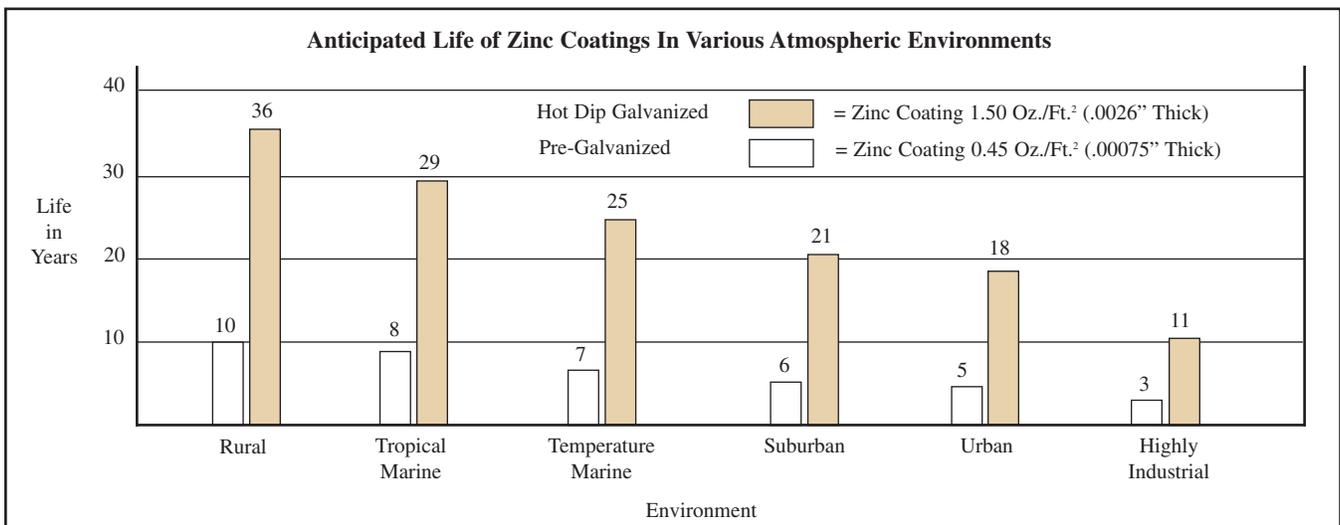
Hot dip galvanized strut products are fabricated from steel and then completely immersed in a bath of molten zinc. A metallic bond occurs resulting in a zinc coating that completely coats all surfaces, including edges and welds.

Another advantage of this method is coating thickness. Strut products that are hot dip galvanized after fabrication have a minimum thickness of 1.50 ounces per square foot on each side, or a total 3.0 ounces per square foot of steel, according to ASTM A123.

The zinc thickness is controlled by the amount of time each part is immersed in the molten zinc bath as well as the speed at which it is removed. The term "double dipping" refers to parts too large to fit into the galvanizing kettle and, therefore, must be dipped one end at a time. It does not refer to extra coating thickness.

The layer of zinc which bonds to steel provides a dual protection against corrosion. It protects first as an overall barrier coating. If this coating happens to be scratched or gouged, zinc's secondary defense is called upon to protect the steel by galvanic action.

Hot-Dip Galvanized After Fabrication is recommended for prolonged outdoor exposure and will usually protect steel for 20 years or more in most atmospheric environments and in many industrial environments. For best results, a zinc rich paint (available from B-Line) should be applied to field cuts. The zinc rich paint will provide immediate protection for these areas and eliminate the short time period for galvanic action to "heal" the damaged coating.



Dura-Green® and Dura-Copper® Epoxy Coatings

Dura-Green and Dura-Copper epoxy coatings are water borne epoxy coatings applied to B-Line products by a precisely controlled cathodic electro-deposition process. This process is accomplished using a conveyor to transport channel and fittings through several cleaning, phosphatizing and application stages prior to being baked (See diagram below).

This custom-designed paint system is used for painting all channels, channel combinations, slotted angle, and fittings.

Samples are selected on a routine basis for Salt Spray (fog) testing to verify the quality of the finish. These tests are performed in accordance with ASTM B117 and evaluated and related according to ASTM D1654 (Tables 1 & 2).

The Dura-Green and Dura-Copper Epoxy coatings have been tested and listed by Underwriters Laboratories in accordance with “Standard for Surface Metal Raceway

and Fittings, UL5” and “Standard for Pipe Hanger Equipment for Fire Protection Service, UL203”.

Due to Dura-Green’s organically based composition, it seats itself into porous surfaces more completely and efficiently than zinc coatings. As these porous caverns are filled along the material profile, the outer finished surface demonstrates an increased smooth uniform plane which produces considerably less off-gasing when tested.

B-Line’s Dura-Green channel meets or exceeds 100 level clean room standards. This was confirmed by testing the channel in accordance with Boeing (PCL) Standards, which are more stringent and complete than ASTM E595-93. Dura-Green was found to be a superior finish, due in part to its proven application process.

PVC Coating

Another of the corrosion resistant coatings offered by B-Line is PVC (polyvinyl

chloride), applied over steel or aluminum channel and fittings. The PVC coating process begins by cleaning the product thoroughly. A bonding coat is applied to the part and then preheated to a temperature above the melting point of the coating powder. The product is then passed through a fluidized bed of vinyl plastic powder where the powder particles melt, adhere and flow out to form a smooth continuous coating. The thickness is controlled by the base metal temperature and the immersion time in the bed. It is then post-heated to complete the fusion of the outer surfaces.

The standard coating thickness of B-Line’s PVC coated products is 15 mils (.380 mm), plus or minus 5 mils (.125 mm). Since the chemistry, not the thickness of vinyl plastic PVC determines longevity, a coating of 10 to 20 mils (.250 to .500 mm) is more than adequate. If the corrosive conditions are such that the plasticizers are leached out, a thicker coating will do little to extend the life of a coated product.

For certain environments, a plastisol dipped PVC coating is available on request.

PVC coating depends totally on the concept of encapsulation attached to the base metal by a bonding agent. If any hole or discontinuity occurs, the corrosive action can undercut the base metal to a point where all that remains is the PVC.

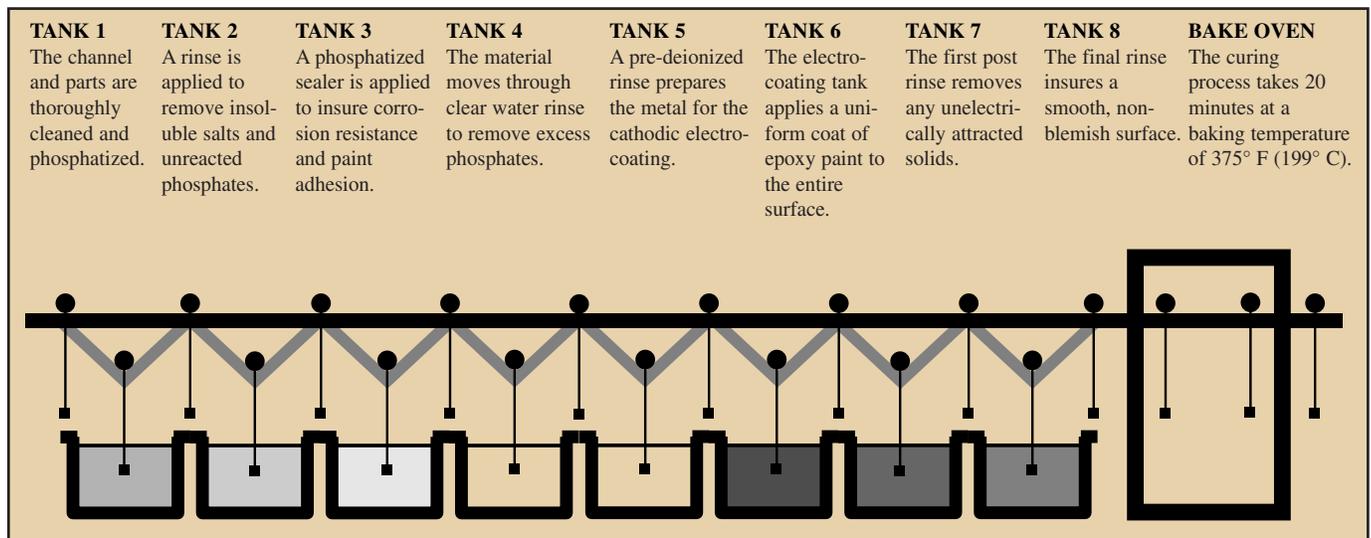
In the event of field cuts or any other damage to the coating, a liquid PVC patch, available from B-Line, must be applied to maintain the integrity of the coating. After the installation is complete, a thorough inspection should be performed to assure the absence of voids, pinholes, or cuts.

SALT SPRAY TEST RESULTS

| Type of Finish | Unscribed 5% Failure (1) | Scribed 1/8" (3.2) Creepage from Scribe (1) |
|----------------------------|--------------------------|---|
| B-Line Dura-Green Epoxy | 1000 Hours | 312 Hours |
| Mill Galv. (Pre-Galv.) G90 | 192 Hours | 288 Hours |
| Perma-Green | 438 Hours | 231 Hours |
| Zinc Chromate | 36 Hours | 96 Hours |
| Industry Green (Range) | 10 to 36 Hours | 4 to 30 Hours |

(1) All salt spray (fog) tests conducted in accordance with ASTM B117 and evaluated and rated according to ASTM D1654 Tables 1 & 2. Tests are performed and certified by an independent testing laboratory.

DURA-GREEN®/DURA-COPPER® EPOXY COATING PROCESS



WELDING

The welding procedures used in the fabrication of B-Line steel products are in accordance with American Welding Society Standards. To achieve the highest quality in our manufacturing processes, our welders follow standards set by AWS Code.

Spot Welding

Spot welded back-to-back channel is manufactured using a modern DC powered resistance welder controlled by a microprocessor. This produces a series of spot welds with speed and consistency. Consistency is one of the most important

advantages in specifying B-Line back-to-back channel. Variables such as weld sequence, speed and duration are carefully controlled and monitored by a sophisticated electronic control system. A statistical quality control program, combining destructive and non-destructive testing, is used by B-Line to ensure high quality welds.

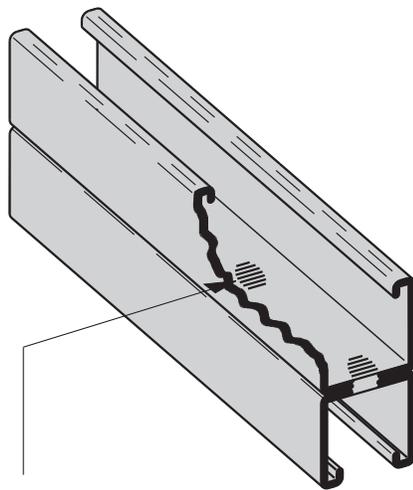
MIG Welding

MIG welded, more properly called gas metal arc welded (GMAW) combination channels and fittings, are produced when physical dimensions or certain combinations require a weld process other

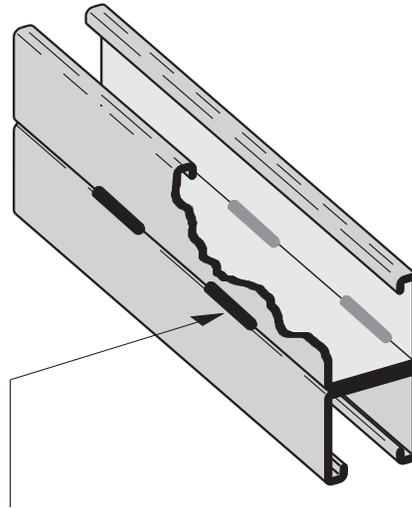
than automatic spot welding. The same quality control requirements are imposed on MIG welded and spot-welded products.

Quality Assurance

B-Line System's Quality Assurance Program has been developed and implemented for compliance to 10CFR50 appendix B and NQA-1. B-Line also complies with various industry standards and specifications. B-Line has extensive experience in supplying metal framing components for the nuclear power generating industry and complies with 10 CFR21.



Spot Weld



Mig Weld

CORROSION

All metal surfaces are affected by corrosion. Depending on the physical properties of the metal and the environment to which it is exposed, chemical or electromechanical corrosion may occur.

Atmospheric Corrosion

Atmospheric corrosion occurs when metal is exposed to airborne liquids, solids or gases. Some sources of atmospheric corrosion are moisture, salt, dirt and sulphuric acid. This form of corrosion is typically more severe outdoors, especially near marine environments.

Chemical Corrosion

Chemical corrosion takes place when metal comes in direct contact with a corrosive solution. Some factors which affect the severity of chemical corrosion include: chemical concentration level, duration of contact, frequency of washing, and operating temperature.

Storage Corrosion

Wet storage stain (white rust) is caused by the entrapment of moisture between surfaces of closely packed and poorly ventilated material for an extended period. Wet storage stain is usually superficial, having no effect on the properties of the metal.

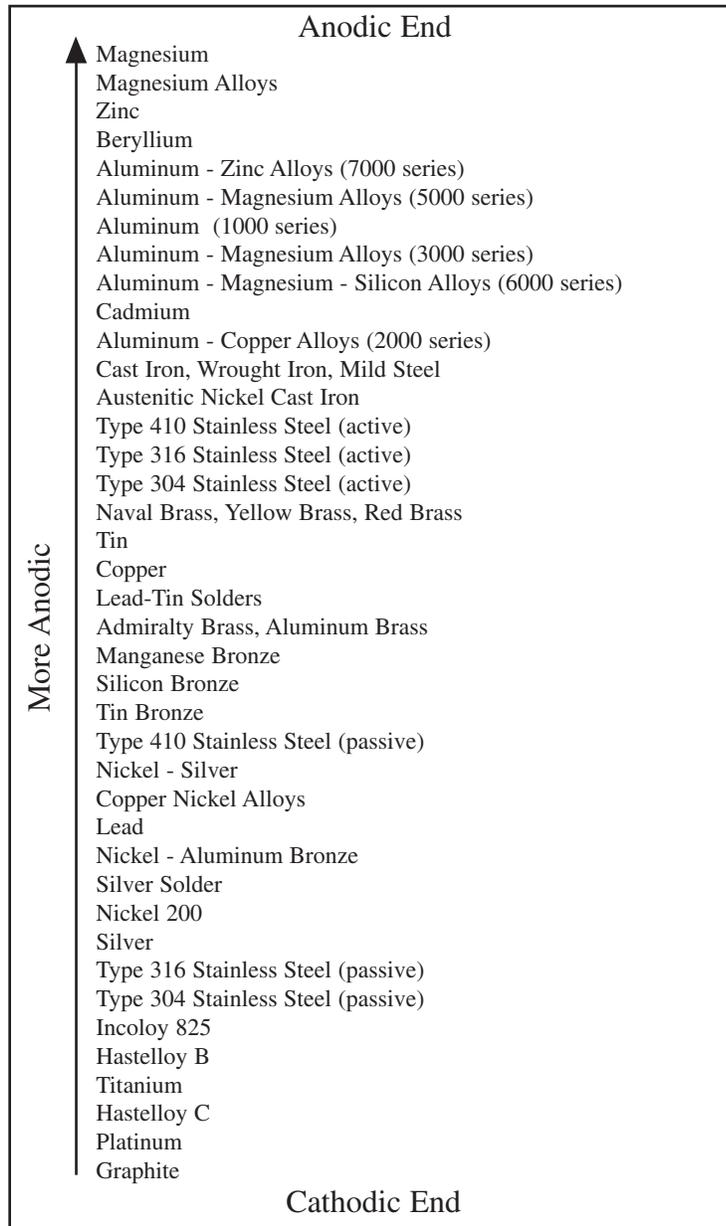
Light staining normally disappears with weathering. Medium to heavy buildup should be removed in order to allow the formation of normal protective film. Proper handling and storage will help to assure stain-free material. If product arrives wet, it should be unpacked and dried before storage. Dry material should be stored in a well ventilated "low moisture" environment to avoid condensation formation. Outdoor storage is undesirable, and should be avoided whenever possible.

Galvanic Corrosion

Galvanic corrosion occurs when two or more dissimilar metals are in contact in the presence of an electrolyte (ie. moisture). An electrolytic cell is created and the metals form an anode or a cathode depending on their relative position on the Galvanic Series Table. The anodic material will be the one to corrode. Anodic or cathodic characteristics of two dissimilar metals will depend on the type of each material. For example: If zinc and steel are in contact, the zinc acts as the anode and will corrode; the steel acts as the cathode, and will be protected. If steel and copper are in contact, the steel is now the anode and will corrode.

The rate at which galvanic corrosion occurs depends on several factors:

GALVANIC SERIES IN SEA WATER



Metals in descending order of activity in the presence of an electrolyte.

1. The relative position on the Galvanic Series Table - the further apart materials are in the Galvanic Series Table, the greater the potential for corrosion of the anodic material.

2. The amount and concentration of electrolyte present - an indoor, dry environment will have little or no galvanic corrosion compared to a wet atmosphere.

3. The relative size of the materials - a small amount of anodic material in contact

with a large cathodic material will result in greater corrosion. Likewise, a large anode in contact with a small cathode will decrease the rate of attack.

| Chemical | Aluminum | Dura-Green | PVC | Type 304 Stainless | Type 316 Stainless | Zinc Coated Steel |
|---------------------------------|----------|------------|-----|--------------------|--------------------|-------------------|
| Acetic Acid 10% | R | NR | R | R | R | NR |
| Acetic Acid 2% | R | F | R | R | R | NR |
| Acetone | R | R | NR | R | R | R |
| Ammonium Hydroxide-Conc. | R | R | R | R | R | - |
| Ammonium Hydroxide 10% | F | R | R | R | R | - |
| Ammonium Hydroxide 2% | R | R | R | R | R | - |
| Benzene | R | R | NR | R | R | - |
| Bromine Water | NR | R | R | NR | NR | - |
| Butanol (Butyl Alcohol) | R | R | R | R | R | R |
| Carbon Disulfide | R | R | NR | R | R | - |
| Carbon Tetrachloride | F | R | F | R | R | - |
| Chlorine Water | R | R | R | NR | F | R |
| Cutting Oil | - | R | - | - | - | - |
| Diethanolamine | R | R | NR | - | - | NR |
| Ethanol | R | R | R | R | R | R |
| Ethyl Acetate | R | R | NR | - | - | R |
| Ethylene Dichloride | F | R | NR | - | - | R |
| Formaldehyde 20% | R | R | R | R | R | R |
| Gasoline | R | R | R | R | R | R |
| Glycerine | R | R | R | R | R | R |
| Household Detergent 10% | F | R | R | R | R | - |
| Hydrochloric Acid 40% | NR | NR | R | NR | NR | NR |
| Hydrochloric Acid 10% | NR | F | - | NR | NR | NR |
| Hydrochloric Acid 2% | NR | F | - | NR | NR | NR |
| Hydrogen Peroxide 30% | R | NR | R | R | R | - |
| Hydrogen Peroxide 3% | R | - | - | R | R | - |
| Hydrogen Sulfide (Gas) | R | R | R | F | R | - |
| JP-4 Jet Fuel | R | R | R | R | R | - |
| Lactic Acid 85% | F | R | R | NR | - | - |
| Latex | R | R | - | R | R | NR |
| Linseed Oil Fatty Acid | R | F | R | R | R | - |
| Methanol | R | R | R | R | R | R |
| Methyl Ethyl Ketone | R | R | NR | - | - | R |
| Methyl Isobutyl Ketone | R | R | NR | - | - | R |
| Mineral Spirits | R | R | - | - | - | - |
| Motor Oil-10W | R | R | R | R | R | R |
| Naphtha, VM&P | R | R | R | R | R | R |
| Nitric Acid 2% | F | NR | R | R | R | - |
| Perchloroethylene | R | R | - | - | - | NR |
| Petroleum Ether | - | R | - | R | R | R |
| Phenol 10% | R | R | NR | R | R | R |
| Phosphoric Acid 2% | F | NR | R | R | R | NR |
| Potassium Hydroxide 50% | NR | R | R | R | R | - |
| Potassium Hydroxide 10% | NR | R | R | R | R | - |
| Potassium Hydroxide 2% | NR | R | R | R | R | - |
| Sodium Chloride 25% | F | R | R | R | R | F |
| Sodium Hydroxide 50% | NR | R | R | R | R | NR |
| Sodium Hydroxide 10% | NR | R | R | R | R | F |
| Sodium Hydroxide 2% | NR | R | R | - | - | - |
| Sodium Hypochlorite-C1. 10% | F | R | R | - | - | - |
| Sodium Hypochlorite-C1. 6% | F | R | R | NR | R | - |
| Sulfuric Acid 2% | F | NR | R | NR | R | NR |
| Tall Oil Fatty Acid (Syfate 94) | R | R | R | - | - | - |
| Tannic Acid 50% | F | R | R | R | R | - |
| Water-Deionized | R | R | R | R | R | F |
| Water-Sea | F | F | R | R | R | F |
| Water-Tap | R | R | R | F | F | R |
| Xyol | R | R | NR | - | - | - |

Fiberglass corrosion chart on page 171.

The corrosion data given in this table is for general comparison only.

The presence of contaminants and the effect of temperature in chemical environments can greatly affect the corrosion of any material.

B-Line strongly suggests that field service tests or simulated laboratory tests using actual environmental conditions be conducted in order to determine the proper materials and finishes to be selected.

R=Recommended

F=May be used under some conditions

NR=Not Recommended

-Information not available

DESIGN OF STRUT SYSTEMS

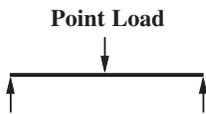
Beams

Beams are usually defined as horizontal members which are subjected to vertical loads such as shelves, platforms or supports for pipes, conduits or cable trays. The following is a brief overview of common beam configurations:

Simple Beam

An example of a simple beam is a length of channel placed across two cylinders. When a load is applied, the channel will support the load because of its stiffness. The cylinders serve to support the channel, but do not interfere with its natural tendency to flex or bend. Simple beam analysis is used almost universally for beam comparisons, even though it is seldom practical in field installations.

A cable tray or conduit trapeze hanger closely resembles a simple beam.



Fixed Beam

This type of fixed support restricts the movement of the ends of the channel when a load is applied. Because of this, the stiffness of the channel at the ends and center is employed to resist the load. The result is a load capability which is greater than that of an identical simple beam.

The fixed beam can be approximated by bolting or welding a length of channel to rigid supports.



Cantilever Beam

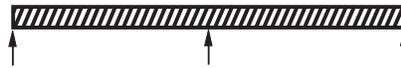
Cantilever beams are often viewed as variations of a fixed beam, but they have special characteristics of their own. One end of the channel is firmly attached to a rigid support while the other end remains completely free.

A shelf bracket is an example of a cantilever beam.



Continuous Beam

This beam configuration is commonly used in lighting installations. The continuous beam possesses traits of both the simple and fixed beams. When equal loads are applied to all spans simultaneously, the counter-balancing effect of the loads on both sides of a support restricts the movement of the channel at the support, similar to that of the fixed beam. The end spans behave substantially like simple beams.

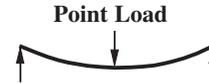


Continuous beam installations can typically support 20% more load than a simple beam of the same span with approximately half the deflection.

Therefore, simple beam data should be used for a general comparison only. An example of this configuration is found in a long run of channel when installed across several supports to form a number of spans.

Deflection

Deflection, commonly referred to as "sag", is inherent in applying a load to a beam and cannot be avoided. Any and all beams will deflect when loaded. The amount of deflection will vary depending upon the material and the stiffness or moment of inertia. The deflection equations in this section show that increasing the stiffness can be increased by a variety of methods. Increasing the depth of the channel is the most direct method.



The material used affects deflection in a manner which is significantly different from the way in which it affects load capacity. The deflection under load is inversely proportional to a material property known as the "modulus of elasticity" designated by "E".

The modulus of elasticity is dependent upon the basic composition of the material and is not necessarily related to the material's strength.

Safety Factor

The design loads given for strut beam loads are based on a simple beam condition using allowable stress of 25,000 psi. This allowable stress results in a safety factor of 1.68. This is based upon a virgin steel minimum yield strength of 33,000 psi cold worked during rolling to an average yield stress of 42,000 psi.

Aluminum typically has an elastic modulus which is $\frac{1}{3}$ that of steel even though they may have identical strength. As a result, the deflection of aluminum channel will be three times that of steel channel under equal loading. In areas where structures will be subject to general viewing, deflection can produce a displeasing effect. To the untrained eye, a sagging channel may appear to be a result of poor design or excessive loading. This is not usually the case. Many properly designed channel installations will show a noticeable deflection at their designed loads. In areas where cosmetics are not important, deflection should not be a factor. Designing an entire installation based on minimal deflection could result in an over designed structure. This translates into increased material and installation cost. Where cosmetics are important, it may be necessary to limit the deflection to an aesthetically pleasing amount. This "acceptable deflection" amount is typically given as a fraction of the span. **1/240 span** deflection is typically the limit where the amount of deflection appears negligible. For example, a beam span of 240" would be allowed 1" (240/240) of deflection at the mid point. A 120" span would only be allowed $\frac{1}{2}$ " (120/240) of deflection. The maximum load for the channel must be limited in order to remain under these deflection requirements. The allowable load resulting in 1/240 span deflection is posted in the beam load chart for each channel size.

For even more stringent deflection requirements, an allowable load is listed in the beam load charts which results in **1/360** span deflection. This amount of deflection is sometimes used for beams in finished ceilings that are to be plastered.

Twisting & Lateral Bracing

Loading of strut on long spans can cause torsional stress, resulting in the tendency of the strut to twist or bend laterally. This phenomenon reduces the allowable beam loads as shown in the beam loading charts. It is recommended that long spans be supported in a manner to prevent twisting (fixed ends), and that the channel have adequate lateral bracing. Many typical strut applications provide this support and bracing inherently. Piping, tubing, cable

trays, or conduits mounted to the strut with straps and clamps prevent twisting or lateral movement. If no such lateral support exists, contact the factory for loading recommendations.

Columns

Columns are vertical members which carry loads in compression. One common example of a channel column is the vertical members of a storage rack.

In theory, a column will carry a load equal to its cross sectional area multiplied by the ultimate compressive stress of the material of which the column is made. In reality, there are many factors affecting the load capacity of a column, such as the tendency to buckle or twist laterally (torsional-flexural buckling), the type of connection at the top or bottom, and the eccentricity of the load application, and material imperfections. Several of these failure modes have been considered in the allowable column load tables shown in the "Channel" section of this catalog.

B-Line strongly recommends that the engineer perform a detailed study of the many variable conditions before the selection process begins.

Design Factors to be Considered

The loading capacity of channel depends primarily on the material, its cross-sectional design, and the beam or column loading configuration. It should be noted that if two lengths of channel have identical designs and configurations, the one made of the stronger base material will support a larger load. Therefore, any comparison of channel should begin by determining whether the materials are approximately equal in strength.

The column loading chart for each channel lists the allowable load for each channel in compression. This load varies depending on the support condition or "K-factor".

Several "K-factors" are listed, which correspond to the following support conditions:

- K = .8 pinned top - fixed bottom
- K = .65 fixed top - fixed bottom
- K = 1.0 pinned top - pinned bottom
- K = 1.2 free top - fixed bottom

There are a number of physical properties which are important to the complete design of a channel member; the "section modulus" designated as "Sx" or "Sy", "moment of inertia" designated by "Ix" or "Iy", and the "radius of gyration" which is given as "rx" or "ry".

Every structural material has its own maximum or ultimate stress, which is usually expressed in "pounds per square inch" (pascals). Any load which causes a member to fail is referred to as its "ultimate" load. In order to prevent channel from being accidentally loaded up to or beyond its ultimate load, a safety factor is included into the design. The ultimate load is divided by the safety factor to obtain the "recommended" or "allowable" working load.

When evaluating channel under various beam conditions, it is often more convenient to compare in terms of the ultimate or recommended "bending moment". Simple equations show the stress is directly proportional to the bending moment.

Therefore, comparing bending moments can save time in repeated calculations. The chart containing Formulas on Common Beam Loadings (following page) shows how to calculate the bending moment for various configurations and load conditions. It should be noted that the bending moment is usually not constant, but varies along the length of the span. However, the channel must be designed for a single point, which is the point of maximum bending moment.

For information regarding dynamic or seismic design, contact B-Line's Home Office.

GENERAL INFORMATION

Torque

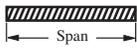
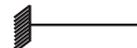
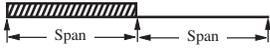
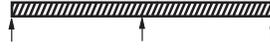
The torque values given throughout the catalog are to be used as a guide only. The relationship between the applied torque or torque wrench reading and the actual tension created in the bolt may be substantially different. For example, a dry non-lubricated bolt with a heavy plating may rate 50% as efficient as a bolt which is lubricated with a mixture of heavy oil and graphite. Other important factors affecting torque-tension relationships include friction under the bolt head or nut, hole tolerances, and torque wrench tolerances. Accuracy of many commercial torque wrenches may vary as much as plus or minus 25%.

Charts and Tables

Charts and tables in this section are compiled from information published by nationally recognized organizations and are intended for use as a guide only. B-Line recommends that users of this information determine the validity of such information as applied to their own application.

Technical Data

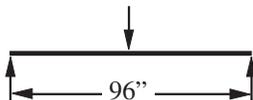
The data shown in the beam load charts for appropriate channels on page(s) 17 thru 39 is for simply supported, single span beams with a uniformly distributed load. For other loading and/or support conditions, use the appropriate factor from the chart below.

| LOAD AND SUPPORT CONDITION | Load Factor | Deflection Factor |
|--|-------------|-------------------|
| Simple Beam - Uniform Load  | 1.00 | 1.00 |
| Simple Beam - Concentrated Load at Center  | .50 | .80 |
| Simple Beam - Two Equal Concentrated Loads at 1/4 Points  | 1.00 | 1.10 |
| Beam Fixed at Both Ends - Uniform Load  | 1.50 | .30 |
| Beam Fixed at Both Ends - Concentrated Load at Center  | 1.00 | .40 |
| Cantilever Beam - Uniform Load  | .25 | 2.40 |
| Cantilever Beam - Concentrated Load at End  | .12 | 3.20 |
| Continuous Beam - Two Equal Spans - Uniform Load on One Span  | 1.30 | .92 |
| Continuous Beam - Two Equal Spans - Concentrated Load on Both Spans  | 1.00 | .42 |
| Continuous Beam - Two Equal Spans - Concentrated Load at Center of One Span  | .62 | .71 |
| Continuous Beam - Two Equal Spans - Concentrated Load at Center of Both Spans  | .67 | .48 |

EXAMPLES:

PROBLEM:

Calculate the maximum allowable load and corresponding deflection of a simply supported B22 beam with a concentrated load at midspan as shown.



SOLUTION:

From beam load chart for B22 (page 22), maximum allowable Load is A and the corresponding deflection is B.
Multiplying by the appropriate factors shown in the chart above.

$$\text{LOAD} = \underline{A} \times \text{load factor} = \underline{\hspace{2cm}}$$

$$\text{DEFLECTION} = \underline{B} \times \text{deflection factor} = \underline{\hspace{2cm}}$$

PROBLEM:

Calculate the maximum allowable load and corresponding deflection of a cantilever B52 beam with a uniformly distributed load.



SOLUTION:

From beam load chart for B52 (page 33), maximum allowable load is A and the corresponding deflection is B.
Multiplying by the appropriate factors shown in chart above.

$$\text{LOAD} = \underline{A} \times \text{load factor} = \underline{\hspace{2cm}}$$

$$\text{DEFLECTION} = \underline{B} \times \text{deflection factor} = \underline{\hspace{2cm}}$$

RECOMMENDED BOLTED METAL FRAMING SPECIFICATION

Brackets [] indicate alternative specifications which may be substituted by the project engineer.

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Continuous slot, bolted framing channels and all associated fittings and hardware.

B. Trapeze type supports for cable tray, conduit, pipe and other similar systems.

C. Use of bolted metal framing as a surface metal raceway.

1.02 REFERENCES

A. ASTM A108 - Specification for Steel Bars, Carbon, Cold Finished, Structural Quality.

B. ASTM A123 - Specification for Zinc (hot-dip galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strips.

C. ASTM A1011, 33,000 PSI min. yield - Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Structural Quality.

D. ASTM B633 - Specification for Electrodeposited Coatings of Zinc on Iron and Steel.

E. ASTM A653 33,000 PSI min. yield G90 - Specification for Steel Sheet, Zinc Coated (Galvanized) by the Hot-Dip Process.

F. ASTM A1018 - Standard Specification for Steel, Sheet and Strip, Heavy-Thickness Coils, Carbon, Hot-Rolled, Structural Quality.

G. MFMA - Metal Framing Standards Publication, MFMA-1.

1.03 QUALITY ASSURANCE

A. Manufacturers : Firms regularly engaged in the manufacture of bolted metal framing of the types required, whose products have been in satisfactory use in similar service for not less than 5 years.

B. A material heat code number shall be stamped on all strut and fittings. This is required to maintain traceability of the product to the material test reports to the ASTM standard.

C. For stainless steel items, the part number shall contain a material designator (EXAMPLE: B-Line B22SS6 for type 316 or B22SS4 for type 304), or a separate stamp shall be included to reference the type of material used.

D. MFMA Compliance: comply with the latest revision of MFMA Standard Publication Number MFMA-3, "Metal Framing".

E. NEC Compliance: Comply with the latest revision NFPA 70 - Article 352 "Surface Metal Raceways and Surface Nonmetallic Raceways".

F. UL Compliance: Comply with UL "Standard for Surface Metal Raceway and Fittings".

1.04 SUBMITTALS

A. Submit drawings of strut and accessories including clamps, brackets, hanger rods and fittings.

B. Submit manufacturer's product data on strut channels including, but not limited to, types, materials, finishes, gauge thickness and hole patterns. For each different strut cross section, submit cross sectional properties including Section Modulus (S_x) and Moment of Inertia (I_x).

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver strut systems and components carefully to avoid breakage, denting, and scoring finishes. Do not install damaged equipment.

B. Store strut systems and components in original cartons and in clean dry space; protect from weather and construction traffic.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Manufacturer: Subject to compliance with these specifications, strut systems to be installed shall be as manufactured by B-Line Systems, Inc. [or engineer approved equal.]

2.02 STRUT CHANNELS AND COMPONENTS

A. General: Strut shall be 1⁵/₈" wide in varying heights and welded combinations as required to meet load capacities and designs indicated on the drawings.

B. Material and Finish: Material and finish specifications for each strut type are as follows:

1. Aluminum: Strut shall be manufactured of extruded aluminum alloy 6063-T6. All fittings and hardware shall be zinc plated according to ASTM B633. For outdoor use, all fittings and hardware shall be stainless steel Type 316 [Type 304] or chromium zinc, ASTM F1136 Gr. 3.

2. Epoxy Painted: Strut shall be made from steel meeting the minimum mechanical properties of ASTM A1011 33,000 PSI min yield, then painted with water born epoxy

applied by a cathodic electro-deposition process. Fittings shall be manufactured from steel meeting the minimum requirements of ASTM A1018 33,000 PSI min. yield. The fittings shall have the same epoxy finish as the strut. Threaded hardware shall be zinc plated in accordance with ASTM B633 Service Class 1 (SC1). Service Class 1 is not an acceptable coating for fittings or components other than threaded hardware.

3. Pre-Galvanized Steel: Strut shall be made from steel meeting the minimum mechanical properties of ASTM A653 33,000 PSI min. yield, mill galvanized coating designation G90. Fittings shall be manufactured from steel meeting the minimum requirements of ASTM A1018 33,000 PSI min. yield and zinc plated in accordance with ASTM B633 service class 3 (SC3). Threaded hardware shall be zinc plated in accordance with ASTM B633 Service Class 1 (SC1). Service Class 1 is not an acceptable coating for fittings or components other than threaded hardware.

4. Hot-Dip Galvanized Steel: Strut shall be made from steel meeting the minimum mechanical properties of ASTM A1011 33,000 PSI min. yield and shall be hot-dip galvanized after fabrication in accordance with ASTM A123. Fittings shall be manufactured from steel meeting the minimum requirements of ASTM A1018 33,000 PSI min. yield, and hot-dip galvanized after fabrication in accordance with ASTM A123. All hardware shall be stainless steel Type 316 [Type 304] or chromium zinc ASTM F1136 Gr. 3. All hot-dip galvanized after fabrication products must be returned to point of manufacture after coating for inspection and removal of all sharp burrs.

5. Stainless Steel: All strut, fittings and hardware shall be made of AISI Type 316 [Type 304] stainless steel as indicated. Channels must be identified as required in previous section 1.03 Quality Assurance.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Install strut as indicated; in accordance with equipment manufacturer's recommendations, and with recognized industry practices.

B. All nuts and bolts shall be tightened to the following values.

| Bolt Size | Torque (ft-lbs) |
|-----------|-----------------|
| 1/4-20 | 6 |
| 5/16-18 | 11 |
| 3/8-16 | 19 |
| 1/2-13 | 50 |

Metal Framing Channels

Channel

B-Line's metal framing channel is cold formed on our modern rolling mills from 12 Ga. (2.6mm), 14 Ga. (1.9mm), and 16 Ga. (1.5mm) low carbon steel strips. A continuous slot with inturned lips provides the ability to make attachments at any point.

Lengths

Standard lengths are 10' (3.05m) and 20' (6.09m) with length tolerance of $\pm 1/8"$ (+3.2mm). Custom lengths are available upon request.

Slots

B-Line's slotted series of channels offer full flexibility. A variety of pre-punched slot patterns eliminate the need for precise field measuring for hole locations. Slots offer wide adjustments in the alignment and bolt sizing.

Holes

A variety of pre-punched $9/16"$ (14.3 mm) diameter hole patterns are available in B-Line channels. These hole patterns provide an economical alternative to costly field drilling required for many applications.

Knockouts

When used with series B217-20 Closure Strips, B-Line's knockout channels can be used to provide an economical U.L. listed surface raceway. Channels are furnished with $7/8"$ (22.2 mm) knockouts on 6" (152 mm) centers, allowing for perfect fixture alignment on spans up to 20' (6.09 m).

Materials & Finishes (Unless otherwise noted)

Steel: Plain

12 Ga. (2.6), 14 Ga. (1.9) and 16 Ga. (1.5)

Steel: Pre-galvanized

12 Ga. (2.6), 14 Ga. (1.9) and 16 Ga. (1.5)



| Finish Code | Finish | Specification |
|-------------|--------------------------|-----------------------------------|
| PLN | Plain | ASTM A1011, 33,000 PSI min. yield |
| GRN | Dura-Green | |
| GALV | Pre-Galvanized | ASTM A653 33,000 PSI min. yield |
| HDG | Hot-Dipped Galvanized | ASTM A123 |
| YZN | Yellow Zinc Chromate | ASTM B633 SC3 Type II |
| SS4 | Stainless Steel Type 304 | ASTM A240 |
| SS6 | Stainless Steel Type 316 | ASTM A240 |
| AL | Aluminum | Aluminum 6063-T6 |

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

Design Load

The design loads given for strut beam loads are based on a simple beam condition using an allowable stress of 25,000 psi. This allowable stress results in a safety factor of 1.68. This is based upon virgin steel minimum yield strength of 33,000 psi cold worked during rolling to an average yield stress of 42,000 psi.

Welding

Weld spacing is maintained between 2 $1/2$ inches (63.5 mm) and 4 inches (101.6 mm) on center. Through high quality control testing of welded channels and continuous monitoring of welding equipment, B-Line provides the most consistent combination channels available today.

Metric

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

SELECTION CHART

for Channels, Materials and Hole Patterns

| Channel Type | Channel Dimensions | | | | Material & Thickness * | | | | Channel Hole Pattern ** | | | | |
|--------------|--------------------|--------|---------|----------|------------------------|----------|-----------------|----------|--|------------------------|-------------------------------|--|--------------------------------|
| | Height | | Width | | Steel | Alum. | Stainless Steel | | SH 9/16" x 1 1/8" slots on 2" centers | S 13/32" x 3" slots | H17/8 9/16" diameter holes | TH 9/16" diameter on 1 7/8" centers | KO6 7/8" diameter knockouts |
| | | | | | | | Type 304 | Type 316 | | | | | |
| | | | | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | | | | | | |
| B11 | 3 1/4" | (82.5) | 1 5/8" | (41.3) | 12 Ga. | - | - | - | <u>1</u> | <u>1</u> | <u>1</u> | - | <u>1</u> |
| B12 | 2 7/16" | (61.9) | 1 5/8" | (41.3) | 12 Ga. | .105 | - | - | <u>1 2</u> | <u>1</u> | <u>1 2</u> | - | <u>1 2</u> |
| B22 | 1 5/8" | (41.3) | 1 5/8" | (41.3) | 12 Ga. | .105 | 12 Ga. | 12 Ga. | <u>1 2 3 4</u> | <u>1 3</u> | <u>1 2 3</u> | <u>1</u> | <u>1 2</u> |
| B24 | 1 5/8" | (41.3) | 1 5/8" | (41.3) | 14 Ga. | .080 | 14 Ga. | 14 Ga. | <u>1 2 3 4</u> | <u>1</u> | <u>1 2 3</u> | - | <u>1 2</u> |
| B26 | 1 5/8" | (41.3) | 1 5/8" | (41.3) | 16 Ga. | - | - | - | <u>1</u> | <u>1</u> | <u>1</u> | - | <u>1</u> |
| B32 | 1 3/8" | (34.9) | 1 5/8" | (41.3) | 12 Ga. | - | 12 Ga. | - | <u>1 3</u> | <u>1</u> | <u>1 3</u> | - | <u>1</u> |
| B42 | 1" | (25.4) | 1 5/8" | (41.3) | 12 Ga. | - | 12 Ga. | - | <u>1 3</u> | <u>1</u> | <u>1 3</u> | - | <u>1</u> |
| B52 | 1 3/16" | (20.6) | 1 5/8" | (41.3) | 12 Ga. | - | 12 Ga. | - | <u>1</u> | <u>1</u> | <u>1</u> | - | <u>1</u> |
| B54 | 1 3/16" | (20.6) | 1 5/8" | (41.3) | 14 Ga. | .080 | 14 Ga. | 14 Ga. | <u>1 2 3 4</u> | <u>1</u> | <u>1 2 3 4</u> | - | <u>1 2</u> |
| B56 | 1 3/16" | (20.6) | 1 5/8" | (41.3) | 16 Ga. | - | - | - | <u>1</u> | <u>1</u> | <u>1</u> | - | <u>1</u> |
| B62 | 1 3/16" | (20.6) | 1 3/16" | (20.6) | 18 Ga. | - | - | - | - | - | - | - | - |
| B72 | 1 3/32" | (10.3) | 1 3/16" | (20.6) | 18 Ga. | - | - | - | - | - | - | - | - |
| E7016 | 3/4" | (19.0) | 5/8" | (15.9) | 16 Ga. | - | - | - | - | - | - | - | - |

The selection has been prepared to provide a reference for available channel, materials and hole patterns. Material types available for various hole patterns are defined by numbers 1 thru 4.

Some stainless steel channels with hole patterns are available on special order only.

*Metric equivalent for thicknesses shown in chart.

12 Ga. = 2.6 mm

18 Ga. = 1.2 mm

14 Ga. = 1.9 mm

.105 = 2.6 mm

16 Ga. = 1.5 mm

.080 = 2.0 mm

**1 - Steel

2 - Aluminum

3 - Type 304 Stainless Steel

4 - Type 316 Stainless Steel

Properties may vary due to commercial tolerances of the material.

| Channel Part Numbering | | | |
|------------------------|-----------------------------------|-----------------|--------|
| Example: | | | |
| B22 SH SS4 120 | | | |
| Channel Type | Hole Patterns | Material/Finish | Length |
| B11 | SH (pg. 40) | GRN | 120 |
| B12 | S (pg. 40) | GALV | 240 |
| B22 † | H178 (pg. 40) | HDG | |
| B24 † | TH (pg. 41) | YZN | |
| B26 | K06 (pg. 41) | SS4 | |
| B32 | SHA (pg. 41) | SS6 | |
| B42 | S58 (pg. 42) | AL | |
| B52 † | M (pg. 42) | | |
| B54 † | H25 (pg. 43) | | |
| B56 | H112 † (pg. 42) | | |
| B62 | * Leave blank for no hole pattern | | |
| B72 | | | |
| E7016 | | | |

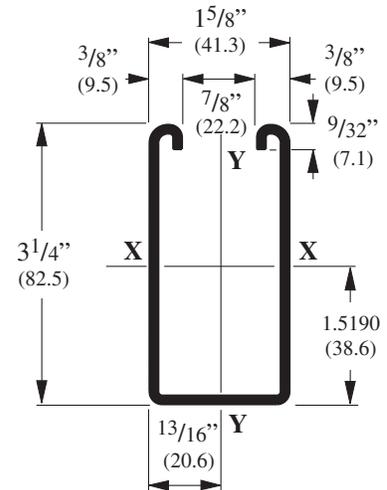
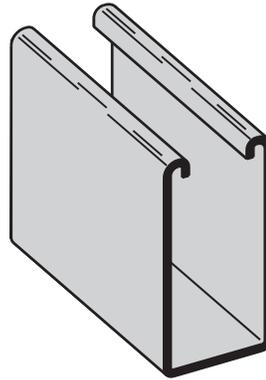
† BK style channel available in four (4) channel sizes and one (1) hole pattern only. (Example BK22H112)

Reference page 14 for general fitting and standard finish specifications.

B11 Channel, Combinations & Load Data

B11

- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Aluminum
- Weight: 3.05 Lbs./Ft. (4.54 kg/m)



SECTION PROPERTIES

| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | X - X Axis | | Y - Y Axis | |
|-------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|-----------------------|---------------------|------------------------|-----------------|
| | | | | | | | | | | | Moment of Inertia (I) | Section Modulus (S) | Radius of Gyration (r) | |
| | lbs./ft. | kg/m | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ |
| B11 | 3.059 | (4.55) | .900 | (5.81) | 1.1203 | (46.63) | .6472 | (10.61) | 1.116 | (2.83) | .4357 | (18.14) | .5362 | (8.79) |
| B11A | 6.119 | (9.11) | 1.800 | (11.61) | 6.3931 | (266.10) | 1.9671 | (32.24) | 1.885 | (4.79) | .8714 | (36.27) | 1.0725 | (17.58) |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

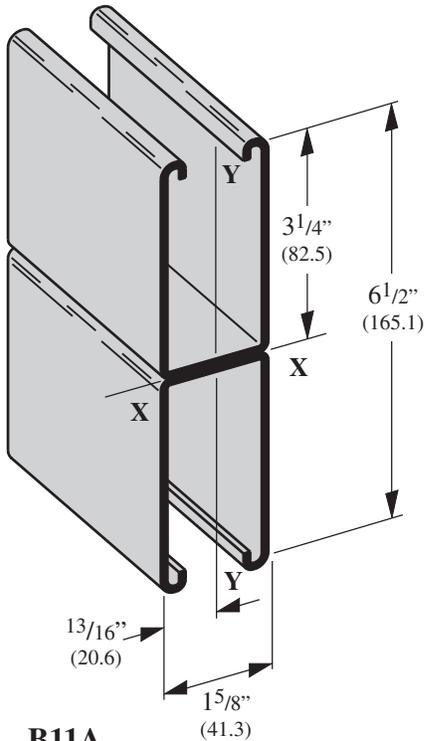
BEAM LOADING

| Beam Span In. | mm | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|------------------|--------|------------------|-----------------------------|---------|-------|---------|-----------------------------|---------|--------------------|---------|
| | | | Lbs. | N | In. | mm | 1/240 Span Lbs. | N | 1/360 Span Lbs. | N |
| 24 | (609) | B11 | 5130 | (22819) | .029 | (.73) | 5130 | (22819) | 5130 | (22819) |
| | | B11A | 5130* | (22819) | .005 | (.13) | 5130* | (22819) | 5130* | (22819) |
| 36 | (914) | B11 | 3488 | (15515) | .065 | (1.65) | 3488 | (15515) | 3488 | (15515) |
| | | B11A | 5130* | (22819) | .017 | (.43) | 5130* | (22819) | 5130* | (22819) |
| 48 | (1219) | B11 | 2616 | (11636) | .117 | (2.97) | 2616 | (11636) | 2616 | (11636) |
| | | B11A | 5130* | (22819) | .040 | (1.01) | 5130* | (22819) | 5130* | (22819) |
| 60 | (1524) | B11 | 2093 | (9310) | .183 | (4.65) | 2093 | (9310) | 1908 | (8487) |
| | | B11A | 5130* | (22819) | .079 | (2.00) | 5130* | (22819) | 5130* | (22819) |
| 72 | (1829) | B11 | 1744 | (7757) | .263 | (6.68) | 1744 | (7757) | 1325 | (5894) |
| | | B11A | 5130* | (22819) | .136 | (3.45) | 5130* | (22819) | 5130* | (22819) |
| 84 | (2133) | B11 | 1495 | (6650) | .358 | (9.09) | 1460 | (6494) | 974 | (4332) |
| | | B11A | 4552 | (20248) | .191 | (4.85) | 4552 | (20248) | 4552 | (20248) |
| 96 | (2438) | B11 | 1308 | (5818) | .468 | (11.89) | 1118 | (4973) | 745 | (3314) |
| | | B11A | 3983 | (17717) | .250 | (6.35) | 3983 | (17717) | 3983 | (17717) |
| 108 | (2743) | B11 | 1163 | (5173) | .592 | (15.03) | 884 | (3932) | 589 | (2620) |
| | | B11A | 3541 | (15751) | .317 | (8.05) | 3541 | (15751) | 3353 | (14915) |
| 120 | (3048) | B11 | 1046 | (4653) | .731 | (18.57) | 716 | (3185) | 477 | (2122) |
| | | B11A | 3187 | (14176) | .391 | (9.93) | 3187 | (14176) | 2716 | (12081) |
| 144 | (3657) | B11 | 872 | (3879) | 1.053 | (26.74) | 497 | (2211) | 331 | (1472) |
| | | B11A | 2656 | (11814) | .563 | (14.30) | 2656 | (11814) | 1886 | (8389) |
| 168 | (4267) | B11 | 747 | (3323) | 1.433 | (36.40) | 365 | (1623) | 243 | (1081) |
| | | B11A | 2276 | (10124) | .766 | (19.45) | 2078 | (9243) | 1386 | (6165) |
| 192 | (4877) | B11 | 654 | (2909) | 1.871 | (47.52) | 280 | (1245) | 186 | (827) |
| | | B11A | 1992 | (8861) | 1.001 | (25.42) | 1591 | (7077) | 1061 | (4719) |
| 216 | (5486) | B11 | 581 | (2584) | 2.368 | (60.15) | 221 | (983) | 147 | (654) |
| | | B11A | 1770 | (7873) | 1.267 | (32.18) | 1257 | (5591) | 838 | (3727) |
| 240 | (6096) | B11 | 523 | (2326) | 2.924 | (74.27) | 179 | (796) | 119 | (529) |
| | | B11A | 1593 | (7086) | 1.564 | (39.72) | 1018 | (4528) | 679 | (3020) |

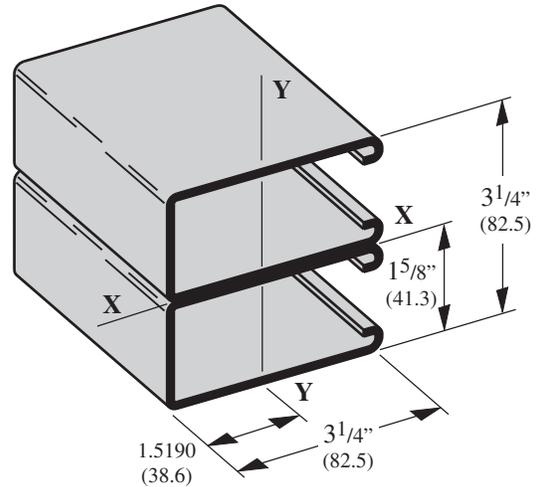
Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

Reference page 14 for general fitting and standard finish specifications.

B11 Beam & Column Loading Data



B11A
Wt. 6.10 Lbs./Ft. (9.08 kg/m)



B11B
Wt. 6.10 Lbs./Ft. (9.08 kg/m)

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|---------------------------|--------|---------------|-----------------------------|---------|--------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 24 | (609) | B11 | 8190 | (36431) | 4477 | (19914) | 8446 | (37569) | 7783 | (34620) | 7311 | (32521) |
| | | B11A | 17701 | (78738) | 8267 | (36773) | 17778 | (79080) | 17572 | (78164) | 17416 | (77470) |
| 36 | (914) | B11 | 7311 | (32521) | 4183 | (18607) | 7838 | (34865) | 6503 | (28927) | 5612 | (24963) |
| | | B11A | 17416 | (77470) | 8189 | (36426) | 17590 | (78244) | 17127 | (76184) | 16774 | (74614) |
| 48 | (1219) | B11 | 6214 | (27641) | 3783 | (16827) | 7053 | (31373) | 4988 | (22188) | 3816 | (16974) |
| | | B11A | 17016 | (75691) | 8079 | (35937) | 17327 | (77074) | 16503 | (73409) | 15876 | (70620) |
| 60 | (1524) | B11 | 4988 | (22188) | 3279 | (14586) | 6140 | (27312) | 3595 | (15991) | 2790 | (12410) |
| | | B11A | 16503 | (73409) | 7727 | (34371) | 16988 | (75566) | 15701 | (69841) | 14721 | (65478) |
| 72 | (1829) | B11 | 3816 | (16974) | 2444 | (10871) | 5146 | (22890) | 2790 | (12410) | 2213 | (9844) |
| | | B11A | 15876 | (70620) | 6160 | (27401) | 16574 | (73724) | 14721 | (65482) | 13310 | (59206) |
| 84 | (2133) | B11 | 3063 | (13625) | 1897 | (8438) | 4133 | (18384) | 2291 | (10191) | 1846 | (8211) |
| | | B11A | 15135 | (67324) | 4961 | (22067) | 16084 | (71545) | 13563 | (60331) | 11642 | (51786) |
| 96 | (2438) | B11 | 2564 | (11405) | 1532 | (6814) | 3398 | (15115) | 1953 | (8687) | 1591 | (7077) |
| | | B11A | 14279 | (63516) | 4045 | (7993) | 15520 | (69036) | 12226 | (54384) | 9717 | (43223) |
| 108 | (2743) | B11 | 2213 | (9844) | 1273 | (5662) | 2886 | (12837) | 1708 | (7597) | 1401 | (6232) |
| | | B11A | 13310 | (59206) | 3337 | (14844) | 14880 | (66189) | 10712 | (47649) | 7725 | (34362) |
| 120 | (3048) | B11 | 1953 | (8687) | 1081 | (4808) | 2514 | (11183) | 1522 | (6770) | 1251** | (5565) |
| | | B11A | 12226 | (54384) | 2784 | (12384) | 14164 | (63004) | 9019 | (40118) | 6257** | (27832) |
| 144 | (3657) | B11 | 1591 | (7077) | 816 | (3630) | 2011 | (8945) | 1251** | (5565) | 1026** | (4564) |
| | | B11A | 9717 | (43223) | 1990 | (8852) | 12508 | (55638) | 6257** | (27832) | 4345** | (19327) |
| 168 | (4267) | B11 | 1347 | (5992) | 642 | (2856) | 1687 | (7504) | 1058** | (4706) | 859** | (3821) |
| | | B11A | 7183 | (31951) | 1464 | (6512) | 10550 | (46929) | 4597** | (20448) | 3192** | (14199) |
| 192 | (4877) | B11 | 1167** | (5191) | 519 | (2308) | 1459 | (6490) | 910** | (4048) | - | - |
| | | B11A | 5499** | (24461) | 1121 | (4986) | 8330 | (37053) | 3520** | (15658) | - | - |
| 216 | (5486) | B11 | 1026** | (4564) | 429 | (1908) | 1285** | (5716) | - | - | - | - |
| | | B11A | 4345** | (19327) | 885 | (3936) | 6582** | (29278) | - | - | - | - |
| 240 | (6096) | B11 | 910** | (4048) | 360 | (1601) | 1148** | (5106) | - | - | - | - |
| | | B11A | 3520** | (15658) | 717 | (3189) | 5331** | (23713) | - | - | - | - |

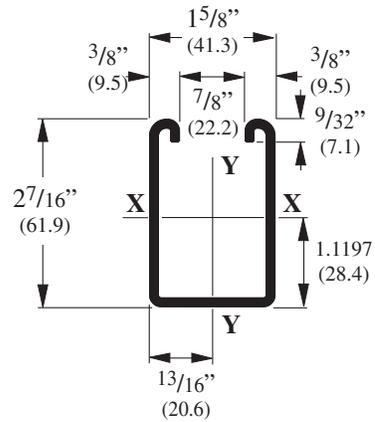
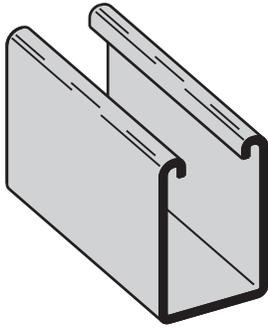
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B12 Channel & Combinations

B12

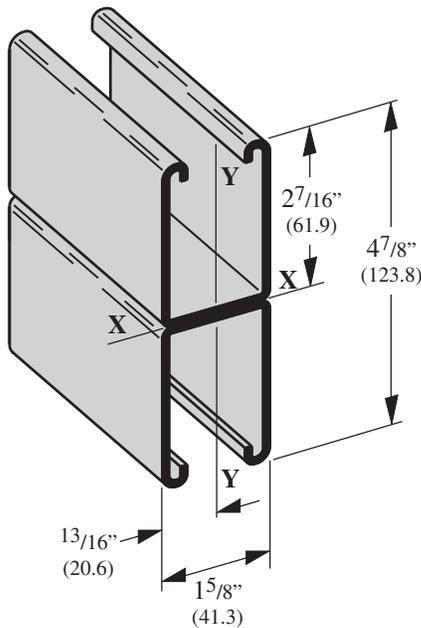
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Aluminum
- Weight: 2.47 Lbs./Ft. (3.67 kg/m)



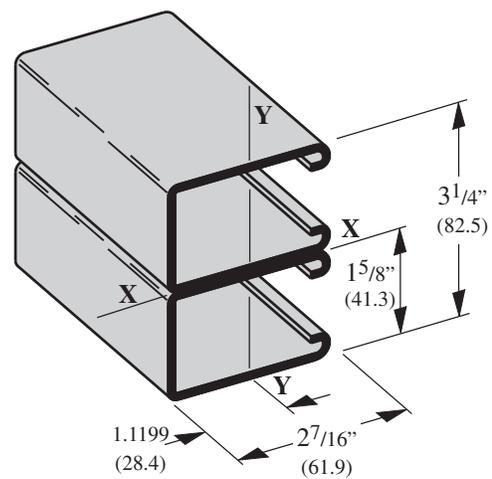
SECTION PROPERTIES

| Channel | Weight lbs./ft. kg/m | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|-------------------------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|----|-----------------------|-----------------|---------------------|-----------------|------------------------|----|
| | | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B12 | 2.484 (3.70) | .731 (4.71) | .5349 (22.26) | .4061 (6.65) | .856 (2.17) | .3377 (14.06) | .4156 (6.81) | .680 (1.73) | | | | | | | |
| B12A | 4.969 (7.40) | 1.462 (9.43) | 2.9036 (120.86) | 1.1915 (19.52) | 1.409 (3.58) | .6756 (28.12) | .8315 (13.63) | .680 (1.73) | | | | | | | |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



B12A
Wt. 4.94 Lbs./Ft. (7.35 kg/m)



B12B
Wt. 4.94 Lbs./Ft. (7.35 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B12 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|---------|--------|---------|-----------------------------|---------|------------|---------|
| | | | Lbs. N | | In. mm | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B12 | 3880 | (17259) | .009 | (.23) | 3880 | (17259) | 3880 | (17259) |
| | | B12A | 3880* | (17259) | .001 | (.02) | 3880* | (17259) | 3880* | (17259) |
| 24 | (609) | B12 | 3273 | (14559) | .038 | (.96) | 3273 | (14559) | 3273 | (14559) |
| | | B12A | 3880* | (17259) | .008 | (.20) | 3880* | (17259) | 3880* | (17259) |
| 36 | (914) | B12 | 2182 | (9706) | .086 | (2.18) | 2182 | (9706) | 2182 | (9706) |
| | | B12A | 3880* | (17259) | .028 | (.71) | 3880* | (17259) | 3880* | (17259) |
| 48 | (1219) | B12 | 1636 | (7277) | .153 | (3.88) | 1636 | (7277) | 1421 | (6321) |
| | | B12A | 3880* | (17259) | .067 | (1.70) | 3880* | (17259) | 3880* | (17259) |
| 60 | (1524) | B12 | 1309 | (5823) | .240 | (6.09) | 1309 | (5823) | 909 | (4043) |
| | | B12A | 3847* | (17112) | .130 | (3.30) | 3847* | (17112) | 3847* | (17112) |
| 72 | (1829) | B12 | 1091 | (4853) | .345 | (8.76) | 947 | (4212) | 632 | (2811) |
| | | B12A | 3206 | (14261) | .188 | (4.77) | 3206 | (14261) | 3206 | (14261) |
| 84 | (2133) | B12 | 935 | (4159) | .470 | (11.94) | 696 | (3096) | 464 | (2064) |
| | | B12A | 2748 | (12224) | .255 | (6.48) | 2748 | (12224) | 2509 | (11160) |
| 96 | (2438) | B12 | 818 | (3638) | .614 | (15.59) | 533 | (2371) | 355 | (1579) |
| | | B12A | 2404 | (10693) | .334 | (8.48) | 2404 | (10693) | 1921 | (8545) |
| 108 | (2743) | B12 | 727 | (3234) | .777 | (19.73) | 421 | (1873) | 281 | (1250) |
| | | B12A | 2137 | (9506) | .422 | (10.72) | 2137 | (9506) | 1518 | (6752) |
| 120 | (3048) | B12 | 655 | (2913) | .959 | (24.36) | 341 | (1517) | 227 | (1010) |
| | | B12A | 1924 | (8558) | .521 | (13.23) | 1844 | (8202) | 1229 | (5467) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|-----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B12 | 10140 | (45105) | 4752 | (21138) | 10247 | (45581) | 9965 | (44326) | 9756 | (43397) |
| | | B12A | 20820 | (92612) | 8023 | (35688) | 20854 | (92763) | 20763 | (92358) | 20694 | (92051) |
| 24 | (609) | B12 | 9244 | (41119) | 4514 | (20079) | 9639 | (42876) | 8629 | (38384) | 7933 | (35288) |
| | | B12A | 20519 | (91273) | 7956 | (35390) | 20655 | (91878) | 20293 | (90268) | 20017 | (89040) |
| 36 | (914) | B12 | 7933 | (35288) | 4137 | (18402) | 8711 | (35748) | 6786 | (30185) | 5572 | (24785) |
| | | B12A | 20017 | (89040) | 7844 | (34892) | 20324 | (90405) | 19509 | (86780) | 18889 | (84022) |
| 48 | (1219) | B12 | 6386 | (28406) | 3638 | (16182) | 7562 | (33637) | 4785 | (21285) | 3717 | (16534) |
| | | B12A | 19315 | (85917) | 7688 | (34198) | 19861 | (88346) | 18412 | (81900) | 17309 | (76994) |
| 60 | (1524) | B12 | 4785 | (21285) | 2963 | (13180) | 6285 | (27957) | 3523 | (15671) | 2806 | (12482) |
| | | B12A | 18412 | (81900) | 6941 | (30875) | 19265 | (85695) | 17002 | (75628) | 15278 | (67960) |
| 72 | (1829) | B12 | 3717 | (16534) | 2197 | (9773) | 4964 | (22081) | 2806 | (12482) | 2271 | (10102) |
| | | B12A | 17309 | (76994) | 5334 | (23727) | 18536 | (82452) | 15278 | (67960) | 12795 | (56915) |
| 84 | (2133) | B12 | 3052 | (13576) | 1717 | (7637) | 3994 | (17766) | 2345 | (10431) | 1913 | (8509) |
| | | B12A | 16005 | (71194) | 4176 | (18576) | 17675 | (78622) | 13240 | (58894) | 9884 | (43966) |
| 96 | (2438) | B12 | 2600 | (11565) | 1391 | (6187) | 3350 | (14901) | 2019 | (8981) | 1650 | (7339) |
| | | B12A | 14500 | (64499) | 3328 | (14803) | 16682 | (74205) | 10889 | (48436) | 7567 | (33659) |
| 108 | (2743) | B12 | 2271 | (10102) | 1155 | (5137) | 2893 | (12869) | 1773 | (7886) | 1446 | (6432) |
| | | B12A | 12795 | (56915) | 2692 | (11974) | 15556 | (69196) | 8610 | (38299) | 5979 | (26596) |
| 120 | (3048) | B12 | 2019 | (8981) | 977 | (4346) | 2553 | (11356) | 1577 | (7015) | 1279** | (5689) |
| | | B12A | 10889 | (48436) | 2202 | (9795) | 14298 | (63600) | 6974 | (31022) | 4843** | (21543) |

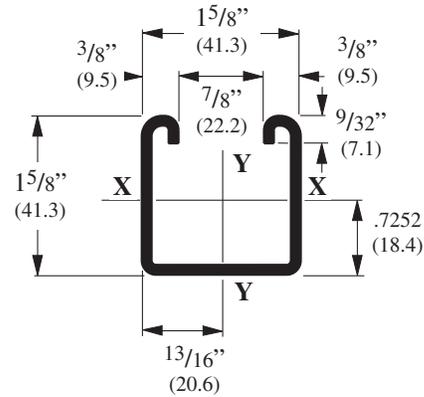
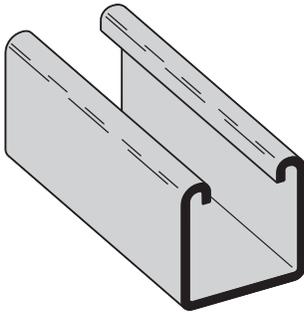
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B22 Channel

B22

- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: 1.90 Lbs./Ft. (2.83 kg/m)

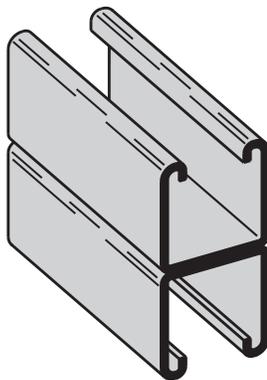


SECTION PROPERTIES

| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|
| | lbs./ft. | kg/m | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B22 | 1.910 | (2.84) | .562 | (3.62) | .1912 | (7.96) | .2125 | (3.48) | .583 | (1.48) | .2399 | (9.99) | .2953 | (4.84) | .653 | (1.66) |
| B22A | 3.820 | (5.69) | 1.124 | (7.25) | .9732 | (40.51) | .5989 | (9.81) | .931 | (2.36) | .4798 | (19.97) | .5905 | (9.68) | .653 | (1.66) |
| B22X | 6.649 | (9.89) | 1.956 | (12.62) | 4.1484 | (172.67) | 1.7019 | (27.89) | 1.456 | (3.70) | 1.1023 | (45.88) | 1.2027 | (19.71) | .751 | (1.91) |

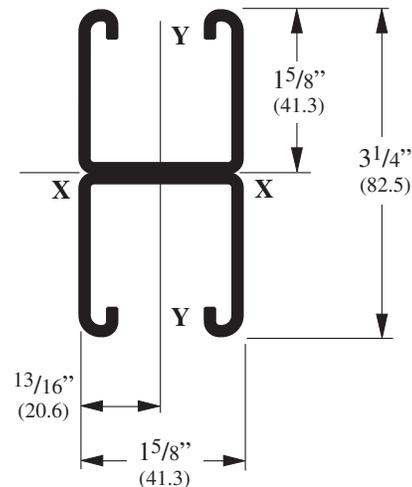
Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

Channel & Combinations



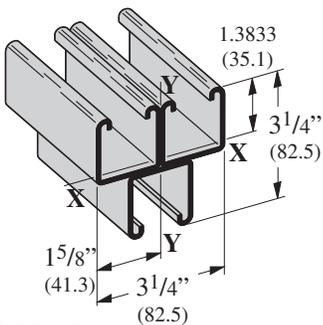
B22A

Wt. 3.80 Lbs./Ft. (5.65 kg/m)

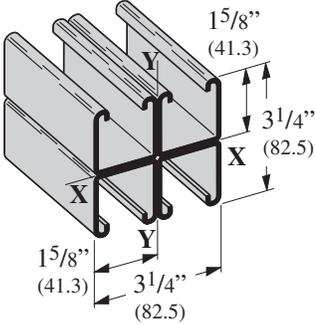


Reference page 14 for general fitting and standard finish specifications.

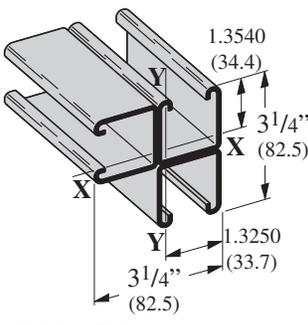
B22 Combinations



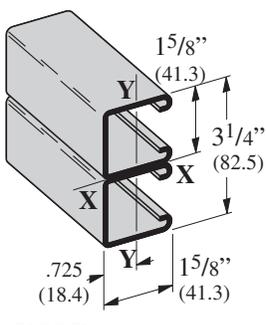
B22A3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



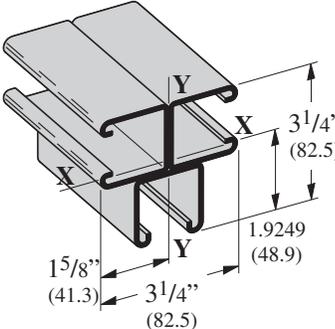
B22A4
Wt. 7.60 Lbs./Ft. (11.31 kg/m)



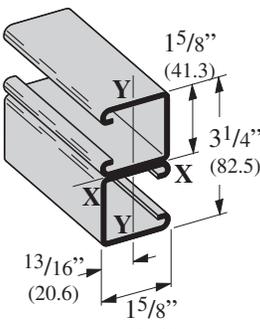
B22AD3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



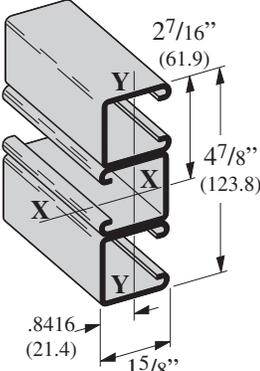
B22B
Wt. 3.80 Lbs./Ft. (5.65 kg/m)



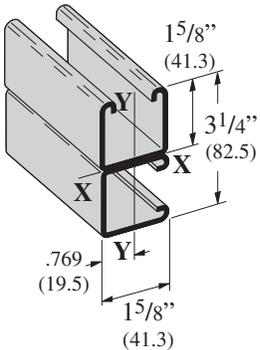
B22B3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



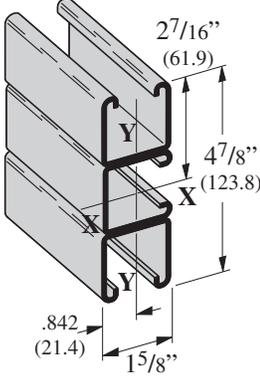
B22C
Wt. 3.80 Lbs./Ft. (5.65 kg/m)



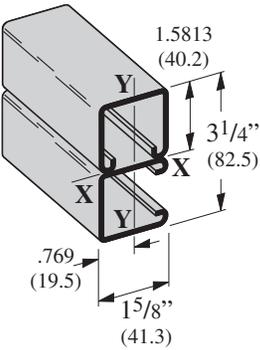
B22C3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



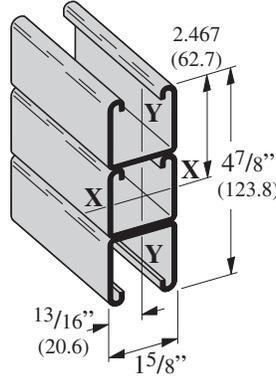
B22D
Wt. 3.80 Lbs./Ft. (5.65 kg/m)



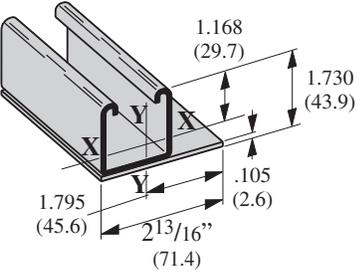
B22D3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



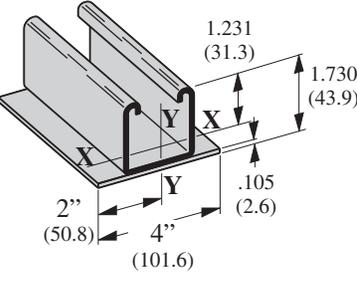
B22E
Wt. 3.80 Lbs./Ft. (5.65 kg/m)



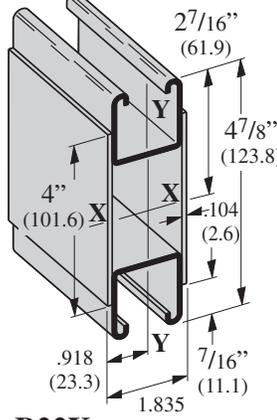
B22E3
Wt. 5.70 Lbs./Ft. (8.48 kg/m)



B22LPL
Wt. 2.90 Lbs./Ft. (4.31 kg/m)



B22PL
Wt. 3.35 Lbs./Ft. (4.98 kg/m)



B22X
Wt. 6.70 Lbs./Ft. (9.97 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B22 Beam Loading Data

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = 1/240 Span 1/360 Span | | | |
|--------------------------|--------|------------------|-----------------------------|---------|-------|---------|--|---------|-------|---------|
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B22 | 2610 | (11610) | .014 | (.35) | 2610 | (11610) | 2610 | (11610) |
| | | B22A | 2610* | (11610) | .002 | (.05) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .001 | (.02) | 5790* | (25755) | 5790* | (25755) |
| 18 | (457) | B22 | 2269 | (10093) | .031 | (.79) | 2269 | (10093) | 2269 | (10093) |
| | | B22A | 2610* | (11610) | .007 | (.18) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .003 | (.07) | 5790* | (25755) | 5790* | (25755) |
| 24 | (609) | B22 | 1702 | (7571) | .056 | (1.42) | 1702 | (7571) | 1702 | (7571) |
| | | B22A | 2610* | (11610) | .017 | (.43) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .008 | (.20) | 5790* | (25755) | 5790* | (25755) |
| 30 | (762) | B22 | 1361 | (6054) | .087 | (2.21) | 1361 | (6054) | 1294 | (5756) |
| | | B22A | 2610* | (11610) | .033 | (.84) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .017 | (.73) | 5790* | (25755) | 5790* | (25755) |
| 36 | (914) | B22 | 1135 | (5049) | .126 | (3.20) | 1135 | (5049) | 899 | (3999) |
| | | B22A | 2610* | (11610) | .057 | (1.45) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .029 | (.73) | 5790* | (25755) | 5790* | (25755) |
| 42 | (1067) | B22 | 972 | (4323) | .172 | (4.37) | 972 | (4323) | 660 | (2936) |
| | | B22A | 2610* | (11610) | .091 | (2.31) | 2610* | (11610) | 2610* | (11610) |
| | | B22X | 5790* | (25755) | .046 | (1.17) | 5790* | (25755) | 5790* | (25755) |
| 48 | (1219) | B22 | 851 | (3785) | .224 | (5.69) | 758 | (3372) | 505 | (2246) |
| | | B22A | 2405 | (10698) | .125 | (3.17) | 2405 | (10698) | 2405 | (10698) |
| | | B22X | 5790* | (25755) | .068 | (1.73) | 5790* | (25755) | 5790* | (25755) |
| 54 | (1371) | B22 | 756 | (3363) | .284 | (7.21) | 599 | (2664) | 399 | (1775) |
| | | B22A | 2138 | (9510) | .158 | (4.01) | 2138 | (9510) | 2024 | (9003) |
| | | B22X | 5790* | (25755) | .097 | (2.46) | 5790* | (25755) | 5790* | (25755) |
| 60 | (1524) | B22 | 681 | (3029) | .351 | (8.91) | 485 | (2157) | 323 | (1437) |
| | | B22A | 1924 | (8558) | .195 | (4.95) | 1924 | (8558) | 1640 | (7295) |
| | | B22X | 5645 | (25110) | .130 | (3.30) | 5645 | (25110) | 5645 | (25110) |
| 66 | (1676) | B22 | 619 | (2753) | .424 | (10.77) | 401 | (1784) | 267 | (1187) |
| | | B22A | 1749 | (7780) | .236 | (5.99) | 1749 | (7780) | 1355 | (6027) |
| | | B22X | 5132 | (22828) | .158 | (4.01) | 5132 | (22828) | 5132 | (22828) |
| 72 | (1829) | B22 | 567 | (2522) | .505 | (12.83) | 337 | (1499) | 225 | (1001) |
| | | B22A | 1603 | (7130) | .281 | (7.14) | 1603 | (7130) | 1139 | (5066) |
| | | B22X | 4704 | (20924) | .188 | (4.77) | 4704 | (20924) | 4704 | (20924) |
| 78 | (1981) | B22 | 524 | (2331) | .593 | (15.06) | 287 | (1276) | 191 | (849) |
| | | B22A | 1480 | (6583) | .330 | (8.38) | 1455 | (6472) | 970 | (4315) |
| | | B22X | 4342 | (19314) | .220 | (5.59) | 4342 | (19314) | 4270 | (18994) |
| 84 | (2133) | B22 | 486 | (2162) | .687 | (17.45) | 248 | (1103) | 165 | (734) |
| | | B22A | 1374 | (6112) | .383 | (9.73) | 1255 | (5582) | 837 | (3723) |
| | | B22X | 4032 | (17935) | .255 | (6.48) | 4032 | (17935) | 3682 | (16378) |
| 90 | (2286) | B22 | 454 | (2019) | .789 | (20.04) | 216 | (961) | 144 | (640) |
| | | B22A | 1283 | (5707) | .440 | (11.17) | 1093 | (4862) | 729 | (3243) |
| | | B22X | 3763 | (16738) | .293 | (7.44) | 3763 | (16738) | 3207 | (14265) |
| 96 | (2438) | B22 | 425 | (1890) | .898 | (22.81) | 190 | (845) | 126 | (560) |
| | | B22A | 1202 | (5347) | .500 | (12.70) | 961 | (4275) | 640 | (2847) |
| | | B22X | 3528 | (15693) | .334 | (8.48) | 3528 | (15693) | 2819 | (12539) |
| 102 | (2591) | B22 | 400 | (1779) | 1.013 | (25.73) | 168 | (747) | 112 | (498) |
| | | B22A | 1132 | (5035) | .565 | (14.35) | 851 | (3785) | 567 | (2522) |
| | | B22X | 3320 | (14768) | .377 | (9.57) | 3320 | (14768) | 2497 | (11107) |
| 108 | (2743) | B22 | 378 | (1681) | 1.136 | (28.85) | 150 | (667) | 100 | (445) |
| | | B22A | 1069 | (4755) | .633 | (16.08) | 759 | (3376) | 506 | (2251) |
| | | B22X | 3136 | (13949) | .422 | (10.72) | 3136 | (13949) | 2227 | (9906) |
| 114 | (2895) | B22 | 358 | (1592) | 1.266 | (32.15) | 134 | (596) | 90 | (400) |
| | | B22A | 1013 | (4506) | .706 | (17.93) | 681 | (3029) | 454 | (2019) |
| | | B22X | 2971 | (13215) | .471 | (11.96) | 2971 | (13215) | 1999 | (8892) |
| 120 | (3048) | B22 | 340 | (1512) | 1.403 | (35.63) | 121 | (538) | 81 | (360) |
| | | B22A | 962 | (4279) | .782 | (19.86) | 615 | (2735) | 410 | (1824) |
| | | B22X | 2822 | (12553) | .521 | (13.23) | 2706 | (12037) | 1804 | (8024) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

Reference page 14 for general fitting and standard finish specifications.

B22 Column Loading Data

| Unbraced Height | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|-----------------|--------|---------------|-----------------------------|----------|-------------------|---------|-------------------------------------|----------|---------|----------|---------|----------|
| | | | Loaded@ C.G. | | Loaded@ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| In. | mm | | | | | | | | | | | |
| 12 | (305) | B22 | 10454 | (46502) | 4276 | (19120) | 10598 | (47142) | 10222 | (45470) | 9950 | (44260) |
| | | B22A | 21625 | (96193) | 7002 | (31146) | 21677 | (96424) | 21539 | (95810) | 21433 | (95339) |
| | | B22X | 46948 | (208835) | 18975 | (84405) | 47061 | (209338) | 46761 | (208003) | 46531 | (206980) |
| 18 | (457) | B22 | 9950 | (44260) | 4153 | (18473) | 10253 | (45607) | 9481 | (42173) | 8955 | (39834) |
| | | B22A | 21433 | (95339) | 6959 | (30955) | 21551 | (95863) | 21239 | (94476) | 21001 | (93417) |
| | | B22X | 46531 | (206980) | 18859 | (83899) | 46787 | (208119) | 46110 | (205107) | 45593 | (202808) |
| 24 | (609) | B22 | 9311 | (41417) | 3993 | (17762) | 9801 | (43597) | 8582 | (38174) | 7801 | (34700) |
| | | B22A | 21164 | (94142) | 6898 | (30684) | 21373 | (95072) | 20819 | (92607) | 20397 | (90730) |
| | | B22X | 45947 | (204382) | 18693 | (84440) | 46401 | (206402) | 45198 | (201051) | 44282 | (196976) |
| 30 | (762) | B22 | 8582 | (38174) | 3802 | (16912) | 9268 | (41226) | 7601 | (33811) | 6595 | (29336) |
| | | B22A | 20819 | (92607) | 6821 | (30341) | 21145 | (94057) | 20279 | (90205) | 19619 | (87269) |
| | | B22X | 45198 | (201051) | 18485 | (82225) | 45906 | (204200) | 44026 | (195837) | 42593 | (189463) |
| 36 | (914) | B22 | 7801 | (34700) | 3589 | (15964) | 8676 | (38593) | 6595 | (28336) | 5392 | (23985) |
| | | B22A | 20397 | (90730) | 6728 | (29927) | 20866 | (92816) | 19619 | (87269) | 18669 | (83044) |
| | | B22X | 44282 | (196976) | 18233 | (81104) | 45300 | (201504) | 42593 | (189463) | 40530 | (180286) |
| 42 | (1067) | B22 | 6998 | (31128) | 3360 | (14946) | 8048 | (35799) | 5595 | (24888) | 4444 | (19768) |
| | | B22A | 19898 | (88511) | 6620 | (29447) | 20537 | (91353) | 18840 | (83804) | 17546 | (78048) |
| | | B22X | 43198 | (192154) | 17940 | (79801) | 44586 | (198328) | 40901 | (181937) | 38092 | (169441) |
| 48 | (1219) | B22 | 6193 | (27548) | 3118 | (13869) | 7401 | (32921) | 4718 | (20987) | 3791 | (16863) |
| | | B22A | 19322 | (85948) | 6496 | (28895) | 20157 | (89663) | 17940 | (79801) | 16251 | (72288) |
| | | B22X | 41948 | (186594) | 17604 | (78306) | 43761 | (194568) | 38948 | (173254) | 35281 | (156938) |
| 54 | (1371) | B22 | 5392 | (23985) | 2864 | (12740) | 6746 | (30008) | 4090 | (18193) | 3310 | (14723) |
| | | B22A | 18669 | (83044) | 6263 | (27859) | 19276 | (87745) | 16920 | (75264) | 14782 | (65753) |
| | | B22X | 40530 | (180286) | 16973 | (75499) | 42825 | (190495) | 36733 | (163396) | 32092 | (142752) |
| 60 | (1524) | B22 | 4718 | (20987) | 2631 | (11703) | 6093 | (27103) | 3616 | (16085) | 2936 | (13060) |
| | | B22A | 17940 | (79801) | 5340 | (23753) | 19244 | (85601) | 15781 | (70197) | 13141 | (58454) |
| | | B22X | 38948 | (173249) | 14471 | (64370) | 41779 | (185842) | 34260 | (152396) | 28529 | (126903) |
| 66 | (1676) | B22 | 4202 | (18691) | 2434 | (10827) | 5441 | (24203) | 3242 | (14421) | 2634 | (11716) |
| | | B22A | 17134 | (76216) | 4587 | (20404) | 18712 | (83235) | 14521 | (64592) | 11328 | (50389) |
| | | B22X | 37198 | (165465) | 12431 | (55296) | 40624 | (180704) | 31525 | (140230) | 24593 | (109395) |
| 72 | (1829) | B22 | 3791 | (16863) | 2264 | (10071) | 4869 | (21658) | 2936 | (13060) | 2381 | (10591) |
| | | B22A | 16251 | (72288) | 3968 | (17650) | 18129 | (80642) | 13141 | (58454) | 9524 | (42365) |
| | | B22X | 35281 | (156938) | 10753 | (47832) | 39358 | (175073) | 28529 | (126903) | 20676 | (91971) |
| 78 | (1981) | B22 | 3456 | (15373) | 2116 | (9412) | 4412 | (19625) | 2680 | (11921) | 2166 | (9635) |
| | | B22A | 15291 | (68018) | 3456 | (15373) | 17496 | (77826) | 11642 | (51786) | 8115 | (36097) |
| | | B22X | 33197 | (147667) | 9366 | (41662) | 37984 | (168961) | 25275 | (112429) | 17617 | (78364) |
| 84 | (2133) | B22 | 3176 | (14127) | 1984 | (8825) | 4037 | (17957) | 2461 | (10947) | 1980 | (8807) |
| | | B22A | 14255 | (63409) | 3028 | (13469) | 16812 | (74783) | 10076 | (44820) | 6998 | (31128) |
| | | B22X | 30947 | (137659) | 8206 | (36502) | 36499 | (162355) | 21875 | (97305) | 15192 | (67577) |
| 90 | (2286) | B22 | 2936 | (13060) | 1867 | (8305) | 3724 | (16565) | 2270 | (10097) | 1816 | (8078) |
| | | B22A | 13141 | (58454) | 2667 | (11863) | 16077 | (71514) | 8778 | (39046) | 6096 | (27116) |
| | | B22X | 28529 | (126903) | 7227 | (32147) | 34903 | (155256) | 19057 | (84770) | 13234 | (58868) |
| 96 | (2438) | B22 | 2728 | (16583) | 1761 | (7833) | 3456 | (15373) | 2101 | (9346) | 1671 | (7433) |
| | | B22A | 11951 | (53160) | 2359 | (10493) | 15291 | (68018) | 7715 | (34318) | 5357 | (23829) |
| | | B22X | 25945 | (115409) | 6393 | (28437) | 33197 | (147667) | 16749 | (74503) | 11630 | (51733) |
| 102 | (2591) | B22 | 2545 | (11321) | 1664 | (7402) | 3225 | (14345) | 1951 | (8678) | 1542** | (6343) |
| | | B22A | 10678 | (47498) | 2093 | (9310) | 14455 | (64299) | 6834 | (30399) | 4746 | (21111) |
| | | B22X | 23182 | (103118) | 5672 | (25230) | 31382 | (139594) | 14836 | (65994) | 10303 | (45830) |
| 108 | (2743) | B22 | 2381 | (10591) | 1575 | (7006) | 3022 | (13442) | 1816 | (8078) | 1426** | (68599) |
| | | B22A | 9524 | (42365) | 1867 | (8305) | 13568 | (60353) | 6096 | (27116) | 4233 | (18829) |
| | | B22X | 20676 | (91971) | 5059 | (22503) | 29456 | (131027) | 13234 | (58868) | 9190 | (40879) |
| 114 | (2895) | B22 | 2234 | (9937) | 1494 | (6645) | 2842 | (12642) | 1694 | (7535) | 1322** | (5880) |
| | | B22A | 8548 | (38023) | 1675 | (7451) | 12630 | (56181) | 5471 | (24336) | 3799** | (16899) |
| | | B22X | 18558 | (82550) | 4539 | (20190) | 27420 | (121970) | 11877 | (52831) | 8247 | (36684) |
| 120 | (3048) | B22 | 2101 | (9346) | 1418 | (6307) | 2680 | (11921) | 1583** | (7041) | 1228** | (5462) |
| | | B22A | 7715 | (34318) | 1512 | (6726) | 11642 | (51786) | 4937 | (21961) | 3429** | (15253) |
| | | B22X | 16749 | (74503) | 4097 | (18224) | 25275 | (112429) | 10718 | (47676) | 7444 | (33112) |

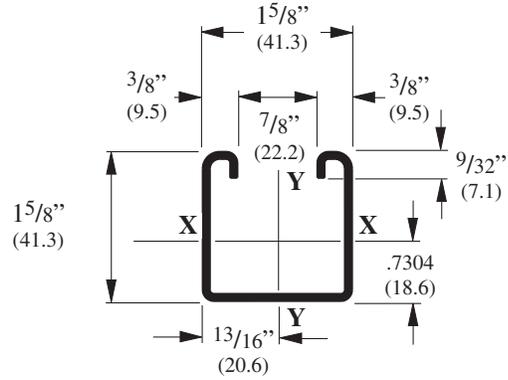
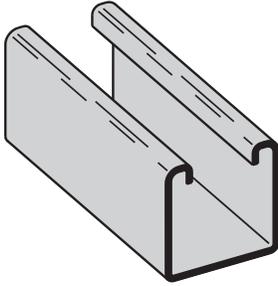
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B24 Channel & Combinations

B24

- Thickness: 14 Gauge (1.9 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: 1.40 Lbs./Ft. (2.08 kg/m)

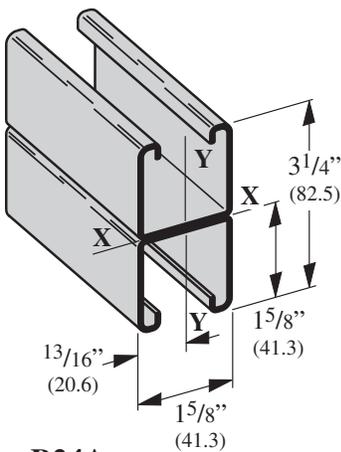


SECTION PROPERTIES

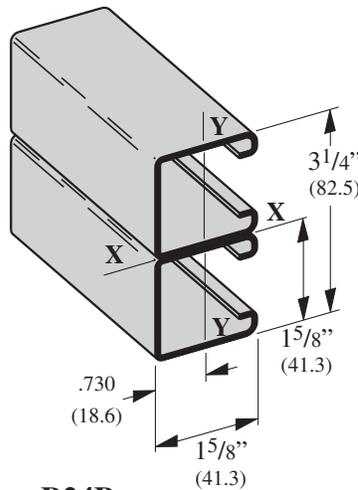
| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | X - X Axis | | Y - Y Axis | | | |
|-------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|
| | | | | | | | | | | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
| | lbs./ft. | kg/m | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B24 | 1.442 | (2.15) | .424 | (2.74) | .1494 | (6.22) | .1670 | (2.74) | .594 | (1.51) | .1857 | (7.73) | .2286 | (3.75) | .662 | (1.68) |
| B24A | 2.884 | (4.29) | .848 | (5.47) | .7514 | (31.28) | .4624 | (7.58) | .941 | (2.39) | .3713 | (15.45) | .4570 | (7.49) | .662 | (1.68) |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

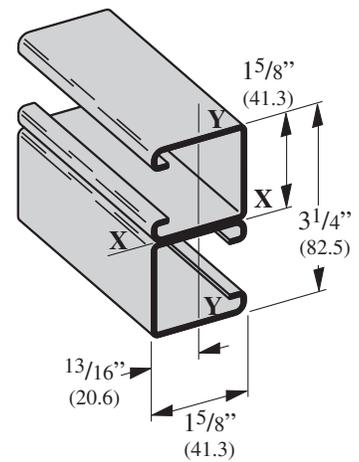
Channel & Combinations



B24A
Wt. 2.80 Lbs./Ft. (4.16 kg/m)



B24B
Wt. 2.80 Lbs./Ft. (4.16 kg/m)



B24C
Wt. 2.80 Lbs./Ft. (4.16 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B24 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|--------|--------|---------|-----------------------------|--------|------------|--------|
| | | | Lbs. N | | In. mm | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B24 | 1750 | (7784) | .014 | (.35) | 1750 | (7784) | 1750 | (7784) |
| | | B24A | 1750* | (7784) | .002 | (.05) | 1750* | (7784) | 1750* | (7784) |
| 24 | (609) | B24 | 1379 | (6134) | .057 | (1.45) | 1379 | (6134) | 1379 | (6134) |
| | | B24A | 1750* | (7784) | .014 | (.35) | 1750* | (7784) | 1750* | (7784) |
| 36 | (914) | B24 | 919 | (4088) | .128 | (3.25) | 919 | (4088) | 720 | (3203) |
| | | B24A | 1750* | (7784) | .048 | (1.22) | 1750* | (7784) | 1750* | (7784) |
| 48 | (1219) | B24 | 689 | (3065) | .227 | (5.76) | 607 | (2700) | 405 | (1801) |
| | | B24A | 1750* | (7784) | .115 | (2.92) | 1750* | (7784) | 1750* | (7784) |
| 60 | (1524) | B24 | 551 | (2451) | .355 | (9.02) | 389 | (1730) | 259 | (1152) |
| | | B24A | 1518 | (6752) | .195 | (4.95) | 1518 | (6752) | 1294 | (5756) |
| 72 | (1829) | B24 | 460 | (2046) | .511 | (12.98) | 270 | (1201) | 180 | (800) |
| | | B24A | 1265 | (5627) | .281 | (7.14) | 1265 | (5627) | 898 | (3994) |
| 84 | (2133) | B24 | 394 | (1752) | .695 | (17.65) | 198 | (881) | 132 | (587) |
| | | B24A | 1084 | (4822) | .383 | (9.73) | 990 | (4404) | 660 | (2936) |
| 96 | (2438) | B24 | 345 | (1534) | .908 | (23.06) | 152 | (676) | 101 | (449) |
| | | B24A | 949 | (4221) | .500 | (12.70) | 758 | (3372) | 505 | (2246) |
| 108 | (2743) | B24 | 306 | (1361) | 1.149 | (29.18) | 120 | (534) | 80 | (356) |
| | | B24A | 843 | (3750) | .633 | (16.08) | 599 | (2664) | 399 | (1775) |
| 120 | (3048) | B24 | 276 | (1228) | 1.419 | (36.04) | 97 | (431) | 65 | (289) |
| | | B24A | 759 | (3376) | .782 | (19.86) | 485 | (2157) | 323 | (1437) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|-----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B24 | 6441 | (28651) | 3077 | (13687) | 6509 | (28953) | 6330 | (28157) | 6198 | (27570) |
| | | B24A | 13212 | (58770) | 4988 | (22188) | 13237 | (58881) | 13171 | (58587) | 13121 | (58365) |
| 24 | (609) | B24 | 5874 | (26129) | 2896 | (12882) | 6124 | (27241) | 5483 | (24389) | 5038 | (22410) |
| | | B24A | 12993 | (57796) | 4924 | (21903) | 13092 | (58236) | 12828 | (57062) | 12627 | (56167) |
| 36 | (914) | B24 | 5038 | (22410) | 2619 | (11650) | 5535 | (24621) | 4302 | (19136) | 3516 | (15640) |
| | | B24A | 12627 | (56167) | 4819 | (21436) | 12851 | (57164) | 12256 | (54517) | 11804 | (52507) |
| 48 | (1219) | B24 | 4043 | (17984) | 2272 | (10106) | 4800 | (21351) | 3008 | (13380) | 2324 | (10337) |
| | | B24A | 12115 | (53890) | 4675 | (20795) | 12512 | (55656) | 11456 | (50959) | 10651 | (47378) |
| 60 | (1524) | B24 | 3008 | (13380) | 1873 | (8331) | 3978 | (17695) | 2200 | (9786) | 1740 | (7740) |
| | | B24A | 11456 | (50959) | 4020 | (17882) | 12078 | (53725) | 10427 | (46381) | 9169 | (40786) |
| 72 | (1829) | B24 | 2324 | (10337) | 1562 | (6948) | 3123 | (13892) | 1740 | (7740) | 1397 | (6214) |
| | | B24A | 10651 | (47378) | 3048 | (13558) | 11546 | (51359) | 9169 | (40786) | 7358 | (32730) |
| 84 | (2133) | B24 | 1898 | (8443) | 1340 | (5960) | 2502 | (11129) | 1444 | (6423) | 1168 | (5195) |
| | | B24A | 9700 | (43148) | 2362 | (10506) | 10918 | (48565) | 7683 | (34175) | 5464 | (24305) |
| 96 | (2438) | B24 | 1608 | (7153) | 1175 | (5226) | 2089 | (9292) | 1236 | (5498) | 1000 | (4448) |
| | | B24A | 8602 | (38263) | 1866 | (8300) | 10194 | (45345) | 6024 | (26796) | 4184 | (18611) |
| 108 | (2743) | B24 | 1397 | (6214) | 1046 | (4653) | 1796 | (7989) | 1078 | (4795) | 870** | (3870) |
| | | B24A | 7358 | (32730) | 1498 | (6663) | 9373 | (41693) | 4760 | (21173) | 3306 | (14706) |
| 120 | (3048) | B24 | 1236 | (5498) | 942 | (4190) | 1578 | (7019) | 953** | (4239) | 764** | (3398) |
| | | B24A | 6024 | (26796) | 1216 | (5409) | 8455 | (37610) | 3856 | (17152) | 2677** | (11908) |

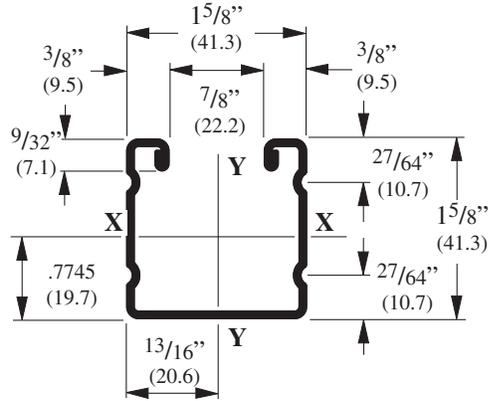
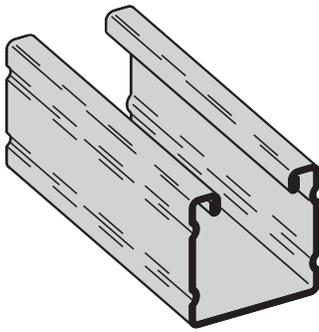
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B26 Channel & Combinations

B26

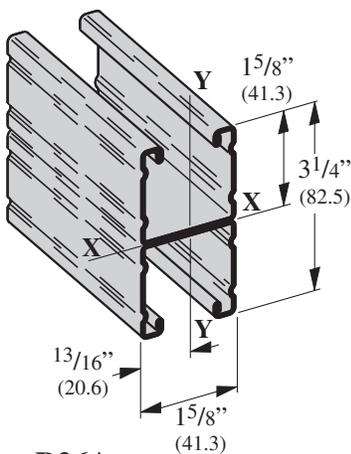
- Thickness: 16 Gauge (1.5 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized
- Weight: 1.12 Lbs./Ft. (1.66 kg/m)



SECTION PROPERTIES

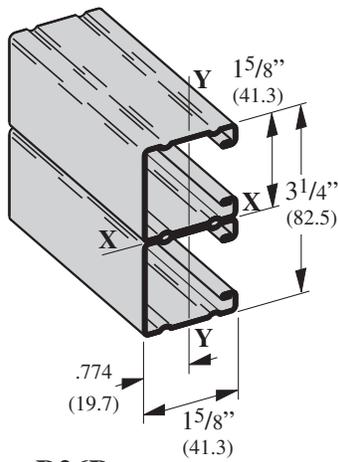
| Channel | Weight lbs./ft. kg/m | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|-------------------------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|----|-----------------------|-----------------|---------------------|-----------------|------------------------|----|
| | | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B26 | 1.234 (1.84) | .363 (2.34) | | .1337 (5.57) | | .1581 (2.59) | | .607 (1.54) | | .1564 (6.51) | | .1925 (3.15) | | .656 (1.67) | |
| B26A | 2.467 (3.67) | .726 (4.68) | | .7086 (29.49) | | .4361 (7.15) | | .988 (2.51) | | .3128 (13.02) | | .3850 (6.31) | | .656 (1.67) | |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



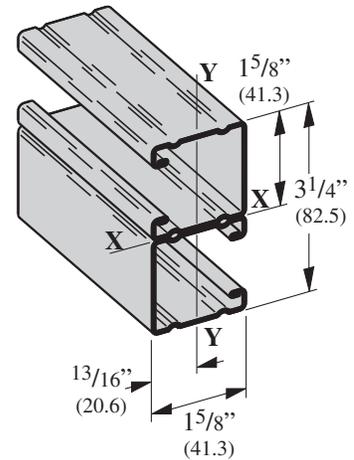
B26A

Wt. 2.24 Lbs./Ft. (3.33 kg/m)



B26B

Wt. 2.24 Lbs./Ft. (3.33 kg/m)



B26C

Wt. 2.24 Lbs./Ft. (3.33 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B26 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|--------|--------|---------|-----------------------------|--------|------------|--------|
| | | | Lbs. N | | In. mm | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B26 | 1220 | (5427) | .014 | (.35) | 1220 | (5427) | 1220 | (5427) |
| | | B26A | 1220* | (5427) | .001 | (.02) | 1220* | (5427) | 1220* | (5427) |
| 24 | (609) | B26 | 1163 | (5173) | .057 | (1.45) | 1163 | (5173) | 1163 | (5173) |
| | | B26A | 1220* | (5427) | .012 | (.30) | 1220* | (5427) | 1220* | (5427) |
| 36 | (914) | B26 | 775 | (3447) | .128 | (3.25) | 775 | (3447) | 603 | (2682) |
| | | B26A | 1220* | (5427) | .040 | (1.01) | 1220* | (5427) | 1220* | (5427) |
| 48 | (1219) | B26 | 581 | (2584) | .228 | (5.79) | 509 | (2264) | 339 | (1508) |
| | | B26A | 1220* | (5427) | .096 | (2.44) | 1220* | (5427) | 1220* | (5427) |
| 60 | (1524) | B26 | 465 | (2068) | .357 | (9.07) | 326 | (1450) | 217 | (965) |
| | | B26A | 1220* | (5427) | .188 | (4.77) | 1220* | (5427) | 1076 | (4786) |
| 72 | (1829) | B26 | 388 | (1726) | .514 | (13.05) | 226 | (1450) | 151 | (965) |
| | | B26A | 1052 | (4679) | .281 | (7.14) | 1052 | (4679) | 747 | (3323) |
| 84 | (2133) | B26 | 332 | (1477) | .699 | (17.75) | 166 | (738) | 111 | (494) |
| | | B26A | 902 | (4012) | .383 | (9.73) | 824 | (3665) | 549 | (2442) |
| 96 | (2438) | B26 | 291 | (1294) | .913 | (23.19) | 127 | (565) | 85 | (378) |
| | | B26A | 789 | (3509) | .500 | (12.70) | 631 | (2807) | 420 | (1868) |
| 108 | (2743) | B26 | 258 | (1147) | 1.156 | (29.36) | 101 | (449) | 67 | (298) |
| | | B26A | 702 | (3122) | .633 | (16.08) | 498 | (2215) | 332 | (1477) |
| 120 | (3048) | B26 | 233 | (1036) | 1.427 | (36.24) | 81 | (360) | 54 | (240) |
| | | B26A | 631 | (2807) | .782 | (19.86) | 404 | (1797) | 269 | (1196) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|-----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B26 | 4002 | (17802) | 2216 | (9857) | 4032 | (17935) | 3952 | (17579) | 3891 | (17308) |
| | | B26A | 8151 | (36257) | 3630 | (16147) | 8163 | (36311) | 8133 | (36177) | 8109 | (36070) |
| 24 | (609) | B26 | 3740 | (16636) | 2109 | (9381) | 3857 | (17157) | 3554 | (15809) | 3336 | (14838) |
| | | B26A | 8051 | (35812) | 3591 | (15973) | 8096 | (36013) | 7975 | (35474) | 7883 | (35065) |
| 36 | (914) | B26 | 3336 | (14839) | 1941 | (8634) | 3579 | (15920) | 2962 | (13175) | 2546 | (11325) |
| | | B26A | 7883 | (35065) | 3528 | (15693) | 7986 | (35523) | 7713 | (34309) | 7505 | (33384) |
| 48 | (1219) | B26 | 2828 | (12579) | 1725 | (7613) | 3217 | (14310) | 2251 | (10013) | 1705 | (7584) |
| | | B26A | 7648 | (34020) | 3441 | (15306) | 7831 | (34834) | 7346 | (32676) | 6977 | (31035) |
| 60 | (1524) | B26 | 2251 | (10013) | 1469 | (6534) | 2793 | (12424) | 1603 | (7130) | 1233 | (5484) |
| | | B26A | 7346 | (32676) | 3066 | (13638) | 7631 | (33944) | 6874 | (30577) | 6298 | (28015) |
| 72 | (1829) | B26 | 1705 | (7584) | 1203 | (5351) | 2326 | (10346) | 1233 | (5484) | 967 | (4301) |
| | | B26A | 6977 | (31035) | 2385 | (10609) | 7388 | (32863) | 6298 | (28015) | 5467 | (24318) |
| 84 | (2133) | B26 | 1358 | (6040) | 1011 | (4497) | 1851 | (8233) | 1003 | (4461) | 797 | (3545) |
| | | B26A | 6541 | (29096) | 1884 | (8380) | 7100 | (31582) | 5616 | (24981) | 4486 | (19955) |
| 96 | (2438) | B26 | 1129 | (5022) | 871 | (3874) | 1513 | (6730) | 847 | (3767) | 680 | (3025) |
| | | B26A | 6038 | (26858) | 1512 | (6726) | 6767 | (30101) | 4830 | (21485) | 3463 | (15404) |
| 108 | (2743) | B26 | 967 | (4301) | 766 | (3407) | 1277 | (5680) | 734 | (3265) | 592** | (2633) |
| | | B26A | 5467 | (24318) | 1231 | (5476) | 6391 | (28428) | 3940 | (17526) | 2736 | (12170) |
| 120 | (3048) | B26 | 847 | (3767) | 684 | (3042) | 1105 | (4915) | 648 | (2882) | 523** | (2326) |
| | | B26A | 4830 | (21485) | 1015 | (4515) | 5970 | (26556) | 3192 | (14199) | 2216** | (9857) |

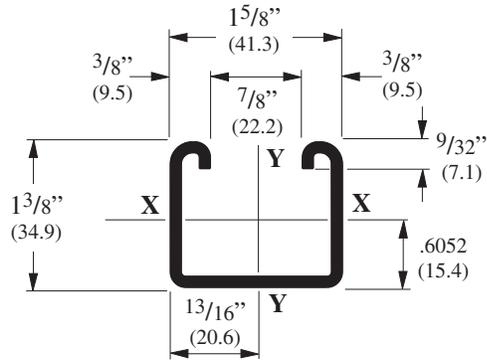
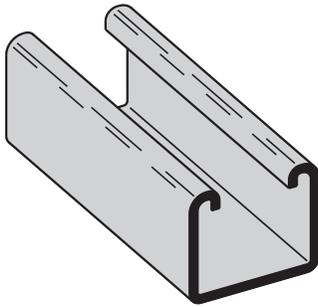
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B32 Channel & Combinations

B32

- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304
- Weight: 1.70 Lbs./Ft. (2.53 kg/m)

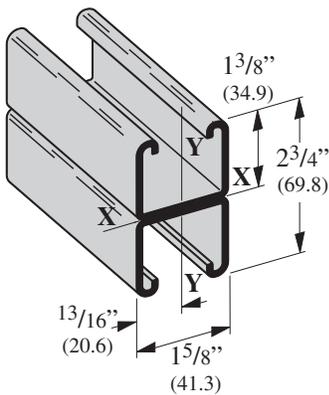


SECTION PROPERTIES

| Channel | Weight lbs./ft. kg/m | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|-------------------------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|----|-----------------------|-----------------|---------------------|-----------------|------------------------|----|
| | | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B32 | 1.733 (2.58) | .510 (3.29) | | .1252 (5.21) | | .1626 (2.67) | | .496 (1.26) | | .2098 (8.73) | | .2582 (4.23) | | .642 (1.63) | |
| B32A | 3.467 (5.16) | 1.020 (6.58) | | .6238 (25.96) | | .4537 (7.43) | | .782 (1.99) | | .4195 (17.46) | | .5163 (8.46) | | .642 (1.63) | |

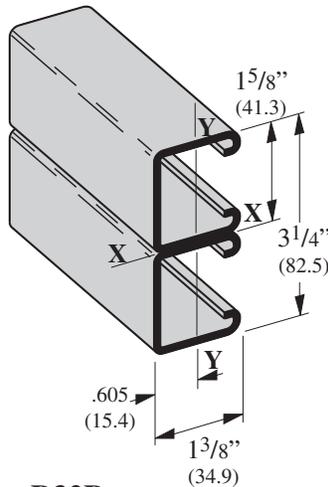
Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

Channel & Combinations



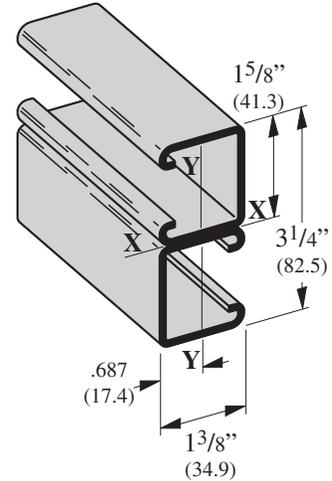
B32A

Wt. 3.40 Lbs./Ft. (5.06 kg/m)



B32B

Wt. 3.40 Lbs./Ft. (5.06 kg/m)



B32C

Wt. 3.40 Lbs./Ft. (5.06 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B32 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|--------|-------|---------|-----------------------------|--------|------------|--------|
| | | | Lbs. | | N | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B32 B32A | 2210 | (9830) | .016 | (.40) | 2210 | (9830) | 2210 | (9830) |
| | | | 2210* | (9830) | .003 | (.07) | 2210* | (9830) | 2210* | (9830) |
| 24 | (609) | B32 B32A | 1299 | (5778) | .065 | (1.65) | 1299 | (5778) | 1299 | (5778) |
| | | | 2210* | (9830) | .022 | (.56) | 2210* | (9830) | 2210* | (9830) |
| 36 | (914) | B32 B32A | 866 | (3852) | .147 | (3.73) | 866 | (3852) | 587 | (2611) |
| | | | 2210* | (9830) | .076 | (1.93) | 2210* | (9830) | 2210* | (9830) |
| 48 | (1219) | B32 B32A | 649 | (2887) | .262 | (6.65) | 495 | (2202) | 330 | (1468) |
| | | | 1817 | (8082) | .148 | (3.76) | 1817 | (8082) | 1638 | (7286) |
| 60 | (1524) | B32 B32A | 520 | (2313) | .410 | (10.41) | 317 | (1410) | 211 | (938) |
| | | | 1454 | (6468) | .231 | (5.87) | 1454 | (6468) | 1048 | (4662) |
| 72 | (1829) | B32 B32A | 433 | (1926) | .590 | (14.98) | 220 | (978) | 147 | (654) |
| | | | 1211 | (5387) | .333 | (8.46) | 1092 | (4857) | 728 | (3238) |
| 84 | (2133) | B32 B32A | 371 | (1650) | .803 | (20.39) | 162 | (720) | 108 | (480) |
| | | | 1038 | (4617) | .453 | (11.50) | 802 | (3567) | 535 | (2380) |
| 96 | (2438) | B32 B32A | 325 | (1445) | 1.049 | (26.64) | 124 | (551) | 83 | (369) |
| | | | 909 | (4043) | .591 | (15.01) | 614 | (2731) | 410 | (1824) |
| 108 | (2743) | B32 B32A | 289 | (1285) | 1.327 | (33.70) | 98 | (436) | 65 | (289) |
| | | | 808 | (3594) | .749 | (19.02) | 485 | (2157) | 324 | (1441) |
| 120 | (3048) | B32 B32A | 260 | (1156) | 1.639 | (41.63) | 79 | (351) | 53 | (236) |
| | | | 727 | (3234) | .924 | (23.47) | 393 | (1748) | 262 | (1165) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|-----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B32 B32A | 10278 | (45719) | 4036 | (17953) | 10432 | (46404) | 10035 | (44638) | 9753 | (43383) |
| | | | 21320 | (94836) | 6557 | (29167) | 21378 | (95094) | 21224 | (94409) | 21106 | (93884) |
| 24 | (609) | B32 B32A | 9104 | (40496) | 3732 | (16601) | 9600 | (42702) | 8387 | (37307) | 7640 | (33984) |
| | | | 20806 | (92550) | 6431 | (28606) | 21039 | (93586) | 20421 | (90837) | 19950 | (88742) |
| 36 | (914) | B32 B32A | 7640 | (33984) | 3323 | (14781) | 8479 | (37716) | 6520 | (29002) | 5425 | (24131) |
| | | | 19950 | (88742) | 6228 | (27703) | 20474 | (91073) | 19083 | (84885) | 18023 | (80170) |
| 48 | (1219) | B32 B32A | 6151 | (27361) | 2877 | (12797) | 7265 | (32316) | 4778 | (21253) | 3870 | (17214) |
| | | | 18751 | (83408) | 5954 | (26485) | 19682 | (87550) | 17210 | (76554) | 15326 | (68173) |
| 60 | (1524) | B32 B32A | 4778 | (21253) | 2435 | (10831) | 6060 | (26956) | 3693 | (16427) | 2994 | (13318) |
| | | | 17210 | (76554) | 4692 | (20871) | 18665 | (83026) | 14801 | (65838) | 11858 | (52747) |
| 72 | (1829) | B32 B32A | 3870 | (17214) | 2089 | (9292) | 4923 | (21898) | 2994 | (13318) | 2403 | (10689) |
| | | | 15326 | (68173) | 3448 | (15337) | 17421 | (77492) | 11858 | (52747) | 8316 | (36991) |
| 84 | (2133) | B32 B32A | 3243 | (14425) | 1817 | (8082) | 4114 | (18300) | 2489 | (11071) | 1807** | (8038) |
| | | | 13100 | (58272) | 2609 | (11605) | 15951 | (70953) | 8798 | (39135) | 6110 | (27178) |
| 96 | (2438) | B32 B32A | 2774 | (12339) | 1594 | (7090) | 3531 | (15706) | 1993 | (8865) | 1384** | (6156) |
| | | | 10525 | (46817) | 2014 | (8959) | 14256 | (63414) | 6736 | (29963) | 4678 | (20809) |
| 108 | (2743) | B32 B32A | 2403 | (10689) | 1407 | (6258) | 3083 | (13714) | 1574** | (7001) | 1093** | (4862) |
| | | | 8316 | (36991) | 1592 | (7081) | 12334 | (54864) | 5322 | (23673) | 3696** | (16440) |
| 120 | (3048) | B32 B32A | 1993 | (8865) | 1221 | (5431) | 2723 | (12112) | 1275** | (5671) | 886** | (3941) |
| | | | 6736 | (29963) | 1289 | (5734) | 10203 | (45385) | 4311 | (19176) | 2994** | (13318) |

**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

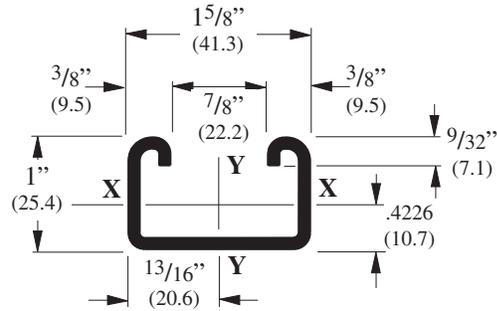
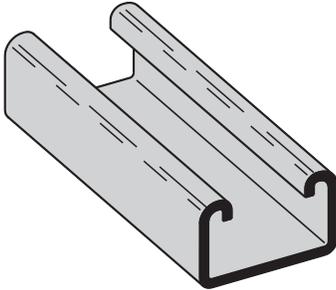
Reference page 14 for general fitting and standard finish specifications.

B42 Channel & Combinations

B42

- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304
- Weight: 1.44 Lbs./Ft. (2.14 kg/m)

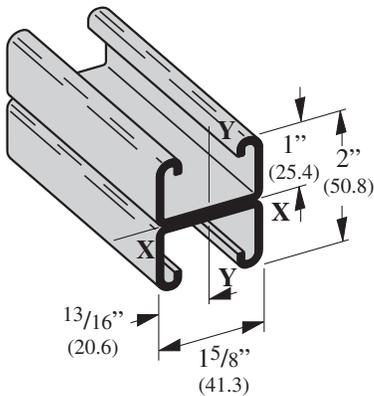
Note: Also available in 14 gauge (1.9mm) material as B44



SECTION PROPERTIES

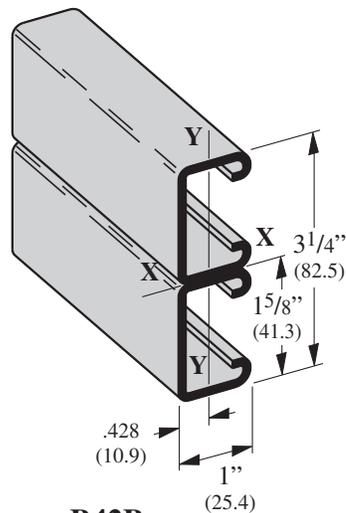
| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | X - X Axis | | Moment of Inertia (I) | | Y - Y Axis | | Radius of Gyration (r) | |
|-------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|
| | | | | | | | | | Radius of Gyration (r) | | | | Section Modulus (S) | | | |
| | lbs./ft. | kg/m | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B42 | 1.468 | (2.18) | .432 | (2.79) | .0554 | (2.31) | .0968 | (1.59) | .358 | (.91) | .1645 | (6.85) | .2025 | (3.32) | .617 | (1.57) |
| B42A | 2.936 | (4.37) | .864 | (5.57) | .2689 | (11.19) | .2689 | (4.41) | .558 | (1.42) | .3292 | (13.70) | .4052 | (6.64) | .617 | (1.57) |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



B42A

Wt. 2.88 Lbs./Ft. (4.28 kg/m)



B42B

Wt. 2.88 Lbs./Ft. (4.28 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B42 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|---------------------------|-----------------------------|------------------|----------------|--------------------|-----------------------------|------------------|---------------|------------------|
| | | | Lbs. N | | In. mm | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B42 B42A | 1538 1590* | (6841) (7072) | .022 .005 | (.56) (.13) | 1538 1590* | (6841) (7072) | 1538 1590* | (6841) (7072) |
| 24 | (609) | B42 B42A | 769 1590* | (3420) (7072) | .088 .038 | (2.23) (.96) | 769 1590* | (3420) (7072) | 582 1590* | (2589) (7072) |
| 36 | (914) | B42 B42A | 513 1428 | (2282) (6352) | .198 .114 | (5.03) (2.89) | 388 1428 | (1726) (6352) | 259 1248 | (1152) (5551) |
| 48 | (1219) | B42 B42A | 384 1071 | (1708) (4764) | .352 .203 | (8.94) (5.15) | 218 1053 | (970) (4684) | 145 702 | (645) (3122) |
| 60 | (1524) | B42 B42A | 308 857 | (1370) (3812) | .550 .318 | (13.97) (8.08) | 140 674 | (623) (2998) | 93 449 | (413) (1997) |
| 72 | (1829) | B42 B42A | 256 714 | (1139) (3176) | .792 .457 | (20.11) (11.61) | 97 468 | (431) (2082) | 65 312 | (289) (1388) |
| 84 | (2133) | B42 B42A | 220 612 | (978) (2722) | 1.079 .623 | (27.40) (15.82) | 71 344 | (316) (1530) | 48 229 | (213) (1018) |
| 96 | (2438) | B42 B42A | 192 535 | (854) (2380) | 1.409 .813 | (35.79) (20.65) | 55 263 | (244) (1170) | 36 176 | (160) (783) |
| 108 | (2743) | B42 B42A | 171 476 | (760) (2117) | 1.783 1.029 | (45.29) (26.13) | 43 208 | (191) (925) | 29 139 | (129) (618) |
| 120 | (3048) | B42 B42A | 154 428 | (685) (1904) | 2.202 1.271 | (55.93) (32.28) | 35 168 | (155) (747) | 23 112 | (102) (498) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|---------------------------|-----------------------------|--------------------|-----------------------|--------------------|-------------------------------------|--------------------|----------------|--------------------|----------------|--------------------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B42 B42A | 9138 21094 | (40648) (93831) | 3493 5834 | (15537) (25951) | 9283 21304 | (41293) (94765) | 8916 20793 | (39660) (92492) | 8670 20469 | (38566) (91050) |
| 24 | (609) | B42 B42A | 8137 19757 | (36195) (87883) | 3145 5585 | (13989) (24843) | 8540 20299 | (37988) (90294) | 7589 18964 | (33757) (84356) | 7050 18094 | (31360) (80486) |
| 36 | (914) | B42 B42A | 7050 18094 | (31360) (80486) | 2722 5237 | (12108) (23295) | 7657 19067 | (34060) (84814) | 5925 16654 | (26356) (74080) | 4335 15057 | (19283) (66977) |
| 48 | (1219) | B42 B42A | 5405 16139 | (24042) (71790) | 2227 4818 | (9906) (21431) | 6786 17632 | (30185) (78431) | 3512 13906 | (15622) (61857) | 2439 11387 | (10849) (50652) |
| 60 | (1524) | B42 B42A | 3512 13906 | (15622) (61857) | 1718 4352 | (7642) (19358) | 5272 16008 | (23451) (71207) | 2247 10710 | (9995) (47640) | 1561** 7531 | (6943) (33499) |
| 72 | (1829) | B42 B42A | 2439 11387 | (10849) (50652) | 1351 3856 | (6009) (17152) | 3694 14200 | (16432) (64165) | 1561** 7531 | (6943) (33499) | 1084** 5230 | (4822) (23264) |
| 84 | (2133) | B42 B42A | 1792 8645 | (7971) (38455) | 1087 3332 | (4835) (14821) | 2714 12206 | (12072) (54295) | 1147** 5533 | (5102) (24612) | 796** 3842 | (3541) (17090) |
| 96 | (2438) | B42 B42A | 1372** 6619 | (6103) (29443) | 891 2873 | (3963) (12780) | 2078 10012 | (9243) (44535) | 878** 4236 | (3905) (18842) | - 2942** | - (13086) |
| 108 | (2743) | B42 B42A | 1084** 5230 | (4822) (23264) | 743 2495 | (3305) (11098) | 1642 7922 | (7304) (35239) | - 3347 | - (14888) | - 2324** | - (10337) |
| 120 | (3048) | B42 B42A | 878** 4236 | (3905) (18842) | 628 2182 | (2793) (9706) | 1330** 6417 | (5916) (28544) | - 2711** | - (12059) | - 1883** | - (8376) |

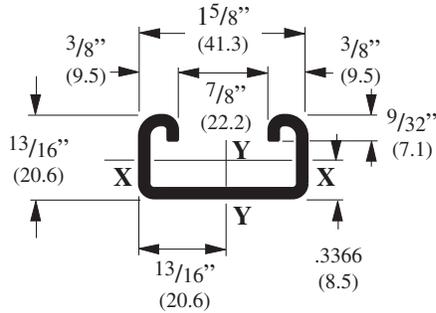
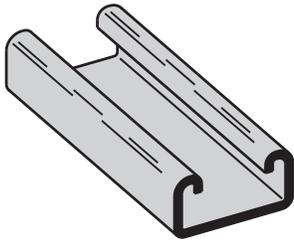
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B52 Channel & Combinations

B52

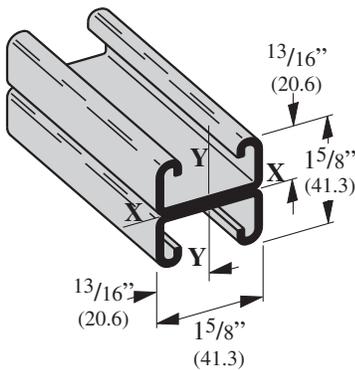
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized
- Weight: 1.27 Lbs./Ft. (1.89 kg/m)



SECTION PROPERTIES

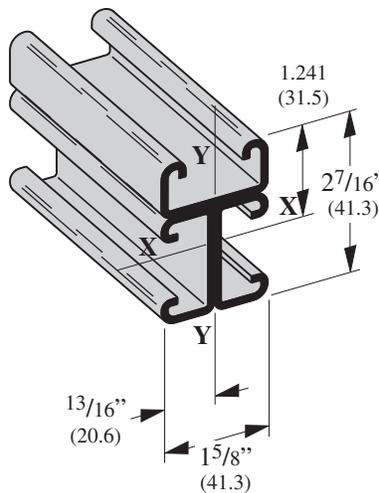
| Channel | Weight lbs./ft. kg/m | Areas of Section sq. in. cm ² | | X - X Axis | | | | | | Y - Y Axis | | | | | |
|-------------|-------------------------|--|--------------|--|-------------|--|--------------|-------------------------------------|--|--|--|--|--|-------------------------------------|--|
| | | | | Moment of Inertia (I) in. ⁴ cm ⁴ | | Section Modulus (S) in. ³ cm ³ | | Radius of Gyration (r) in. cm | | Moment of Inertia (I) in. ⁴ cm ⁴ | | Section Modulus (S) in. ³ cm ³ | | Radius of Gyration (r) in. cm | |
| B52 | 1.313 (1.95) | .386 (2.49) | .0320 (1.33) | .0673 (1.10) | .288 (.73) | .1404 (5.84) | .1728 (2.83) | .603 (1.53) | | | | | | | |
| B52A | 2.627 (3.91) | .773 (4.99) | .1517 (6.31) | .1868 (3.06) | .443 (1.13) | .2809 (11.69) | .3457 (5.67) | .603 (1.53) | | | | | | | |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



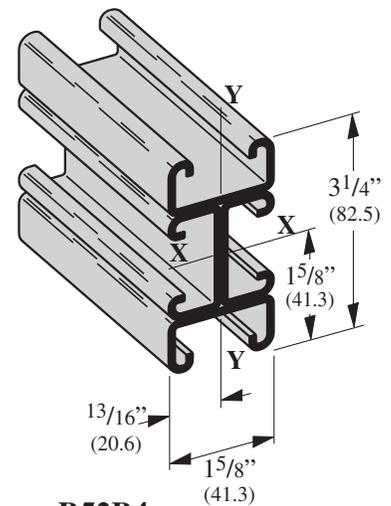
B52A

Wt. 2.54 Lbs./Ft. (3.78 kg/m)



B52B3

Wt. 3.81 Lbs./Ft. (5.67 kg/m)



B52B4

Wt. 5.08 Lbs./Ft. (7.56 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B52 Beam & Column Loading Data

BEAM LOADING

| Beam Span | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|-----------|--------|---------------------------|-----------------------------|------------------|----------------|--------------------|-----------------------------|------------------|---------------|------------------|
| In. | mm | | Lbs. | N | In. | mm | 1/240 Span | | 1/360 Span | |
| | | | | | | Lbs. | N | Lbs. | N | |
| 12 | (305) | B52 B52A | 1079 1270* | (4799) (5649) | .026 .006 | (.66) (.15) | 1079 1270* | (4799) (5649) | 1079 1270* | (4799) (5649) |
| 24 | (609) | B52 B52A | 539 1270* | (2397) (5649) | .106 .052 | (2.69) (1.32) | 506 1270* | (2251) (5649) | 337 1270* | (1499) (5649) |
| 36 | (914) | B52 B52A | 360 1013 | (1601) (4506) | .240 .141 | (6.09) (3.58) | 225 1013 | (1001) (4506) | 150 719 | (667) (3198) |
| 48 | (1219) | B52 B52A | 270 759 | (1201) (3376) | .427 .250 | (10.84) (6.35) | 126 607 | (560) (2700) | 84 404 | (373) (1797) |
| 60 | (1524) | B52 B52A | 216 608 | (961) (2704) | .667 .391 | (16.94) (9.93) | 81 388 | (360) (1726) | 54 259 | (240) (1152) |
| 72 | (1829) | B52 B52A | 180 506 | (800) (2251) | .960 .563 | (24.38) (14.30) | 56 270 | (249) (1201) | 37 180 | (164) (800) |
| 84 | (2133) | B52 B52A | 154 434 | (685) (1930) | 1.307 .766 | (33.20) (19.45) | 41 198 | (182) (881) | 28 132 | (124) (587) |
| 96 | (2438) | B52 B52A | 135 380 | (600) (1690) | 1.707 1.001 | (43.36) (25.42) | 32 152 | (142) (676) | 21 101 | (93) (449) |
| 108 | (2743) | B52 B52A | 120 338 | (534) (1503) | 2.160 1.267 | (54.86) (32.18) | 25 120 | (111) (534) | 17 80 | (75) (356) |
| 120 | (3048) | B52 B52A | 108 304 | (480) (1352) | 2.667 1.564 | (67.74) (39.72) | 20 97 | (89) (431) | 13 65 | (58) (289) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|-----------------|--------|---------------------------|-----------------------------|--------------------|--------------------|--------------------|-------------------------------------|--------------------|----------------|--------------------|----------------|--------------------|
| In. | mm | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | |
| 12 | (305) | B52 B52A | 8407 19160 | (37396) (85228) | 3162 5290 | (14065) (23531) | 8543 19425 | (38001) (86407) | 8205 18777 | (36497) (83524) | 7989 18363 | (35537) (81682) |
| 24 | (609) | B52 B52A | 7519 17444 | (33446) (77595) | 2755 4955 | (12255) (22041) | 7879 18144 | (35047) (80708) | 6521 16412 | (29007) (73004) | 5397 15275 | (24007) (67946) |
| 36 | (914) | B52 B52A | 5397 15275 | (24007) (67946) | 2152 4496 | (9572) (19999) | 6653 16547 | (29594) (73605) | 3616 13376 | (16085) (59499) | 2511 11243 | (11169) (50011) |
| 48 | (1219) | B52 B52A | 3178 12692 | (14136) (56457) | 1560 3963 | (6939) (17628) | 4785 14667 | (21285) (65242) | 2034 9683 | (9047) (43072) | 1412** 6780 | (6281) (30159) |
| 60 | (1524) | B52 B52A | 2034 9683 | (9047) (43072) | 1159 3383 | (5155) (15048) | 3081 12516 | (13705) (55674) | 1302** 6248 | (5791) (27792) | 904** 4339 | (4021) (19301) |
| 72 | (1829) | B52 B52A | 1412** 6780 | (6281) (30159) | 891 2799 | (3963) (12450) | 2139 10084 | (9515) (44856) | 904** 4339 | (4021) (19301) | - 3013 | - (13402) |
| 84 | (2133) | B52 B52A | 1038** 4981 | (4617) (22156) | 704 2337 | (3131) (10395) | 1572 7545 | (6992) (33562) | 664** 3188 | (2953) (14181) | - 2214** | - (9848) |
| 96 | (2438) | B52 B52A | 794** 3814 | (3532) (16965) | 570 1973 | (2535) (8776) | 1203** 5777 | (5351) (25697) | - 2441** | - (10858) | - 1695** | - (7540) |
| 108 | (2743) | B52 B52A | - 3013 | - (13402) | 470 1684 | (2090) (7491) | 951** 4564 | (4230) (20301) | - 1928** | - (8576) | - 1339** | - (5956) |
| 120 | (3048) | B52 B52A | - 2441** | - (10858) | 394 1452 | (1752) (6459) | 770** 3697 | (3425) (16445) | - 1562** | - (6948) | - - | - - |

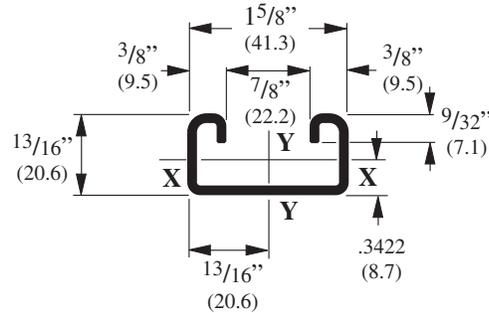
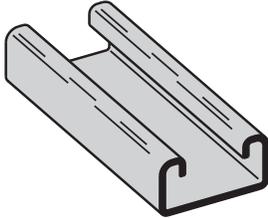
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B54 Channel & Combinations

B54

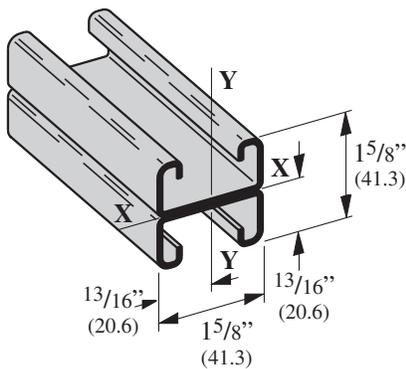
- Thickness: 14 Gauge (1.9 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: .97 Lbs./Ft. (1.44 kg/m)



SECTION PROPERTIES

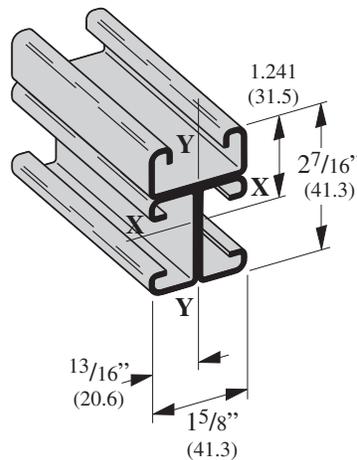
| Channel | Weight lbs./ft. kg/m | | Areas of Section sq. in. cm ² | | Moment of Inertia (I) in. ⁴ cm ⁴ | | X - X Axis | | Y - Y Axis | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|-------------------------|--------|---|--------|---|--------|------------------|-----------------|------------------|-----------------|-----------------------|-----------------|---------------------|--------|------------------------|-----------------|
| | | | | | | | in. ³ | cm ³ | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ³ | cm ³ | in. | cm |
| B54 | 1.016 | (1.51) | .299 | (1.93) | .0263 | (1.09) | .0560 | (.92) | .297 | (.75) | .1106 | (4.60) | .1361 | (2.23) | .608 | (1.55) |
| B54A | 2.032 | (3.02) | .598 | (3.86) | .1226 | (5.10) | .1510 | (2.47) | .453 | (1.15) | .2212 | (9.12) | .2722 | (4.46) | .608 | (1.55) |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



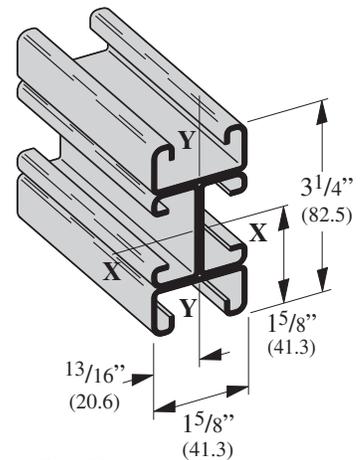
B54A

Wt. 1.94 Lbs./Ft. (2.89 kg/m)



B54B3

Wt. 2.91 Lbs./Ft. (4.33 kg/m)



B54B4

Wt. 3.88 Lbs./Ft. (5.77 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B54 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|--------|--------|---------|-----------------------------|--------|------------|--------|
| | | | Lbs. N | | In. mm | | 1/240 Span | | 1/360 Span | |
| | | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B54 | 870 | (3870) | .027 | (.68) | 870 | (3870) | 870 | (3870) |
| | | B54A | 870* | (3870) | .005 | (.13) | 870* | (3870) | 870* | (3870) |
| 24 | (609) | B54 | 465 | (2068) | .108 | (2.74) | 430 | (1913) | 287 | (1276) |
| | | B54A | 870* | (3870) | .043 | (1.09) | 870* | (3870) | 870* | (3870) |
| 36 | (914) | B54 | 310 | (1379) | .243 | (6.17) | 191 | (849) | 127 | (565) |
| | | B54A | 832 | (3701) | .141 | (3.58) | 832 | (3701) | 591 | (2629) |
| 48 | (1219) | B54 | 233 | (1036) | .432 | (10.97) | 108 | (480) | 72 | (320) |
| | | B54A | 624 | (2775) | .250 | (6.35) | 499 | (2219) | 332 | (1477) |
| 60 | (1524) | B54 | 186 | (827) | .676 | (17.17) | 69 | (307) | 46 | (204) |
| | | B54A | 499 | (2219) | .391 | (9.93) | 319 | (1419) | 213 | (947) |
| 72 | (1829) | B54 | 155 | (689) | .973 | (24.71) | 48 | (213) | 32 | (142) |
| | | B54A | 416 | (1850) | .563 | (14.30) | 222 | (987) | 148 | (658) |
| 84 | (2133) | B54 | 133 | (591) | 1.324 | (33.63) | 35 | (155) | 23 | (102) |
| | | B54A | 357 | (1588) | .766 | (19.45) | 163 | (725) | 109 | (485) |
| 96 | (2438) | B54 | 116 | (516) | 1.730 | (43.94) | 27 | (120) | 18 | (80) |
| | | B54A | 312 | (1388) | 1.001 | (25.42) | 125 | (556) | 83 | (369) |
| 108 | (2743) | B54 | 103 | (458) | 2.189 | (55.60) | 21 | (93) | 14 | (62) |
| | | B54A | 277 | (1232) | 1.267 | (32.18) | 98 | (436) | 66 | (293) |
| 120 | (3048) | B54 | 93 | (413) | 2.703 | (68.65) | 17 | (75) | 11 | (49) |
| | | B54A | 250 | (1112) | 1.564 | (39.72) | 80 | (356) | 53 | (236) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded@ C.G. | | Loaded@ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B54 | 6186 | (27516) | 2586 | (11503) | 6284 | (27952) | 6032 | (26831) | 5857 | (26053) |
| | | B54A | 12763 | (56772) | 4060 | (18060) | 12835 | (57093) | 12645 | (56248) | 12501 | (55607) |
| 24 | (609) | B54 | 5464 | (24305) | 2254 | (10026) | 5763 | (25635) | 4968 | (22099) | 4300 | (19127) |
| | | B54A | 12135 | (53979) | 3857 | (17157) | 12420 | (55247) | 11663 | (51879) | 11087 | (49317) |
| 36 | (914) | B54 | 4300 | (19127) | 1816 | (8078) | 5043 | (22432) | 3076 | (13683) | 2136 | (9501) |
| | | B54A | 11087 | (49317) | 3549 | (15787) | 11728 | (52169) | 10026 | (44598) | 8729 | (38828) |
| 48 | (1219) | B54 | 2703 | (12023) | 1341 | (5965) | 3920 | (17437) | 1730 | (7695) | 1201 | (5342) |
| | | B54A | 9620 | (42792) | 3169 | (14096) | 10759 | (47858) | 7734 | (34402) | 5571 | (24781) |
| 60 | (1524) | B54 | 1730 | (7695) | 995 | (4426) | 2621 | (11659) | 1107** | (4924) | 769** | (3420) |
| | | B54A | 7734 | (34402) | 2745 | (12210) | 9514 | (42320) | 5134 | (22837) | 3566 | (15862) |
| 72 | (1829) | B54 | 1201 | (5342) | 763 | (3394) | 1820 | (8096) | 769** | (3420) | 534** | (2375) |
| | | B54A | 5571 | (24781) | 2291 | (10191) | 7992 | (35550) | 3566 | (15862) | 2476 | (11014) |
| 84 | (2133) | B54 | 883** | (3928) | 603 | (2682) | 1337 | (5947) | 565** | (2513) | - | - |
| | | B54A | 4093 | (18206) | 1913 | (8509) | 6200 | (27579) | 2620 | (11654) | 1819** | (8091) |
| 96 | (2438) | B54 | 676** | (3007) | 487 | (2166) | 1024** | (4555) | - | - | - | - |
| | | B54A | 3134 | (13941) | 1616 | (7188) | 4747 | (21116) | 2006** | (8923) | 1393** | (6196) |
| 108 | (2743) | B54 | 534** | (2375) | 401 | (1784) | 809** | (3598) | - | - | - | - |
| | | B54A | 2476 | (11014) | 1380 | (6138) | 3751 | (16685) | 1585** | (7050) | 1100** | (4893) |
| 120 | (3048) | B54 | - | - | 336 | (1494) | 655** | (2913) | - | - | - | - |
| | | B54A | 2006** | (8923) | 1190 | (5293) | 3038 | (13513) | 1284** | (5711) | - | - |

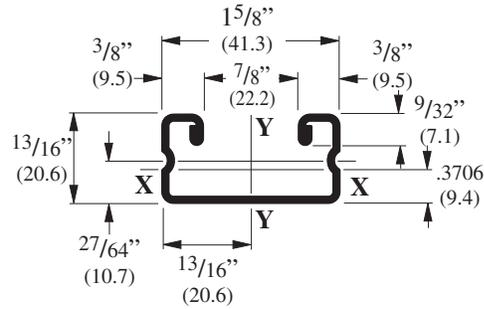
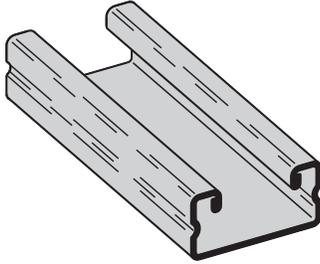
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B56 Channel & Combinations

B56

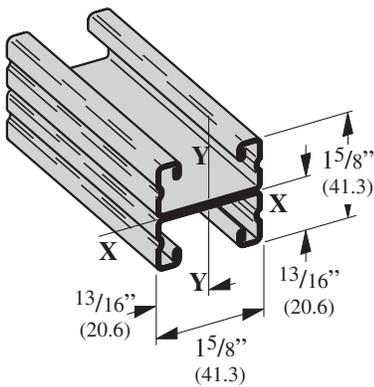
- Thickness: 16 Gauge (1.5 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized
- Weight: .85 Lbs./Ft. (1.26 kg/m)



SECTION PROPERTIES

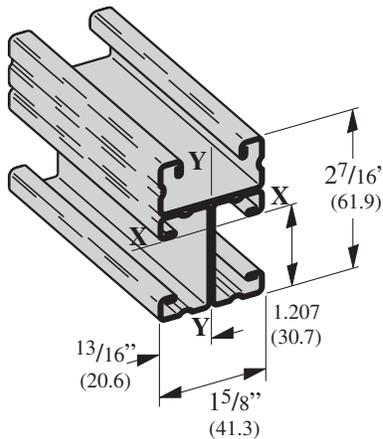
| Channel | Weight lbs./ft. kg/m | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
|-------------|-------------------------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|----|-----------------------|-----------------|---------------------|-----------------|------------------------|----|
| | | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B56 | .894 (1.33) | .263 (1.70) | | .0241 (1.00) | | .0546 (.89) | | .303 (.77) | | .0966 (4.02) | | .1189 (1.95) | | .606 (1.54) | |
| B56A | 1.789 (2.66) | .526 (3.39) | | .1205 (5.02) | | .1484 (2.43) | | .479 (1.22) | | .1931 (8.04) | | .2377 (3.89) | | .606 (1.54) | |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



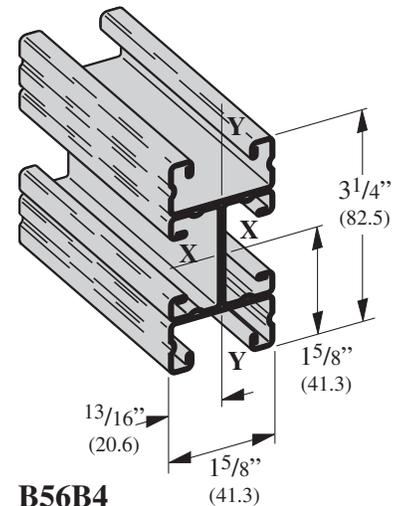
B56A

Wt. 1.70 Lbs./Ft. (2.53 kg/m)



B56B3

Wt. 2.55 Lbs./Ft. (3.79 kg/m)



B56B4

Wt. 3.40 Lbs./Ft. (5.06 kg/m)

Reference page 14 for general fitting and standard finish specifications.

B56 Beam & Column Loading Data

BEAM LOADING

| Beam Span In. mm | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|--------|------------------|-----------------------------|--------|-------|---------|-----------------------------|--------|------------|--------|
| | | | Lbs. | | N | | 1/240 Span | | 1/360 Span | |
| In. | mm | | Lbs. | N | In. | mm | Lbs. | N | Lbs. | N |
| 12 | (305) | B56 | 610 | (2713) | .027 | (.68) | 610 | (2713) | 610 | (2713) |
| | | B56A | 610* | (2713) | .004 | (.10) | 610* | (2713) | 610* | (2713) |
| 24 | (609) | B56 | 405 | (1801) | .109 | (2.77) | 372 | (1655) | 248 | (1103) |
| | | B56A | 610* | (2713) | .035 | (.89) | 610* | (2713) | 610* | (2713) |
| 36 | (914) | B56 | 270 | (1201) | .245 | (6.22) | 165 | (734) | 110 | (489) |
| | | B56A | 610* | (2713) | .121 | (3.07) | 610* | (2713) | 502 | (2233) |
| 48 | (1219) | B56 | 202 | (898) | .435 | (11.05) | 93 | (413) | 62 | (276) |
| | | B56A | 530 | (2357) | .250 | (6.35) | 423 | (1881) | 282 | (1699) |
| 60 | (1524) | B56 | 162 | (720) | .680 | (17.27) | 59 | (262) | 40 | (178) |
| | | B56A | 424 | (1886) | .391 | (9.93) | 271 | (1205) | 181 | (805) |
| 72 | (1829) | B56 | 135 | (600) | .980 | (24.89) | 41 | (182) | 28 | (124) |
| | | B56A | 353 | (1570) | .563 | (14.30) | 188 | (836) | 125 | (556) |
| 84 | (2133) | B56 | 116 | (516) | 1.334 | (33.88) | 30 | (133) | 20 | (89) |
| | | B56A | 303 | (1348) | .766 | (19.45) | 138 | (614) | 92 | (409) |
| 96 | (2438) | B56 | 101 | (449) | 1.742 | (44.24) | 23 | (102) | 15 | (67) |
| | | B56A | 265 | (1179) | 1.001 | (25.42) | 106 | (471) | 71 | (316) |
| 108 | (2743) | B56 | 90 | (400) | 2.205 | (56.01) | 18 | (80) | 12 | (53) |
| | | B56A | 236 | (1050) | 1.267 | (32.18) | 84 | (373) | 56 | (249) |
| 120 | (3048) | B56 | 81 | (360) | 2.722 | (69.14) | 15 | (67) | 10 | (44) |
| | | B56A | 212 | (943) | 1.564 | (39.72) | 68 | (302) | 45 | (200) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

| Unbraced Height In. mm | | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|--------|------------------|-----------------------------|---------|-----------------------|---------|-------------------------------------|---------|---------|---------|---------|---------|
| | | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| In. | mm | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | (305) | B56 | 4968 | (22099) | 2182 | (9706) | 5044 | (22437) | 4845 | (21551) | 4702 | (20915) |
| | | B56A | 10237 | (45536) | 3365 | (14968) | 10291 | (45776) | 10148 | (45140) | 10039 | (44655) |
| 24 | (609) | B56 | 4367 | (19425) | 1903 | (8465) | 4624 | (20568) | 3985 | (17726) | 3572 | (15889) |
| | | B56A | 9762 | (43423) | 3202 | (14243) | 9977 | (44380) | 9405 | (41835) | 8969 | (39896) |
| 36 | (914) | B56 | 3572 | (15889) | 1557 | (6926) | 4034 | (17944) | 2658 | (11823) | 1845 | (8207) |
| | | B56A | 8969 | (39896) | 2955 | (13144) | 9454 | (42053) | 8167 | (36328) | 7186 | (31965) |
| 48 | (1219) | B56 | 2335 | (10386) | 1164 | (5178) | 3290 | (14634) | 1495 | (6650) | 1038 | (4617) |
| | | B56A | 7860 | (34963) | 2649 | (11783) | 8722 | (38797) | 6434 | (28620) | 4731 | (21044) |
| 60 | (1524) | B56 | 1495 | (6650) | 862 | (3834) | 2264 | (10071) | 957 | (4257) | 664** | (2953) |
| | | B56A | 6434 | (28620) | 2307 | (10262) | 7780 | (34607) | 4360 | (19394) | 3028 | (13469) |
| 72 | (1829) | B56 | 1038 | (4617) | 661 | (2940) | 1572 | (6992) | 664** | (2953) | 461** | (2050) |
| | | B56A | 4731 | (21044) | 1937 | (8616) | 6629 | (29487) | 3028 | (13469) | 2103 | (9354) |
| 84 | (2133) | B56 | 763** | (3394) | 522 | (2322) | 1155 | (5137) | 488** | (2171) | - | - |
| | | B56A | 3476 | (15462) | 1619 | (7201) | 5269 | (23437) | 2224 | (9893) | 1545** | (6872) |
| 96 | (2438) | B56 | 584** | (2598) | 422 | (1877) | 884** | (3932) | - | - | - | - |
| | | B56A | 2661 | (11837) | 1368 | (6085) | 4031 | (17931) | 1703** | (7575) | 1183** | (5262) |
| 108 | (2743) | B56 | 461** | (2050) | 348 | (1548) | 699** | (3109) | - | - | - | - |
| | | B56A | 2103 | (9354) | 1169 | (5200) | 3185 | (14167) | 1346** | (5987) | 934** | (4154) |
| 120 | (3048) | B56 | - | - | 291 | (1294) | 566** | (2417) | - | - | - | - |
| | | B56A | 1703** | (7575) | 1008 | (4484) | 2580 | (11476) | 1090** | (4848) | - | - |

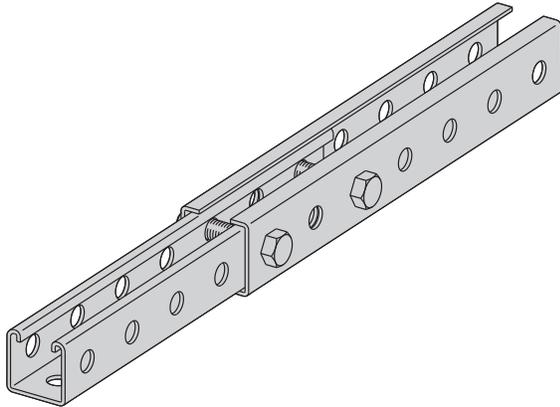
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

Telescoping Channel

BTS22TH

- Can be secured at any point of system
- Order BTS22TH & B22TH separately
- Thickness: 12 Gauge (1.5 mm)
- Standard lengths: 10' (3.05 m)
- Standard finishes: Dura-Green, Yellow Zinc Dichromate, Hot-Dipped Galvanized



Slip Load Data

Resistance to slip*
700 lbs.

1/4" thick 2-hole fitting with (2) 1/2" bolts & channel nuts.
Typical of many standard fittings.

Resistance to slip*
3600 lbs.

1/2" bolt & nut

*With a safety factor of 3

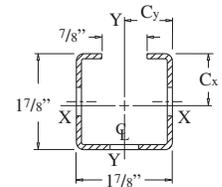
Channel & Combinations

BTS22TH TELESCOPING STRUT

Fits over all 1 5/8" x 1 5/8" channels 9/16" holes on 1 7/8" centers 12 gauge material thickness

| Section Properties | | | X-X Axis | | | | Y-Y Axis | | | |
|--------------------|-----------------|----------------------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|--------------------------------|-------------------|
| Channel | Weight lbs./ft. | Area In ² | C _x In | I _x In ⁴ | S _x In ³ | r _x In | C _y In | I _y In ⁴ | S _y In ³ | r _y In |
| BTS22TH | 1.934 | 0.4578 | 1.0009 | 0.2525 | 0.2523 | 0.7426 | 0.9375 | 0.2757 | 0.2941 | 0.7761 |

Section properties are based on nominal metal thickness, and overall dimensions.

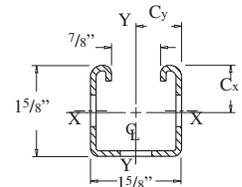


B22TH THREE HOLE STRUT

9/16" holes on 1 7/8" centers 12 gauge material thickness

| Section Properties | | | X-X Axis | | | | Y-Y Axis | | | |
|--------------------|-----------------|----------------------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|--------------------------------|-------------------|
| Channel | Weight lbs./ft. | Area In ² | C _x In | I _x In ⁴ | S _x In ³ | r _x In | C _y In | I _y In ⁴ | S _y In ³ | r _y In |
| B22TH | 1.760 | 0.3863 | 0.8245 | 0.1596 | 0.1936 | 0.6400 | 0.8125 | 0.1719 | 0.2116 | 0.6642 |

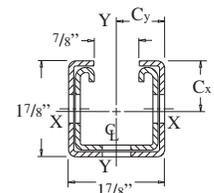
Section properties are based on nominal metal thickness, and overall dimensions.



COMBINATION OF BTS22TH & B22TH

| Section Properties | | | X-X Axis | | | | Y-Y Axis | | | |
|----------------------|-----------------|----------------------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|--------------------------------|-------------------|
| Channel Combination | Weight lbs./ft. | Area In ² | C _x In | I _x In ⁴ | S _x In ³ | r _x In | C _y In | I _y In ⁴ | S _y In ³ | r _y In |
| BTS22TH/B22TH | 3.597 | 0.8474 | 0.9773 | 0.4126 | 0.4222 | 0.6978 | 0.9375 | 0.4476 | 0.4774 | 0.7268 |

Section properties are based on nominal metal thickness, and overall dimensions.

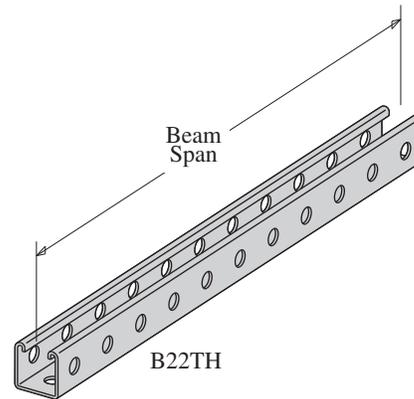


Reference page 14 for general fitting and standard finish specifications.

BEAM LOADING DATA

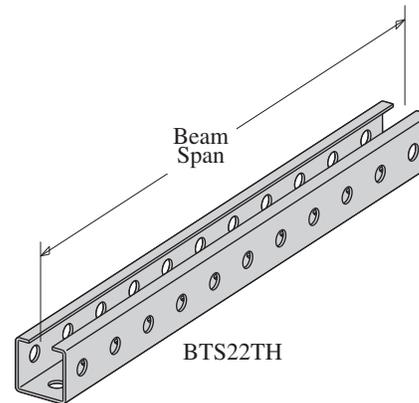
B22TH

| Beam Span in | Beam Load Data x-x Axis | | |
|-----------------|-------------------------|----------------------------|--|
| | Allowable Load lbs* | Resulting Deflection in | Allowable Load @ Deflection= 1/240 Span |
| 12 | 2225 | 0.015 | 3225 |
| 24 | 1610 | 0.061 | 1610 |
| 36 | 1071 | 0.136 | 1071 |
| 48 | 800 | 0.243 | 658 |
| 60 | 637 | 0.379 | 417 |
| 72 | 528 | 0.546 | 286 |
| 84 | 449 | 0.743 | 206 |
| 96 | 390 | 0.970 | 153 |
| 108 | 344 | 1.228 | 116 |
| 120 | 306 | 1.516 | 90 |



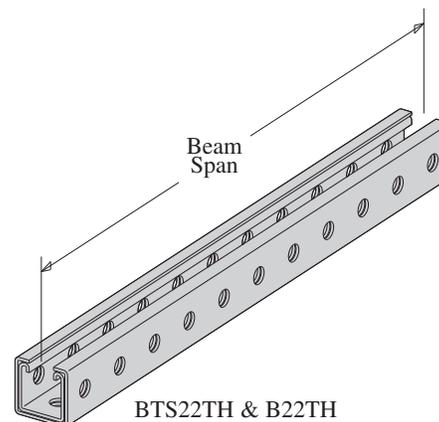
BTS22TH

| Beam Span in | Beam Load Data x-x Axis | | |
|-----------------|-------------------------|----------------------------|--|
| | Allowable Load lbs* | Resulting Deflection in | Allowable Load @ Deflection= 1/240 Span |
| 12 | 4203 | 0.012 | 4203 |
| 24 | 2099 | 0.050 | 2099 |
| 36 | 1396 | 0.112 | 1396 |
| 48 | 1044 | 0.200 | 1044 |
| 60 | 831 | 0.312 | 664 |
| 72 | 689 | 0.450 | 456 |
| 84 | 587 | 0.612 | 330 |
| 96 | 510 | 0.799 | 248 |
| 108 | 450 | 1.012 | 190 |
| 120 | 401 | 1.249 | 149 |



BTS22TH & B22TH TELESCOPING MEMBERS OF EQUAL LENGTH

| Beam Span in | Beam Load Data x-x Axis | | |
|-----------------|-------------------------|----------------------------|--|
| | Allowable Load lbs* | Resulting Deflection in | Allowable Load @ Deflection= 1/240 Span |
| 12 | 7033 | 0.013 | 7033 |
| 24 | 3511 | 0.051 | 3511 |
| 36 | 2335 | 0.115 | 2335 |
| 48 | 1745 | 0.205 | 1705 |
| 60 | 1389 | 0.320 | 1082 |
| 72 | 1151 | 0.460 | 742 |
| 84 | 980 | 0.627 | 536 |
| 96 | 851 | 0.819 | 401 |
| 108 | 749 | 1.036 | 307 |
| 120 | 668 | 1.279 | 239 |



*Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) with adequate lateral bracing (see page 11 for further explanation). To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8.

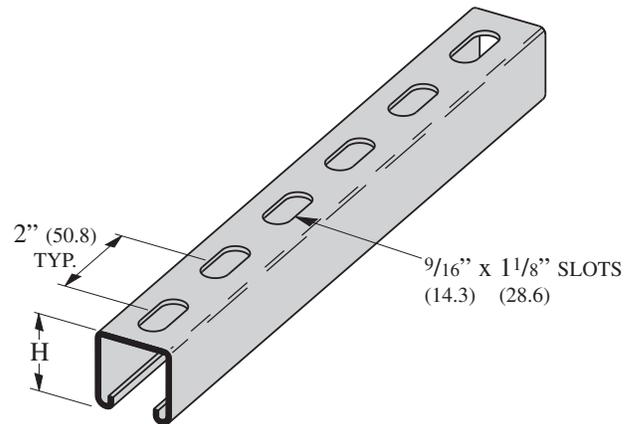
Reference page 14 for general fitting and standard finish specifications.

Channel Hole Patterns

B11SH THRU B56SH SH TYPE CHANNEL

•For beam loads use 90% of Channel Loading Chart

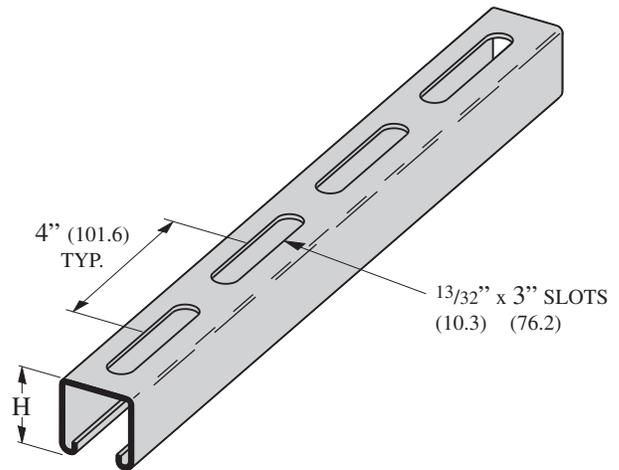
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B11SH | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 2.97 | (4.42) |
| B12SH | 12 Ga. | (2.6) | 27/16" | (61.9) | 2.39 | (3.55) |
| B22SH | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.82 | (2.71) |
| B24SH | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.34 | (1.99) |
| B26SH | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.07 | (1.59) |
| B32SH | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.62 | (2.41) |
| B42SH | 12 Ga. | (2.6) | 1" | (25.4) | 1.36 | (2.02) |
| B52SH | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.19 | (1.77) |
| B54SH | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .91 | (1.35) |
| B56SH | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .80 | (1.19) |



B11S THRU B56S S TYPE CHANNEL

•For beam loads use 90% of Channel Loading Chart

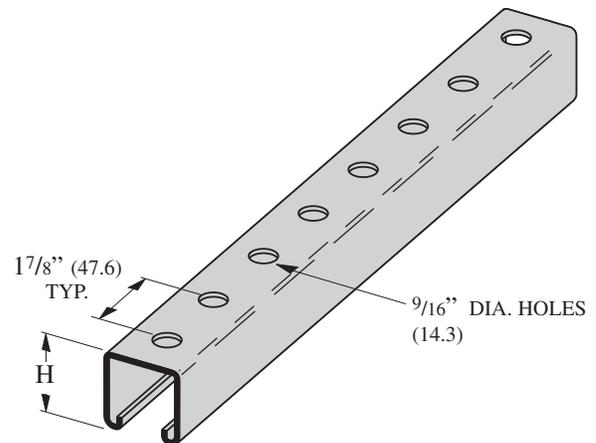
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B11S | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 2.94 | (4.37) |
| B12S | 12 Ga. | (2.6) | 27/16" | (61.9) | 2.36 | (3.51) |
| B22S | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.79 | (2.66) |
| B24S | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.32 | (1.96) |
| B26S | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.06 | (1.58) |
| B32S | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.59 | (2.36) |
| B42S | 12 Ga. | (2.6) | 1" | (25.4) | 1.33 | (1.98) |
| B52S | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.16 | (1.72) |
| B54S | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .89 | (1.32) |
| B56S | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .79 | (1.17) |



B11H17/8 THRU B56H17/8 H17/8 TYPE CHANNEL

•For beam loads use 90% of Channel Loading Chart

| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B11H17/8 | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 3.00 | (4.46) |
| B12H17/8 | 12 Ga. | (2.6) | 27/16" | (61.9) | 2.42 | (3.60) |
| B22H17/8 | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.85 | (2.75) |
| B24H17/8 | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.36 | (2.02) |
| B26H17/8 | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.09 | (1.62) |
| B32H17/8 | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.65 | (2.45) |
| B42H17/8 | 12 Ga. | (2.6) | 1" | (25.4) | 1.39 | (2.07) |
| B52H17/8 | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.22 | (1.81) |
| B54H17/8 | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .93 | (1.38) |
| B56H17/8 | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .82 | (1.22) |

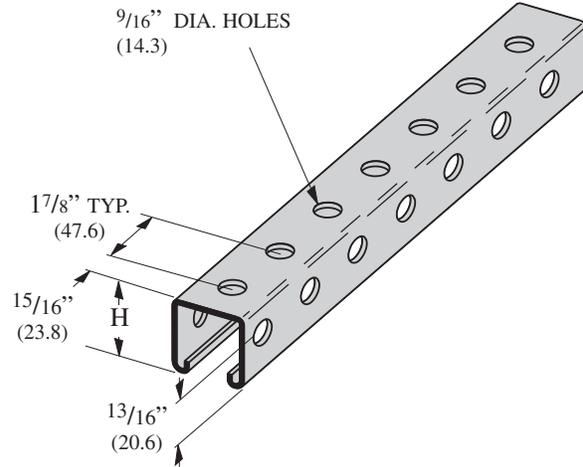


Reference page 14 for general fitting and standard finish specifications.

B22TH (TH TYPE CHANNEL)

•For beam loads use 90% of Channel Loading Chart

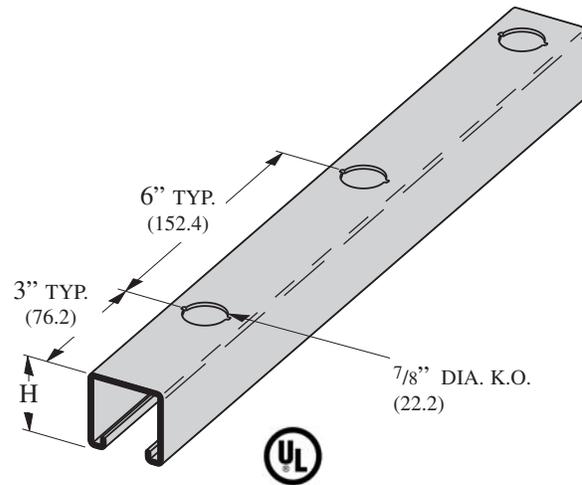
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|---------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B22TH | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.76 | (2.62) |



B11KO6 THRU B56KO6 (KO6 TYPE KNOCKOUT CHANNEL)

•For beam loads use 90% of Channel Loading Chart

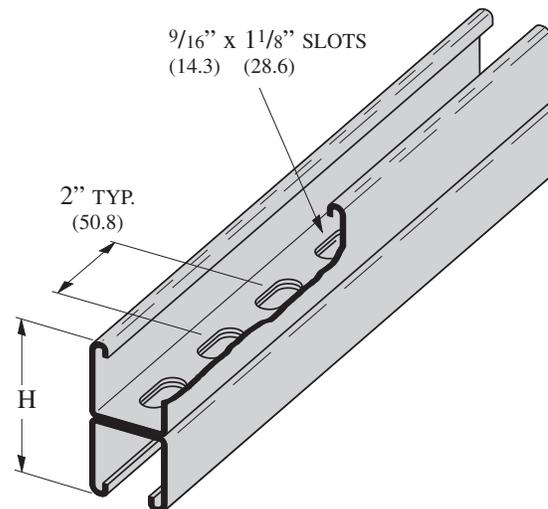
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B11KO6 | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 3.05 | (4.54) |
| B12KO6 | 12 Ga. | (2.6) | 2 ⁷ / ₁₆ " | (61.9) | 2.47 | (3.67) |
| B22KO6 | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.90 | (2.83) |
| B24KO6 | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.40 | (2.08) |
| B26KO6 | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.12 | (1.66) |
| B32KO6 | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.70 | (2.53) |
| B42KO6 | 12 Ga. | (2.6) | 1" | (25.4) | 1.44 | (2.14) |
| B52KO6 | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.27 | (1.89) |
| B54KO6 | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .97 | (1.44) |
| B56KO6 | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .85 | (1.26) |



B22SHA (BACK TO BACK SH TYPE CHANNEL)

•For beam loads use 90% of Channel Loading Chart

| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|---------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B22SHA | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 3.64 | (5.42) |



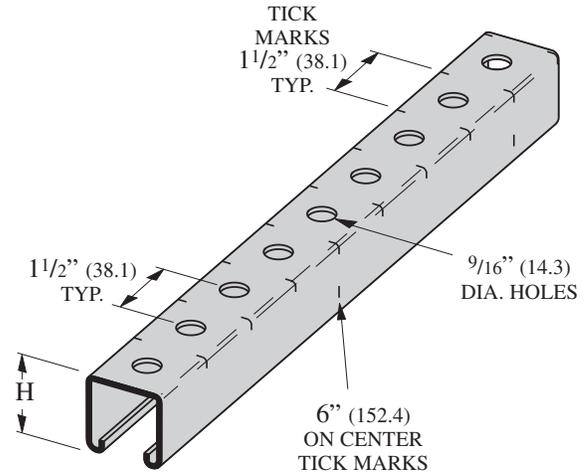
Reference page 14 for general fitting and standard finish specifications.

Channel Hole Patterns

BK22H112 THRU BK54H112 H11/2 TYPE CHANNEL

- For beam loads use 90% of Channel Loading Chart
- Standard Finish: Yellow Zinc Chromate (YZN) Other finishes available.

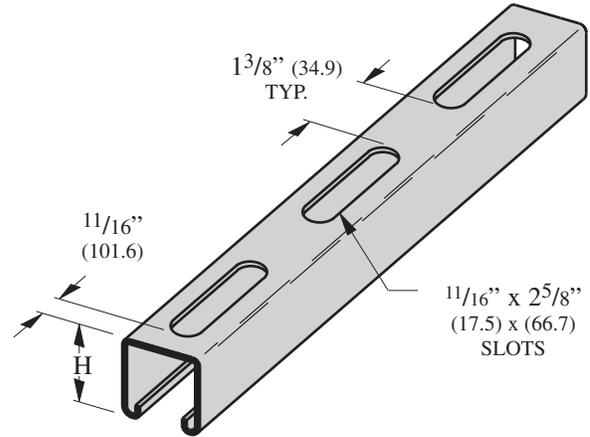
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| BK22H112 | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.85 | (2.75) |
| BK24H112 | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.36 | (2.02) |
| BK52H112 | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.22 | (1.81) |
| BK54H112 | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .93 | (1.38) |



B11S58 THRU B56S58 S58 TYPE CHANNEL

- For beam loads use 90% of Channel Loading Chart

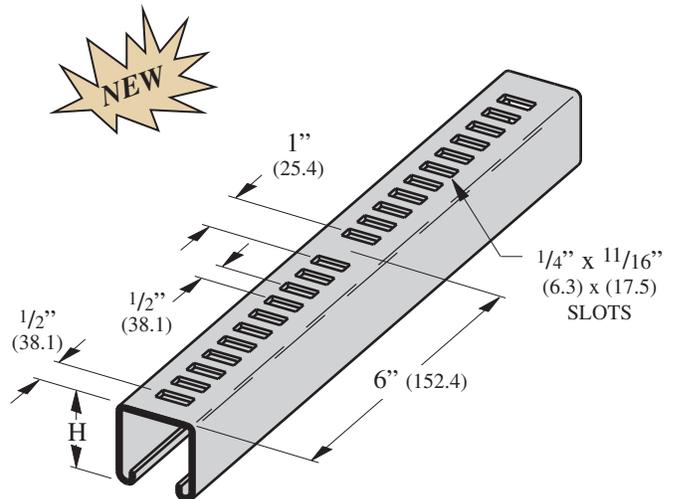
| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B11S58 | 12 Ga. | (2.6) | 3 ¹ / ₄ " | (82.5) | 2.94 | (4.37) |
| B12S58 | 12 Ga. | (2.6) | 2 ⁷ / ₁₆ " | (61.9) | 2.36 | (3.51) |
| B22S58 | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.79 | (2.66) |
| B24S58 | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.32 | (1.96) |
| B26S58 | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.06 | (1.58) |
| B32S58 | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.59 | (2.36) |
| B42S58 | 12 Ga. | (2.6) | 1" | (25.4) | 1.33 | (1.98) |
| B52S58 | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.16 | (1.72) |
| B54S58 | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .89 | (1.32) |
| B56S58 | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .79 | (1.17) |



B22M THRU B54M M (MARINE RUNG) TYPE CHANNEL

- For beam loads use 90% of Channel Loading Chart

| Part No. | Thickness | | Height H | | Weight | |
|----------|-----------|-------|----------------------------------|--------|----------|--------|
| | In. | mm | In. | mm | Lbs./Ft. | kg/m |
| B22M | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.79 | (2.66) |
| B24M | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.32 | (1.96) |
| B32M | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.59 | (2.36) |
| B42M | 12 Ga. | (2.6) | 1" | (25.4) | 1.33 | (1.98) |
| B44M | 14 Ga. | (1.9) | 1" | (25.4) | 0.98 | (1.46) |
| B52M | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.16 | (1.72) |
| B54M | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .89 | (1.32) |

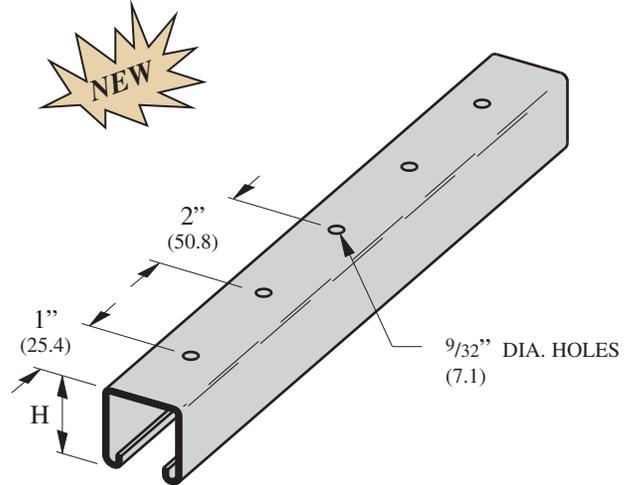


Reference page 14 for general fitting and standard finish specifications.

B22H25 THRU B56H25 H25 TYPE CHANNEL

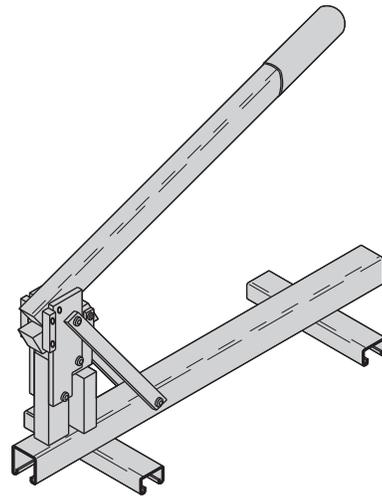
•For beam loads use 90% of Channel Loading Chart

| Part No. | Thickness | | Height H | | Weight | |
|---------------|-----------|-------|----------------------------------|--------|----------|--------|
| | | | In. | mm | Lbs./Ft. | kg/m |
| B22H25 | 12 Ga. | (2.6) | 1 ⁵ / ₈ " | (41.3) | 1.85 | (2.75) |
| B24H25 | 14 Ga. | (1.9) | 1 ⁵ / ₈ " | (41.3) | 1.36 | (2.02) |
| B26H25 | 16 Ga. | (1.5) | 1 ⁵ / ₈ " | (41.3) | 1.09 | (1.62) |
| B32H25 | 12 Ga. | (2.6) | 1 ³ / ₈ " | (34.9) | 1.65 | (2.45) |
| B42H25 | 12 Ga. | (2.6) | 1" | (25.4) | 1.39 | (2.07) |
| B52H25 | 12 Ga. | (2.6) | 1 ³ / ₁₆ " | (20.6) | 1.22 | (1.81) |
| B54H25 | 14 Ga. | (1.9) | 1 ³ / ₁₆ " | (20.6) | .93 | (1.38) |
| B56H25 | 16 Ga. | (1.5) | 1 ³ / ₁₆ " | (20.6) | .82 | (1.22) |



B96HP CHANNEL PUNCH

- Field-punch holes exactly where you want them in any type channel...Quick and easy!
- Any size holes...anywhere you need them...with on-the-job convenience!
- Channel punch will work on any standard single channels that have solid backs.
- Do not use this punch on combination, stainless steel, or KO6 channels.



Die Blocks Only

| Part No. | Hole Size | | Bolt Size | | Weight Each | |
|---------------------|--------------------------------|--------|-------------------------------|--------|-------------|------|
| | | | | | Lbs. | kg |
| B96HP-0.562D | ⁹ / ₁₆ " | (14.3) | ¹ / ₂ " | (12.7) | .50 | (.2) |
| B96HP-0.438D | ⁷ / ₁₆ " | (11.1) | ³ / ₈ " | (9.5) | .50 | (.2) |
| B96HP-0.281D | ⁹ / ₃₂ " | (7.1) | ¹ / ₄ " | (6.3) | .50 | (.2) |

Punch & Die Block Assembly

| Part No. | Hole Size | | Bolt Size | | Weight Each | |
|--------------------|--------------------------------|--------|-------------------------------|--------|-------------|--------|
| | | | | | Lbs. | kg |
| B96HP-0.562 | ⁹ / ₁₆ " | (14.3) | ¹ / ₂ " | (12.7) | 24.5 | (11.1) |
| B96HP-0.438 | ⁷ / ₁₆ " | (11.1) | ³ / ₈ " | (9.5) | 24.5 | (11.1) |
| B96HP-0.281 | ⁹ / ₃₂ " | (7.1) | ¹ / ₄ " | (6.3) | 24.5 | (11.1) |



Reference page 14 for general fitting and standard finish specifications.

Channel Nuts & Hardware

Channel Nuts

B-Line's channel nut is one of the main components of our metal framing system. It is designed to provide essential gripping power and ease during installation. Channel nuts are press formed, machined and hardened from steel which meets the requirements of ASTM A108 or ASTM A36 for our larger sizes.

Bolts, Screws, and Nuts

All bolts, screws and nuts meet the physical and chemical requirements of ASTM A307, SAE J429 or ASTM A563, and have unified inch screw threads (coarse, UNC). ISO metric threads are also available on special request.

Recommended Torque

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

| Bolt Size | M6x1 | M8 x1.25 | M10 x 1.5 | M12x1.75 |
|-----------|------|----------|-----------|----------|
| NM | 12 | 17 | 36 | 62 |
| Foot/Lbs. | 9 | 13 | 27 | 46 |

Materials & Finishes*

| Finish Code | Finish | Specification |
|-------------|--------------------------|---|
| PLN | Plain | ASTM A108/A307 Gr. A, ASTM A563, SAE J429 |
| ZN | Electro-Plated Zinc | ASTM B633 SC1 Type III |
| CZ | Chromium Zinc | ASTM F1136 Gr. 3 |
| HDG | Hot-Dipped Galvanized | ASTM A153 |
| SS4 | Stainless Steel Type 304 | ASTM F593 |
| SS6 | Stainless Steel Type 316 | MPIF 35/ASTM A593 |
| AL | Aluminum | ASTM F468 S4 |

*Unless otherwise noted.

Note: Channel nuts are not available in HDG or Aluminum

Metric

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



STANDARD CHANNEL NUTS

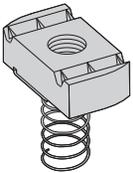
Numbering Example: **N 7 25 (*) WO**

| Nut Type | Channel Type | Thread Size | Stud Length | Suffix |
|-----------------------|---------------------|-------------------------|--|---|
| N = Standard Nut | 7 = Tall Channels | 21 = #8-32 | * = Specify Length of stud below for Stud Nut or Twirl Stud Nuts | WO = Without Spring ** = Twirl Nuts or nuts with springs have blank suffix |
| TN = Twirl Nut | B11 | 22 = #10-24 | $\frac{3}{4}$ = $\frac{3}{4}$ " | |
| SN = Stud Nut | B12 | 27 = #10-32 | 1 = 1" | |
| STN = Stud Twirl Nut | 2 = Medium Channels | 24 = $\frac{1}{4}$ -20 | $1\frac{1}{4}$ = $1\frac{1}{4}$ " | |
| FN = FN Nut | B22 | 23 = $\frac{5}{16}$ -18 | $1\frac{1}{2}$ = $1\frac{1}{2}$ " | |
| NW = Combo Nut Washer | B24 | 28 = $\frac{3}{8}$ -16 | | |
| | B26 | 26 = $\frac{7}{16}$ -14 | | |
| | B32 | 25 = $\frac{1}{2}$ -13 | | |
| | 5 = Short Channels | 55 = $\frac{5}{8}$ -11 | | |
| | B42 | 75 = $\frac{5}{8}$ -11 | | |
| | B52 | 78 = $\frac{7}{8}$ -9 | | |
| | B54 | | | |
| | B56 | | | |

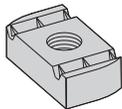
METRIC CHANNEL NUTS

Numbering Example: **BMS 6 M**

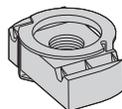
| Nut Type | Metric Thread Size | Suffix |
|---|--------------------|---|
| BMS = Spring Nut | 3 = M3.5 | S = Short Spring |
| BMS-D = Spring Nut ($\frac{1}{2}$ " thick) | 4 = M4 | M = Medium Spring |
| BMT = Twirl Nut | 5 = M5 | L = Long Spring |
| BMT-D = Twirl Nut ($\frac{1}{2}$ " thick) | 6 = M6 | * = Twirl Nuts and nuts without springs have blank suffix |
| BFN = FN Nut | 8 = M8 | |
| BMM = Spring Nut (Mini channel) | 10 = M10 | |
| | 12 = M12 | |



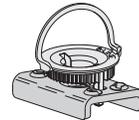
SPRING NUT



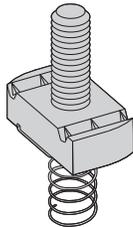
NUT WITHOUT SPRING



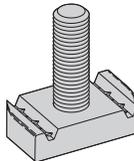
TWIRL-NUT®



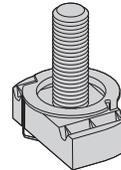
FN NUT Patented



STUD NUT WITH SPRING



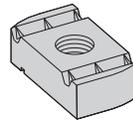
STUD NUT WITHOUT SPRING



TWIRL STUD NUT

Reference page 44 for general fitting and standard finish specifications.

Channel Nuts



Note: See page 50 for resistance to slip & page 51 for pull-out strength.

NUT WITHOUT SPRING

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Wt./C | |
|-----------------------|-------------|------------------------------|---------------|--------|-------|--------|
| | | | | | Lbs. | kg |
| N221WO | #8-32 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) |
| N227WO | #10-32 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) |
| N222WO | #10-24 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) |
| N224WO | 1/4-20 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) |
| N223WO | 5/16-18 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) |
| N228WO | 3/8-16 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.3 | (4.22) |
| N226WO | 7/16-14 | All sizes except B62 & B72 | 3/8" | (9.5) | 8.8 | (3.99) |
| N225WO | 1/2-13 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 11.6 | (5.26) |
| N525WO | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) |
| N255WO | 5/8-11 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 16.4 | (7.44) |
| N555WO | 5/8-11 | B42, B52, B54, B56 | 3/8" | (9.5) | 10.2 | (4.62) |
| N275WO | 3/4-10 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 14.5 | (6.58) |
| N575WO | 3/4-10 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) |
| N278WO | 7/8-9 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 12.5 | (5.67) |
| Metric Threads | | | | | | |
| BMS-6 | M6 x 1 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.9 | (3.13) |
| BMS-8 | M8 x 1.25 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) |
| BMS-10 | M10 x 1.5 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.6 | (4.35) |
| BMS-12 | M12 x 1.75 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.2 | (4.17) |
| BMS-D-12 | M12 x 1.75 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 12.2 | (5.53) |

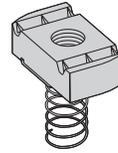
Note: For mini channel nut information see page 191.

Reference page 44 for general fitting and standard finish specifications.

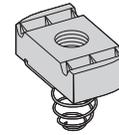
Note: See page 50 for resistance to slip & page 51 for pull-out strength.



**700
SERIES**



**200
SERIES**



**500
SERIES**

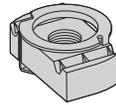
SPRING NUT

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Wt./C | |
|-----------------------|-------------|--------------------|---------------|--------|-------|--------|
| | | | | | Lbs. | kg |
| N721 | #8-32 | B11 & B12 | 1/4" | (6.3) | 7.0 | (3.17) |
| N221 | #8-32 | B22, B24, B26, B32 | 1/4" | (6.3) | 7.0 | (3.17) |
| N521 | #8-32 | B42, B52, B54, B56 | 1/4" | (6.3) | 7.0 | (3.17) |
| N727 | #10-32 | B11 & B12 | 1/4" | (6.3) | 7.0 | (3.17) |
| N227 | #10-32 | B22, B24, B26, B32 | 1/4" | (6.3) | 7.0 | (3.17) |
| N527 | #10-32 | B42, B52, B54, B56 | 1/4" | (6.3) | 7.0 | (3.17) |
| N722 | #10-24 | B11 & B12 | 1/4" | (6.3) | 7.0 | (3.17) |
| N222 | #10-24 | B22, B24, B26, B32 | 1/4" | (6.3) | 7.0 | (3.17) |
| N522 | #10-24 | B42, B52, B54, B56 | 1/4" | (6.3) | 7.0 | (3.17) |
| N724 | 1/4-20 | B11 & B12 | 1/4" | (6.3) | 6.7 | (3.04) |
| N224 | 1/4-20 | B22, B24, B26, B32 | 1/4" | (6.3) | 6.7 | (3.04) |
| N524 | 1/4-20 | B42, B52, B54, B56 | 1/4" | (6.3) | 6.7 | (3.04) |
| N723 | 5/16-18 | B11 & B12 | 1/4" | (6.3) | 6.7 | (3.04) |
| N223 | 5/16-18 | B22, B24, B26, B32 | 1/4" | (6.3) | 6.7 | (3.04) |
| N523 | 5/16-18 | B42, B52, B54, B56 | 1/4" | (6.3) | 6.7 | (3.04) |
| N728 | 3/8-16 | B11 & B12 | 3/8" | (9.5) | 9.3 | (4.22) |
| N228 | 3/8-16 | B22, B24, B26, B32 | 3/8" | (9.5) | 9.3 | (4.22) |
| N528 | 3/8-16 | B42, B52, B54, B56 | 3/8" | (9.5) | 9.3 | (4.22) |
| N726 | 7/16-14 | B11 & B12 | 3/8" | (9.5) | 8.8 | (3.99) |
| N226 | 7/16-14 | B22, B24, B26, B32 | 3/8" | (9.5) | 8.8 | (3.99) |
| N526 | 7/16-14 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) |
| N725 | 1/2-13 | B11 & B12 | 1/2" | (12.7) | 11.6 | (5.26) |
| N225 | 1/2-13 | B22, B24, B26, B32 | 1/2" | (12.7) | 11.6 | (5.26) |
| N525 | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) |
| N755 | 5/8-11 | B11 & B12 | 1/2" | (12.7) | 16.4 | (7.44) |
| N255 | 5/8-11 | B22, B24, B26, B32 | 1/2" | (12.7) | 16.4 | (7.44) |
| N555 | 5/8-11 | B42, B52, B54, B56 | 3/8" | (9.5) | 10.2 | (4.62) |
| N775 | 3/4-10 | B11 & B12 | 1/2" | (12.7) | 14.5 | (6.58) |
| N275 | 3/4-10 | B22, B24, B26, B32 | 1/2" | (12.7) | 14.5 | (6.58) |
| N575 | 3/4-10 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) |
| N778 | 7/8-9 | B11 & B12 | 1/2" | (12.7) | 12.5 | (5.67) |
| N278 | 7/8-9 | B22, B24, B26, B32 | 1/2" | (12.7) | 12.5 | (5.67) |
| Metric Threads | | | | | | |
| BMS-6L | M6 x 1 | B11 & B12 | 1/4" | (6.3) | 6.9 | (3.13) |
| BMS-6M | M6 x 1 | B22, B24, B26, B32 | 1/4" | (6.3) | 6.9 | (3.13) |
| BMS-6S | M6 x 1 | B42, B52, B54, B56 | 1/4" | (6.3) | 6.9 | (3.13) |
| BMS-8L | M8 x 1.25 | B11 & B12 | 1/4" | (6.3) | 6.7 | (3.04) |
| BMS-8M | M8 x 1.25 | B22, B24, B26, B32 | 1/4" | (6.3) | 6.7 | (3.04) |
| BMS-8S | M8 x 1.25 | B42, B52, B54, B56 | 1/4" | (6.3) | 6.7 | (3.04) |
| BMS-10L | M10 x 1.5 | B11 & B12 | 3/8" | (9.5) | 9.6 | (4.35) |
| BMS-10M | M10 x 1.5 | B22, B24, B26, B32 | 3/8" | (9.5) | 9.6 | (4.35) |
| BMS-10S | M10 x 1.5 | B42, B52, B54, B56 | 3/8" | (9.5) | 9.6 | (4.35) |
| BMS-12M | M12 x 1.75 | B22, B24, B26, B32 | 3/8" | (9.5) | 9.2 | (4.17) |
| BMS-12S | M12 x 1.75 | B42, B52, B54, B56 | 3/8" | (9.5) | 9.2 | (4.17) |
| BMS-D-12L | M12 x 1.75 | B11 & B12 | 1/2" | (12.7) | 12.2 | (5.53) |
| BMS-D-12M | M12 x 1.75 | B22, B24, B26, B32 | 1/2" | (12.7) | 12.2 | (5.53) |

Note: For mini channel nut information see page 191.

Reference page 44 for general fitting and standard finish specifications.

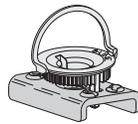
Channel Nuts



Note: See page 50 for resistance to slip & page 51 for pull-out strength.

TWIRL-NUT® Patented

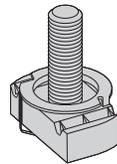
| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Wt./C | | |
|----------------|-------------|------------------------------|------------------------------|--------|--------|--------|--------|
| | | | | | Lbs. | kg | |
| TN221 | #8-32 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) | |
| TN227 | #10-32 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) | |
| TN222 | #10-24 | All sizes except B62 & B72 | 1/4" | (6.3) | 7.0 | (3.17) | |
| TN224 | 1/4-20 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) | |
| TN223 | 5/16-18 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) | |
| TN228 | 3/8-16 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.3 | (4.22) | |
| TN226 | 7/16-14 | All sizes except B62 & B72 | 3/8" | (9.5) | 8.8 | (3.99) | |
| TN225 | 1/2-13 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 11.6 | (5.26) | |
| TN525 | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 8.8 | (3.99) | |
| TN255 | 5/8-11 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 11.0 | (4.99) | |
| Metric Threads | BMT-6 | M6 x 1 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.9 | (3.13) |
| | BMT-8 | M8 x 1.25 | All sizes except B62 & B72 | 1/4" | (6.3) | 6.7 | (3.04) |
| | BMT-10 | M10 x 1.5 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.6 | (4.35) |
| | BMT-12 | M12 x 1.75 | All sizes except B62 & B72 | 3/8" | (9.5) | 9.2 | (4.17) |
| | BMT-D-12 | M12 x 1.75 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 12.2 | (5.53) |



Note: See page 50 for resistance to slip & page 51 for pull-out strength.

FN NUT

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Wt./C | | |
|----------------|-------------|----------------------------|----------------------------|-------|-------|--------|--------|
| | | | | | Lbs. | kg | |
| FN224 | 1/4-20 | All sizes except B62 & B72 | .31 | (7.9) | 5.4 | (2.45) | |
| FN228 | 3/8-16 | All sizes except B62 & B72 | .31 | (7.9) | 5.4 | (2.45) | |
| Metric Threads | BFN-6 | M6 x 1 | All sizes except B62 & B72 | .31 | (7.9) | 5.4 | (2.45) |
| | BFN-8 | M8 x 1.25 | All sizes except B62 & B72 | .31 | (7.9) | 5.4 | (2.45) |
| | BFN-10 | M10 x 1.5 | All sizes except B62 & B72 | .31 | (7.9) | 5.4 | (2.45) |



Note: See page 50 for resistance to slip & page 51 for pull-out strength.

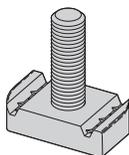
STUD TWIRL NUT

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Ave. Wt./C | |
|----------|-------------|------------------------------|---------------|--------|------------|--------|
| | | | | | Lbs. | kg |
| STN224-* | 1/4-20 | All sizes except B62 & B72 | 1/4" | (6.3) | 8.1 | (3.66) |
| STN228-* | 3/8-16 | All sizes except B62 & B72 | 3/8" | (9.5) | 12.9 | (5.85) |
| STN225-* | 1/2-13 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 18.2 | (8.23) |
| STN525-* | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 15.4 | (6.96) |

*Note: Add stud length in inches (3/4, 1, 1 1/4, 1 1/2)

Reference page 44 for general fitting and standard finish specifications.

Note: See page 50 for resistance to slip & page 51 for pull-out strength.

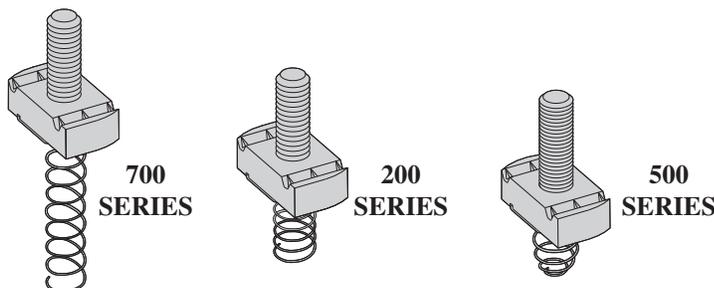


STUD NUT WITHOUT SPRING

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Ave. Wt./C | |
|-----------|-------------|------------------------------|---------------|--------|------------|--------|
| | | | | | Lbs. | kg |
| SN224-*WO | 1/4-20 | All sizes except B62 & B72 | 1/4" | (6.3) | 8.1 | (3.66) |
| SN228-*WO | 3/8-16 | All sizes except B62 & B72 | 3/8" | (9.5) | 12.9 | (5.85) |
| SN225-*WO | 1/2-13 | B11, B12, B22, B24, B26, B32 | 1/2" | (12.7) | 18.2 | (8.23) |
| SN525-*WO | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 15.4 | (6.96) |

*Note: Add stud length in inches (3/4, 1, 1 1/4, 1 1/2)

Note: See page 50 for resistance to slip & page 51 for pull-out strength.



STUD NUT WITH SPRING

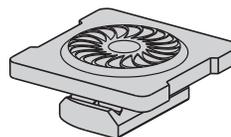
| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Ave. Wt./C | |
|----------|-------------|--------------------|---------------|--------|------------|--------|
| | | | | | Lbs. | kg |
| SN724-* | 1/4-20 | B11 & B12 | 1/4" | (6.3) | 8.1 | (3.66) |
| SN224-* | 1/4-20 | B22, B24, B26, B32 | 1/4" | (6.3) | 8.1 | (3.66) |
| SN524-* | 1/4-20 | B42, B52, B54, B56 | 1/4" | (6.3) | 8.1 | (3.66) |
| SN728-* | 3/8-16 | B11 & B12 | 3/8" | (9.5) | 12.9 | (5.85) |
| SN228-* | 3/8-16 | B22, B24, B26, B32 | 3/8" | (9.5) | 12.9 | (5.85) |
| SN528-* | 3/8-16 | B42, B52, B54, B56 | 3/8" | (9.5) | 12.9 | (5.85) |
| SN725-* | 1/2-13 | B11 & B12 | 1/2" | (12.7) | 18.2 | (8.23) |
| SN225-* | 1/2-13 | B22, B24, B26, B32 | 1/2" | (12.7) | 18.2 | (8.23) |
| SN525-* | 1/2-13 | B42, B52, B54, B56 | 3/8" | (9.5) | 15.4 | (6.96) |

*Note: Add stud length in inches (3/4, 1, 1 1/4, 1 1/2)

- Finish: Electrodeposited zinc ASTM B633 SC1
- Available in 316 stainless steel - add SS6 to part number



Note: See page 50 for resistance to slip & page 51 for pull-out strength.



COMBO NUT WASHER

| Part No. | Thread Size | Fits Channel Sizes | Nut Thickness | | Ave. Wt./C | |
|----------|-------------|--------------------|---------------|-------|------------|--------|
| | | | | | Lbs. | kg |
| NW524 | 1/4-20 | All Channel Sizes | 1/4" | (6.3) | 11.9 | (5.40) |
| NW528 | 3/8-16 | All Channel Sizes | 3/8" | (9.5) | 13.8 | (6.26) |
| NW525 | 1/2-13 | All Channel Sizes | 3/8" | (9.5) | 13.1 | (5.94) |

Reference page 44 for general fitting and standard finish specifications.

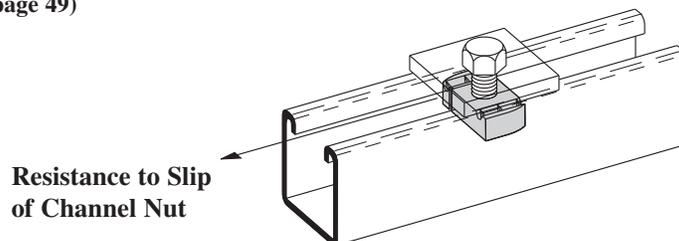
Channel Nuts

RESISTANCE TO SLIP

•With Safety Factor of 3

| Thread Size | Nut Part Numbers | Resistance to Slip | | | | | |
|-------------|--|--------------------|------|----------------|------|----------------|------|
| | | 12 ga. Channel | | 14 ga. Channel | | 16 ga. Channel | |
| | | Lbs. | N | Lbs. | N | Lbs. | N |
| #8-32 | N221, N221WO, N521, N721, TN221 | 50 | 220 | 50 | 220 | 50 | 220 |
| #10-24 | N222, N222WO, N522, N722, TN222 | 100 | 440 | 100 | 440 | 100 | 440 |
| #10-32 | N227, N227WO, N527, N727, TN227 | 100 | 440 | 100 | 440 | 100 | 440 |
| 1/4"-20 | NW524*, FN224, N224, N224WO, N524, N724, TN224, STN224, SN224WO, SN224, SN524, SN724 | 300 | 1330 | 300 | 1330 | 300 | 1330 |
| 5/16"-18 | N223, N223WO, N523, N723, TN223 | 450 | 2000 | 450 | 2000 | 450 | 2000 |
| 3/8"-16 | NW528*, FN228, N228, N228WO, N528, N728, TN228, STN228, SN228WO, SN228, SN528, SN728 | 800 | 3560 | 600 | 2670 | 600 | 2670 |
| 7/16"-14 | N226, N226WO, N526, N726, TN226 | 1000 | 4450 | 800 | 3560 | 800 | 3560 |
| 1/2"-13 | N225, N225WO, N725, TN225, STN225, SN225WO, SN225, SN725 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| | NW525*, N525, N525WO, TN525, STN525, SN525WO, SN525 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| 5/8"-11 | N255, N255WO, N755, TN255 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| | N555, N555WO | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| 3/4"-10 | N275, N275WO, N775 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| | N575, N575WO | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| 7/8"-9 | N278, N278WO, N778 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| M6 x 1 | BMS-6, BMS-6L, BMS-6M, BMS-6S, BFN-6, BMT-6 | 300 | 1330 | 300 | 1330 | 300 | 1330 |
| M8 x 1.25 | BMS-8, BMS-8L, BMS-8M, BMS-8S, BFN-8, BMT-8 | 450 | 2000 | 450 | 2000 | 450 | 2000 |
| M10 x 1.50 | BMS-10, BMS-10L, BMS-10M, BMS-10S, BFN-10, BMT-20 | 800 | 3560 | 600 | 2760 | 600 | 2760 |
| M12 x 1.75 | BMS-D-12, BMS-D-12L, BMS-D-12M, BMT-D-12 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |
| | BMS-12, BMS-12M, BMS-12S, BMT-12 | 1500 | 6670 | 1000 | 4450 | 1000 | 4450 |

* Combo Nut Washer (see page 49)



Note: For mini channel nut information see page 191.

Reference page 44 for general fitting and standard finish specifications.

PULL-OUT STRENGTH

•With Safety Factor of 3

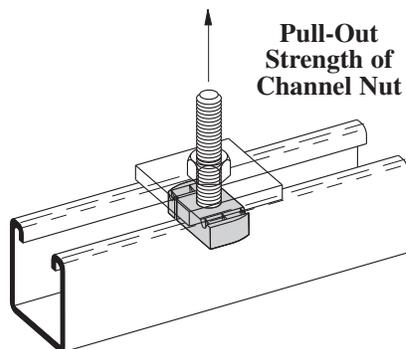
•Maximum pullout strength for B11 & B12 channels is limited to 1500 lbs. (6670 N).

| Thread Size | Nut Part Numbers | Pull-Out Strength | | | | | |
|-------------|--|-------------------|------|----------------|------|----------------|------|
| | | 12 ga. Channel | | 14 ga. Channel | | 16 ga. Channel | |
| | | Lbs. | N | Lbs. | N | Lbs. | N |
| #8-32 | N221, N221WO, N521, N721, TN221 | 200 | 890 | 200 | 890 | 200 | 890 |
| #10-24 | N222, N222WO, N522, N722, TN222 | 250 | 1110 | 250 | 1110 | 250 | 1110 |
| #10-32 | N227, N227WO, N527, N727, TN227 | 250 | 1110 | 250 | 1110 | 250 | 1110 |
| 1/4"-20 | NW524*, FN224, N224, N224WO, N524, N724, TN224, STN224, SN224WO, SN224, SN524, SN724 | 450 | 2000 | 450 | 2000 | 450 | 2000 |
| 5/16"-18 | N223, N223WO, N523, N723, TN223 | 750 | 3330 | 750 | 3330 | 750 | 3330 |
| 3/8"-16 | NW528*, FN228, N228, N228WO, N528, N728, TN228, STN228, SN228WO, SN228, SN528, SN728 | 1100 | 4890 | 1000 | 4450 | 1000 | 4450 |
| 7/16"-14 | N226, N226WO, N526, N726, TN226 | 1500 | 6670 | 1200 | 5340 | 1000 | 4450 |
| 1/2"-13 | N225, N225WO, N725, TN225, STN225, SN225WO, SN225, SN725 | 2000 | 8900 | 1400 | 6230 | 1000 | 4450 |
| | NW525*, N525, N525WO, TN525, STN525, SN525WO, SN525 | 1500 | 6670 | 1400 | 6230 | 1000 | 4450 |
| 5/8"-11 | N255, N255WO, N755, TN255 | 2000 | 8900 | 1400 | 6230 | 1000 | 4450 |
| | N555, N555WO | 1500 | 6670 | 1400 | 6230 | 1000 | 4450 |
| 3/4"-10 | N275, N275WO, N775 | 2000 | 8900 | 1400 | 6230 | 1000 | 4450 |
| | N575, N575WO | 1500 | 6670 | 1400 | 6230 | 1000 | 4450 |
| 7/8"-9 | N278, N278WO, N778 | 1500 | 6670 | 1400 | 6230 | 1000 | 4450 |
| M6 x 1 | BMS-6, BMS-6L, BMS-6M, BMS-6S, BFN-6, BMT-6 | 450 | 2000 | 450 | 2000 | 450 | 2000 |
| M8 x 1.25 | BMS-8, BMS-8L, BMS-8M, BMS-8S, BFN-8, BMT-8 | 750 | 3330 | 750 | 3330 | 750 | 3330 |
| M10 x 1.50 | BMS-10, BMS-10L, BMS-10M, BMS-10S, BFN-10, BMT-20 | 1100 | 4890 | 1000 | 4450 | 1000 | 4450 |
| M12 x 1.75 | BMS-D-12, BMS-D-12L, BMS-D-12M, BMT-D-12 | 2000 | 8900 | 1400 | 6230 | 1000 | 4450 |
| | BMS-12, BMS-12M, BMS-12S, BMT-12 | 1500 | 6670 | 1400 | 6230 | 1000 | 4450 |

Channel Nuts & Hardware
Metric Threads

* Combo Nut Washer (see page 49)

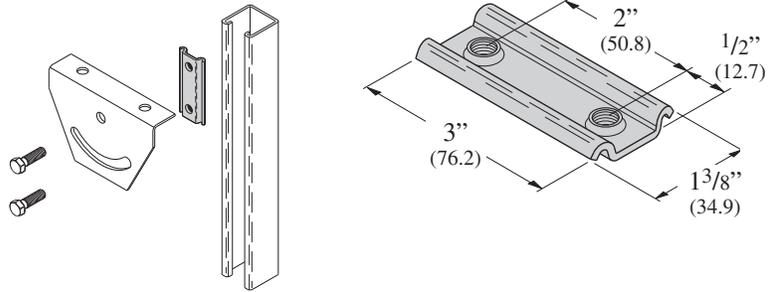
Note: For mini channel nut information see page 191.



Reference page 44 for general fitting and standard finish specifications.

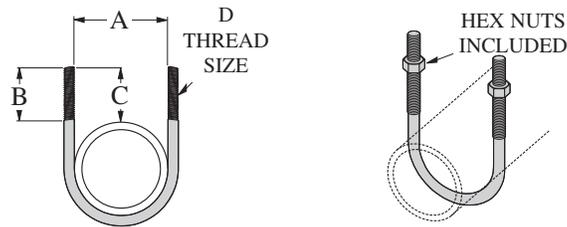
DCN 3/8 DOUBLE CONVEYOR NUT

- Recommended torque - 19 ft./Lbs.
- Allowable slip loading - 700 Lbs.(3.11kN)
- Safety Factor of 3
- Material: ASTM 1011SS Gr. 33
- Finish: Electrodeposited zinc ASTM B633 SC1
- Strut ordered separately



B501 SERIES U-BOLT

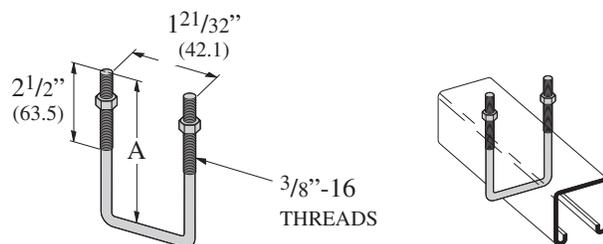
- Designed for use with Rigid Conduit or Iron Pipe
- Dimension "C" is dependent on the type of pipe or conduit supported and is a reference only



| Part No. | A | | B | | C | | D | Design Load | | Wt./C | |
|------------|----------|---------|---------|--------|----------|--------|----------|-------------|---------|-------|--------|
| | Lbs. | mm | Lbs. | mm | Lbs. | mm | | Lbs. | kN | Lbs. | kg |
| B501-1/2 | 15/16" | (23.8) | 1 3/4" | (44.4) | 1 1/2" | (38.1) | 5/16"-18 | 600 | (2.67) | 12 | (5.4) |
| B501-3/4 | 1 1/8" | (28.6) | 1 3/4" | (44.4) | 1 5/8" | (41.3) | 5/16"-18 | 600 | (2.67) | 13 | (5.9) |
| B501-1 | 1 3/8" | (29.9) | 1 7/8" | (47.6) | 1 5/8" | (41.3) | 5/16"-18 | 900 | (4.00) | 14 | (6.3) |
| B501-1 1/4 | 1 23/32" | (43.6) | 1 3/4" | (44.4) | 1 15/32" | (37.3) | 5/16"-18 | 900 | (4.00) | 15 | (6.8) |
| B501-1 1/2 | 2" | (50.8) | 1 3/4" | (44.4) | 1 7/16" | (36.5) | 5/16"-18 | 900 | (4.00) | 16 | (7.2) |
| B501-2 | 2 7/16" | (61.9) | 2 1/16" | (52.4) | 1 7/8" | (47.6) | 3/8"-16 | 1200 | (5.34) | 27 | (12.2) |
| B501-2 1/2 | 2 15/16" | (74.6) | 2 1/16" | (52.4) | 1 13/16" | (46.0) | 3/8"-16 | 1200 | (5.34) | 32 | (14.5) |
| B501-3 | 3 9/16" | (90.5) | 2" | (50.8) | 1 3/4" | (44.4) | 3/8"-16 | 1800 | (8.00) | 36 | (16.3) |
| B501-3 1/2 | 4 3/32" | (94.6) | 2" | (50.8) | 1 23/32" | (43.6) | 3/8"-16 | 1800 | (8.00) | 38 | (17.2) |
| B501-4 | 4 19/32" | (116.7) | 2 1/4" | (57.1) | 1 21/32" | (50.0) | 3/8"-16 | 1800 | (8.00) | 42 | (19.0) |
| B501-5 | 5 21/32" | (143.6) | 2 1/4" | (57.1) | 2" | (50.8) | 1/2"-13 | 2400 | (10.70) | 92 | (41.7) |
| B501-6 | 6 3/4" | (171.4) | 2 5/8" | (66.7) | 2 3/8" | (60.3) | 5/8"-11 | 2400 | (10.70) | 176 | (79.8) |
| B501-8 | 8 3/4" | (222.2) | 2 5/8" | (66.7) | 2 3/8" | (60.3) | 5/8"-11 | 2400 | (10.70) | 191 | (86.6) |

B500 SERIES SQUARE U-BOLT

- Includes:
 - 1 pc. U-Bolt only
 - 2 pcs. 3/8"-16 Hex Nuts
- Additional sizes available
- Standard finish: ZN, SS4

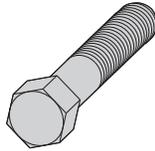


| Part No. | A | | Channel Size | Wt./C | |
|------------|--------|---------|-----------------|-------|--------|
| | Lbs. | mm | | Lbs. | kg |
| B500-3-3/8 | 3 3/8" | (85.7) | 1 5/8" x 1 5/8" | 25 | (11.3) |
| B500-5 | 5" | (127.0) | 3 1/4" x 1 5/8" | 33 | (14.9) |

Reference page 44 for general fitting and standard finish specifications.

HHCS HEX HEAD CAP SCREWS

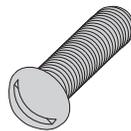
•Standard finish: Zinc-Plated, Stainless Steel



| Part No. | Wt./C | |
|---------------------|-------|--------|
| | Lbs. | kg |
| 1/4" x 1/2" HHCS | 1.3 | (.59) |
| 1/4" x 3/4" HHCS | 1.4 | (.63) |
| 1/4" x 1" HHCS | 1.7 | (.77) |
| 1/4" x 1 1/4" HHCS | 2.1 | (.95) |
| 1/4" x 1 1/2" HHCS | 2.4 | (1.09) |
| 5/16" x 1" HHCS | 2.8 | (1.27) |
| 5/16" x 1 1/4" HHCS | 3.2 | (1.45) |
| 5/16" x 1 1/2" HHCS | 3.8 | (1.72) |
| 3/8" x 3/4" HHCS | 3.4 | (1.54) |
| 3/8" x 1" HHCS | 4.1 | (1.86) |
| 3/8" x 1 1/4" HHCS | 4.7 | (2.13) |
| 3/8" x 1 1/2" HHCS | 5.2 | (2.36) |
| 3/8" x 1 3/4" HHCS | 5.9 | (2.67) |
| 3/8" x 2" HHCS | 7.0 | (3.17) |
| 3/8" x 2 1/4" HHCS | 7.8 | (3.54) |
| 3/8" x 2 1/2" HHCS | 8.5 | (3.85) |
| 1/2" x 7/8" HHCS | 8.0 | (3.63) |
| 1/2" x 1" HHCS | 8.4 | (3.81) |
| 1/2" x 1 1/4" HHCS | 9.2 | (4.17) |
| 1/2" x 1 1/2" HHCS | 10.1 | (4.58) |
| 1/2" x 1 3/4" HHCS | 12.0 | (5.44) |
| 1/2" x 2" HHCS | 13.2 | (5.99) |
| 1/2" x 2 1/2" HHCS | 16.0 | (7.26) |

SRHMS SLOTTED ROUND HEAD MACHINE SCREWS

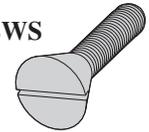
•Standard finish: Zinc-Plated



| Part No. | Wt./C | |
|----------------------|-------|--------|
| | Lbs. | kg |
| 1/4" x 1/2" SRHMS | .9 | (.41) |
| 1/4" x 3/4" SRHMS | 1.2 | (.54) |
| 1/4" x 1" SRHMS | 1.5 | (.68) |
| 1/4" x 1 1/4" SRHMS | 1.7 | (.77) |
| 1/4" x 1 1/2" SRHMS | 1.9 | (.86) |
| 5/16" x 1" SRHMS | 2.5 | (1.13) |
| 5/16" x 1 1/4" SRHMS | 2.9 | (1.31) |
| 5/16" x 1 1/2" SRHMS | 3.3 | (1.49) |
| 3/8" x 1" SRHMS | 4.0 | (1.81) |
| 3/8" x 1 1/4" SRHMS | 4.5 | (2.04) |
| 3/8" x 1 1/2" SRHMS | 5.1 | (2.31) |
| 3/8" x 2" SRHMS | 6.3 | (2.86) |
| 3/8" x 2 1/4" SRHMS | 7.1 | (3.22) |
| 3/8" x 2 1/2" SRHMS | 7.7 | (3.49) |

SFHMS SLOTTED FLAT HEAD MACHINE SCREWS

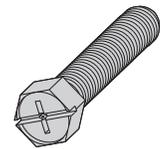
•Standard finish: Zinc-Plated



| Part No. | Wt./C | |
|---------------------|-------|--------|
| | Lbs. | kg |
| 1/4" x 1/2" SFHMS | 1.1 | (.50) |
| 1/4" x 5/8" SFHMS | 1.2 | (.54) |
| 1/4" x 3/4" SFHMS | 1.4 | (.63) |
| 5/16" x 1" SFHMS | 2.8 | (1.27) |
| 3/8" x 1 1/2" SFHMS | 5.6 | (2.54) |
| 3/8" x 2" SFHMS | 6.7 | (3.04) |
| 3/8" x 2 1/4" SFHMS | 7.3 | (3.31) |
| 3/8" x 2 1/2" SFHMS | 7.9 | (3.58) |
| 1/2" x 1" SFHMS | 5.9 | (2.67) |
| 1/2" x 1 1/4" SFHMS | 7.0 | (3.17) |
| 1/2" x 1 1/2" SFHMS | 8.3 | (3.76) |
| 1/2" x 2 1/2" SFHMS | 13.8 | (6.26) |

SHHMS SLOTTED (COMBINATION RECESS) HEX HEAD MACHINE SCREWS

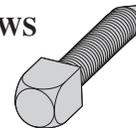
•Standard finish: Zinc-Plated, Stainless Steel



| Part No. | Wt./C | |
|----------------------|-------|--------|
| | Lbs. | kg |
| 1/4" x 3/4" SHHMS | 1.2 | (.54) |
| 1/4" x 1" SHHMS | 1.5 | (.68) |
| 1/4" x 1 1/4" SHHMS | 1.8 | (.80) |
| 1/4" x 1 1/2" SHHMS | 2.0 | (.91) |
| 5/16" x 1" SHHMS | 2.6 | (1.18) |
| 5/16" x 1 1/4" SHHMS | 3.1 | (1.40) |
| 5/16" x 1 1/2" SHHMS | 3.4 | (1.54) |
| 3/8" x 1 1/4" SHHMS | 4.6 | (2.08) |
| 3/8" x 1 1/2" SHHMS | 5.3 | (2.40) |

CNPSS SQUARE HEAD CONE POINT SET SCREWS

•Standard finish: ZN



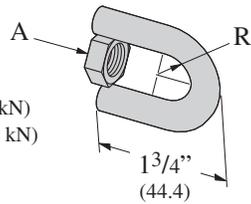
| Part No. | Wt./C | |
|---------------------|-------|---------|
| | Lbs. | kg |
| 3/8" x 1 1/2" CNPSS | 4.7 | (2.13) |
| 3/8" x 2" CNPSS | 6.0 | (2.72) |
| 1/2" x 1 1/2" CNPSS | 9.2 | (4.17) |
| 1/2" x 2" CNPSS | 11.4 | (5.17) |
| 1/2" x 2 1/2" CNPSS | 13.7 | (6.21) |
| 5/8" x 2" CNPSS | 19.0 | (8.62) |
| 5/8" x 2 1/2" CNPSS | 22.6 | (10.25) |

Reference page 44 for general fitting and standard finish specifications.

Hardware

B446A SWIVEL HANGER (FEMALE ONLY)

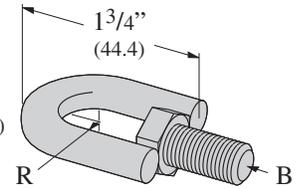
- Design Load: (3/8)-610 Lbs. (2.71 kN)
(1/2)-1130 Lbs. (5.02 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | R | Wt./C | |
|-----------|------------|-------------|-------|-------|
| | | | Lbs. | kg |
| B446A-3/8 | 3/8"-16 HN | 9/32" (7.1) | 13 | (5.9) |
| B446A-1/2 | 1/2"-13 HN | 3/8" (9.5) | 15 | (6.8) |

B446B SWIVEL HANGER (MALE ONLY)

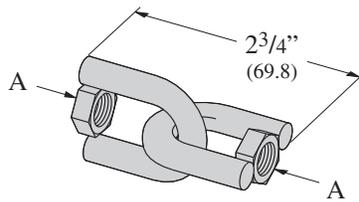
- Design Load: (3/8)-610 Lbs. (2.71 kN)
(1/2)-1130 Lbs. (5.02 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | B | R | Wt./C | |
|-----------|--------------|-------------|-------|-------|
| | | | Lbs. | kg |
| B446B-3/8 | 3/8"-16 HHCS | 9/32" (7.1) | 16 | (7.2) |
| B446B-1/2 | 1/2"-13 HHCS | 3/8" (9.5) | 20 | (9.1) |

B446C SWIVEL HANGER (FEMALE-FEMALE)

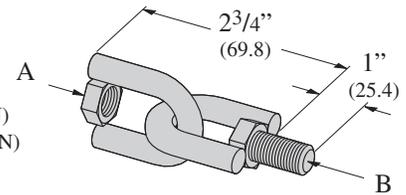
- Design Load:
(3/8)-610 Lbs. (2.71 kN)
(1/2)-1130 Lbs. (5.02 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | Wt./C | |
|-----------|------------|-------|--------|
| | | Lbs. | kg |
| B446C-3/8 | 3/8"-16 HN | 26 | (11.8) |
| B446C-1/2 | 1/2"-13 HN | 31 | (14.0) |

B446 SWIVEL HANGER (FEMALE-MALE)

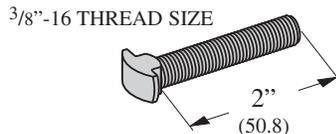
- Design Load:
(3/8)-610 Lbs. (2.71 kN)
(1/2)-1130 Lbs. (5.02 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | B | Wt./C | |
|----------|------------|--------------|-------|--------|
| | | | Lbs. | kg |
| B446-3/8 | 3/8"-16 HN | 3/8"-16 HHCS | 28 | (12.7) |
| B446-1/2 | 1/2"-13 HN | 1/2"-13 HHCS | 36 | (16.3) |

B617 SHOULDER BOLT

- Standard finish: ZN
- Wt./C 6 Lbs. (2.7 kg)



HN HEX NUTS

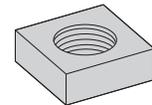
- Standard finish: Zinc-Plated, Stainless Steel



| Part No. | Wt./C | |
|----------|-------|---------|
| | Lbs. | kg |
| 1/4" HN | .7 | (.32) |
| 5/16" HN | 1.0 | (.45) |
| 3/8" HN | 1.5 | (.68) |
| 1/2" HN | 3.6 | (1.63) |
| 5/8" HN | 7.2 | (3.26) |
| 3/4" HN | 11.1 | (5.03) |
| 7/8" HN | 17.9 | (8.12) |
| 1" HN | 27.2 | (12.34) |

MSQN MACHINE SQUARE NUT

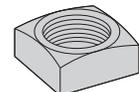
- For use with B755 Beam Clamp
- Standard finish: Zinc-Plated



| Part No. | Wt./C | |
|------------|-------|-------|
| | Lbs. | kg |
| MSQN 1/4" | .6 | (.27) |
| MSQN 5/16" | 1.2 | (.54) |
| MSQN 3/8" | 1.8 | (.81) |

SQN SQUARE NUTS

- Standard finish: Zinc-Plated



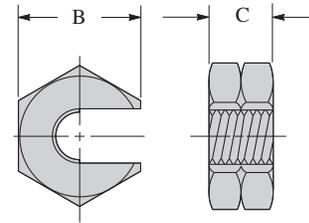
| Part No. | Wt./C | |
|----------|-------|--------|
| | Lbs. | kg |
| 1/2" SQN | 5.7 | (2.58) |
| 5/8" SQN | 10.1 | (4.58) |

Reference page 44 for general fitting and standard finish specifications.

SLN SLIP-ON LOCK NUT

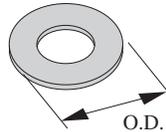
- Material: ASTM A307 Gr. A.
- Standard finish: Zinc-Plated

| Part No. | Size | Recommended Load | | Length | | Wt./C | |
|--------------------|---------|------------------|--------|--------|--------|-------|--------|
| | | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| SLN ^{1/2} | 1/2"-13 | 1 1/8" | (28.6) | 5/8" | (15.9) | 6.0 | (2.72) |
| SLN ^{5/8} | 5/8"-11 | 1 5/16" | (33.3) | 5/8" | (15.9) | 7.0 | (3.17) |



FW FLAT WASHERS

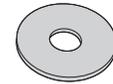
- Standard finish: Zinc-Plated, Stainless Steel



| Part No. | O.D. Outside Dia. | | Wt./C | |
|----------|-------------------|--------|-------|--------|
| | in. | mm | Lbs. | kg |
| 1/4" FW | 47/64" | (18.7) | .7 | (.32) |
| 5/16" FW | 7/8" | (22.2) | 1.4 | (.63) |
| 3/8" FW | 1" | (25.4) | 1.7 | (.77) |
| 1/2" FW | 1 3/8" | (34.9) | 3.9 | (1.77) |
| 5/8" FW | 1 15/32" | (37.3) | 6.4 | (2.90) |
| 3/4" FW | 2" | (50.8) | 10.9 | (4.94) |
| 7/8" FW | 2 1/4" | (57.1) | 13.4 | (6.08) |
| 1" FW | 2 1/2" | (63.5) | 18.8 | (8.53) |

FFW FLAT FENDER WASHERS

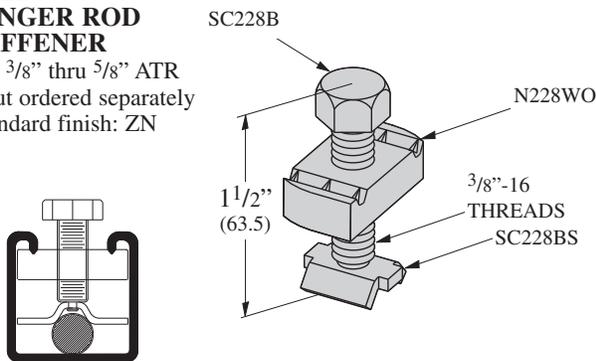
- Standard finish: Zinc-Plated



| Part No. | Wt./C | |
|-------------------|-------|--------|
| | Lbs. | kg |
| 1/4" x 1 1/4" FFW | 2.2 | (1.00) |
| 1/4" x 1 1/2" FFW | 3.1 | (1.40) |
| 3/8" x 1 1/4" FFW | 2.0 | (.91) |
| 3/8" x 1 1/2" FFW | 3.0 | (1.36) |
| 1/2" x 2" FFW | 5.4 | (2.45) |

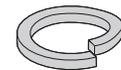
SC228 HANGER ROD STIFFENER

- For 3/8" thru 5/8" ATR
- Strut ordered separately
- Standard finish: ZN



LW LOCK WASHERS

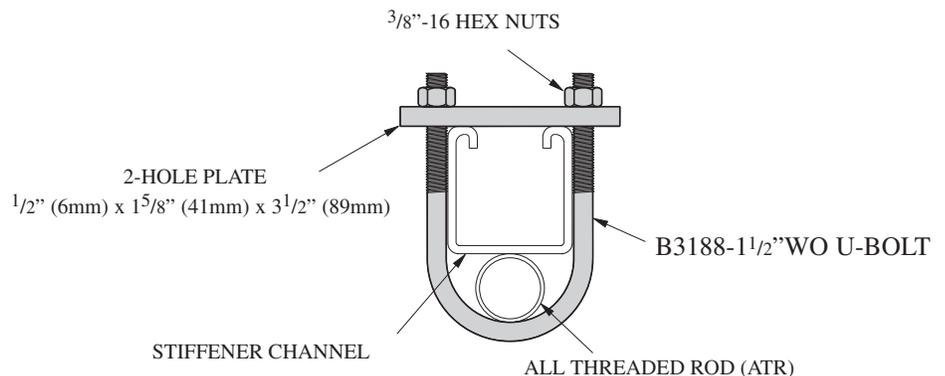
- Standard finish: Zinc-Plated, Stainless Steel



| Part No. | Wt./C | |
|----------|-------|--------|
| | Lbs. | kg |
| 1/4" LW | .3 | (.13) |
| 5/16" LW | .4 | (.18) |
| 3/8" LW | .6 | (.27) |
| 1/2" LW | 1.3 | (.59) |
| 5/8" LW | 2.4 | (1.09) |
| 3/4" LW | 3.8 | (1.72) |
| 7/8" LW | 5.9 | (2.67) |
| 1" LW | 8.8 | (3.99) |

SC-UB HANGER ROD STIFFENER

- For 3/4" thru 7/8" ATR
- Strut ordered separately
- Includes: (1) B3188-1 1/2"WO U-Bolt
(2) 3/8"-16 Hex Nuts
(1) 2-Hole Plate
- Standard finish: ZN



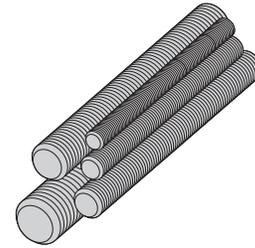
Reference page 44 for general fitting and standard finish specifications.

ATR

ALL THREADED ROD

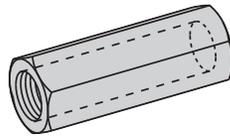
- Available in 36" (91.4 cm), 72" (182.9 cm), 120" (304.8 cm), 144" (365.7 cm) lengths
- Safety Factor of 5 on recommended load
- Standard finish: Zinc-Plated, Stainless Steel Type 304

| Part No. & Size | Threads Per Inch | Recommended Load | | Wt./C Ft. (3048.0 cm) | |
|-----------------|------------------|------------------|---------|-----------------------|----------|
| | | Lbs. | kN | Lbs. | kg |
| ATR 1/4" | 20 | 240 | (1.07) | 12 | (5.44) |
| ATR 5/16" | 18 | 400 | (1.78) | 19 | (8.62) |
| ATR 3/8" | 16 | 730 | (3.24) | 29 | (13.15) |
| ATR 1/2" | 13 | 1350 | (6.00) | 53 | (24.04) |
| ATR 5/8" | 11 | 2160 | (9.60) | 89 | (40.37) |
| ATR 3/4" | 10 | 3230 | (14.37) | 123 | (55.79) |
| ATR 7/8" | 9 | 4480 | (19.93) | 170 | (77.11) |
| ATR 1" | 8 | 5900 | (26.24) | 225 | (102.06) |

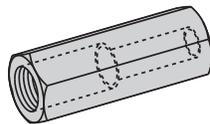


B655 ROD COUPLING B656 REDUCER ROD COUPLING

- Load rating for each coupler meets All Threaded Rod value
- Standard finish: Zinc-Plated, Stainless Steel Type 304



| Part No. | Size | Recommended Load | | Length | Wt./C | |
|-----------|----------|------------------|---------|---------------|-------|---------|
| | | Lbs. | kN | | Lbs. | kg |
| B655-1/4 | 1/4"-20 | 240 | (1.07) | 7/8" (22.2) | 1.9 | (.86) |
| B655-5/16 | 5/16"-18 | 380 | (1.69) | 7/8" (22.2) | 1.8 | (.81) |
| B655-3/8 | 3/8"-16 | 730 | (3.24) | 1 1/8" (28.6) | 3.6 | (1.63) |
| B655-1/2 | 1/2"-13 | 1350 | (6.00) | 1 3/4" (44.4) | 11.3 | (5.12) |
| B655-5/8 | 5/8"-11 | 1810 | (8.05) | 2 1/8" (54.0) | 17.6 | (7.98) |
| B655-3/4 | 3/4"-10 | 2710 | (12.05) | 2 1/4" (57.1) | 28.1 | (12.74) |
| B655-7/8 | 7/8"-9 | 3770 | (16.77) | 2 1/2" (63.5) | 57.2 | (25.94) |
| B655-1 | 1"-8 | 4960 | (22.06) | 2 3/4" (69.8) | 73.7 | (33.43) |



| Part No. | Size | Recommended Load | | Length | Wt./C | |
|----------------|-------------------|------------------|---------|---------------|-------|---------|
| | | Lbs. | kN | | Lbs. | kg |
| B656-3/8 x 1/4 | 3/8"-16 & 1/4"-20 | 240 | (1.07) | 1" (25.4) | 3.7 | (1.68) |
| B656-1/2 x 3/8 | 1/2"-13 & 3/8"-16 | 610 | (2.71) | 1 1/4" (31.7) | 6.6 | (2.99) |
| B656-5/8 x 1/2 | 5/8"-11 & 1/2"-13 | 1130 | (5.02) | 1 1/4" (31.7) | 11.6 | (5.26) |
| B656-3/4 x 5/8 | 3/4"-10 & 5/8"-11 | 1810 | (8.05) | 1 1/2" (38.1) | 20.6 | (9.34) |
| B656-7/8 x 3/4 | 7/8"-9 & 3/4"-10 | 2710 | (12.05) | 1 3/4" (44.4) | 39.4 | (17.87) |

BHR SERIES HOT RODS FOR TRAPEZE HANGERS

- 12" length of threaded rod completely assembled with rod coupling, locking hex nuts, square washer, and channel nut.
- Standard finish: Zinc-Plated

| Part No. | Rod Size | Recommended Load | | Wt./C | |
|-----------|----------|------------------|--------|-------|--------|
| | | Lbs. | kN | Lbs. | kg |
| BHR1225ZN | 1/4"-20 | 240 | (1.07) | 41 | (18.6) |
| BHR1238ZN | 3/8"-16 | 730 | (3.24) | 63 | (28.6) |
| BHR1250ZN | 1/2"-13 | 1350 | (6.00) | 98 | (44.4) |
| BHR1262ZN | 5/8"-11 | 1500 | (6.67) | 148 | (67.1) |

Note: Based on use with 12 ga. channel.

(BHR1225, BHR1238, and BHR1250 use combo nut washers instead of square washers and channel nuts)

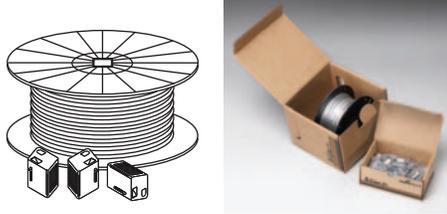


Reference page 44 for general fitting and standard finish specifications.

KWIKWIRE™ HANGING SYSTEM

KWIKPAK™ WIRE ROPE & CLAMPS IN HANDY CARRYING CARTON

- Dispenser Box - Easy Jobsite Handling.
- 1 Kit per box



| Part No. | Kit Includes | Wt./Kit | |
|-----------------|---|---------|--------|
| | | Lbs. | kg |
| BKP10063 | BKC100 (100 pcs.) 1/16"Ø Wire Rope (500 ft.) | 9.1 | (4.1) |
| BKP10094 | BKC100 (100 pcs.) 3/32"Ø Wire Rope (500 ft.) | 18.1 | (8.2) |
| BKP15094 | BKC150 (100 pcs.) 3/32"Ø Wire Rope (500 ft.) | -- | (--) |
| BKP15125 | BKC150 (100 pcs.) 1/8"Ø Wire Rope (500 ft.) | -- | (--) |
| BKP20125 | BKC200 (50 pcs.) 1/8"Ø Wire Rope (500 ft.) | 31.0 | (14.1) |
| BKP20188 | BKC200 (50 pcs.) 3/16"Ø Wire Rope (250 ft.) | 33.0 | (15.0) |

CLAMPS

- For use with Wire Rope



| Part No. | For Use With Wire Rope Diameters | Qty. Per Box | Wt./Box | |
|---------------|----------------------------------|--------------|---------|-------|
| | | | Lbs. | kg |
| BKC100 | 1/16" & 3/32" | 100 | 4.1 | (1.8) |
| BKC150 | 3/32" & 1/8" | 100 | -- | (--) |
| BKC200 | 1/8" & 3/16" | 50 | 15.0 | (6.8) |

KwikWire™ Clamp Working Loads**

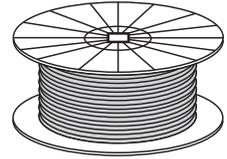
| Clamp Part No. | Wire Rope Dia. | Lbs. Safety Factor 5 |
|----------------|----------------|----------------------|
| BKL100 | 1/16" | 0-75 |
| BKL100 | 3/32" | 25-150 |
| BKL150 | 3/32" | 25-150 |
| BKL150 | 1/8" | 25-250 |
| BKL200 | 1/8" | 25-250 |
| BKL200 | 3/16" | 50-640 |

**Working loads shown are for hanging vertically. For suspending at 15°, 30°, 45° or 60° angles from vertical use the following percentage of the working loads from the chart:
15° = 96%, 30° = 86%,
45° = 70%, 60° = 50%

For additional information on KwikWire™ products see the KwikWire brochure on the website at www.cooperblineline.com

WIRE ROPE

- Uncoated Galvanized Wire
- 1 Spool per box

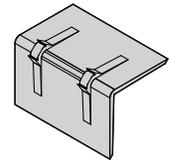


| Part No. | Diameter | Working Load | | Spool Qty. | | Wt./Spool | |
|-------------------|----------|--------------|---------|------------|---------|-----------|-------|
| | | Lbs. | kg | Ft. | M | Lbs. | kg |
| BKW063 (1) | 1/16" | 96 | (43.5) | 500 | (152.4) | 5.0 | (2.3) |
| BKW094 (1) | 3/32" | 184 | (83.4) | 500 | (152.4) | 14.0 | (6.3) |
| BKW125 (1) | 1/8" | 340 | (154.2) | 500 | (152.4) | 16.0 | (7.2) |
| BKW188 (2) | 3/16" | 840 | (381.0) | 250 | (76.2) | 18.0 | (8.2) |

(1) Wire rope construction Type 7 x 7 (2) Wire rope construction Type 7 x 19

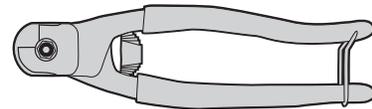
AIR DUCT CORNER POTECTORS BKCP

- Material: Plastic
- 100 per box
- Weight per 100 pcs. 1.0 Lbs. (0.45 kg)



WIRE ROPE CUTTER BKCC

- Never use cutter on energized circuits, wire, or cable.
- 1 per box
- Weight per each 1.0 Lbs. (0.45 kg)



KwikWire™ System Recommendations:

- Do not exceed the safe working load of the products shown in their charts
- KwikWire™ Clamp load ratings are guaranteed only when used in combination with B-Line/Cooper supplied wire rope
- Do not use for overhead lifting or hoisting
- Do not use if cable or components are visibly distorted or worn, remove damaged cable end prior to inserting in KwikWire™ Clamp
- Do not paint cable near working area of KwikWire Clamp connector
- Do not apply lubricant
- Keep product clean and free of dirt
- Do not use on coated wire rope
- Do not use in chlorinated or caustic atmospheres
- For use in dry locations
- Cooper's BKCC tool is recommended for cutting wire rope to prevent fraying

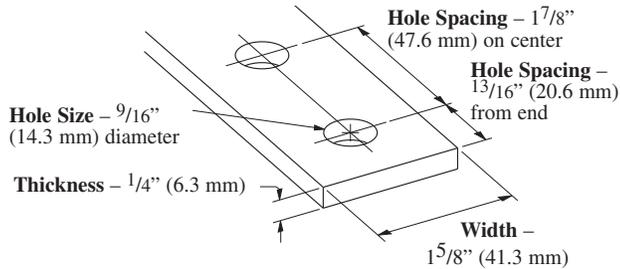
Reference page 44 for general fitting and standard finish specifications.

Fittings

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

Dimensions

The following dimensions apply to all fittings except as noted:



Materials & Finishes (Unless otherwise noted)

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

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

Load Data

The load data published includes safety factor of 2.5 when used with 12 ga. (2.6) channel (safety factor = ratio of ultimate load to the design load).

Use 1/2" by 7/8" hex head cap screws and 1/2" (N225 or TN225) channel nuts for the rated results.

Recommended Bolt Torque

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

See chart on page 98 for setscrew torque.

Hardware

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

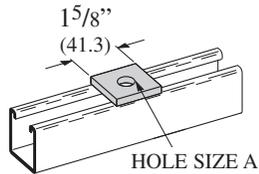
Metric

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



B200-B202-2

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

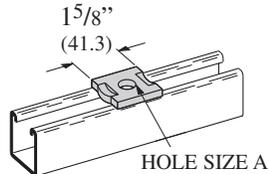


SQUARE WASHER

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

B200D-B202-2D

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



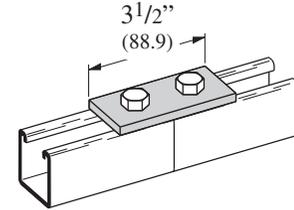
NO TWIST SQUARE WASHER

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

B129

TWO HOLE SPLICE PLATE

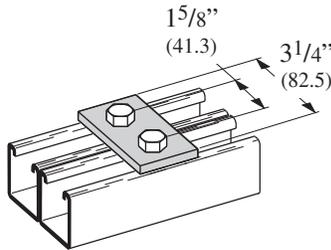
•Standard finishes: ZN, GRN
•Wt./C 37 Lbs. (16.8 kg)



B340

TWO HOLE SPLICE PLATE

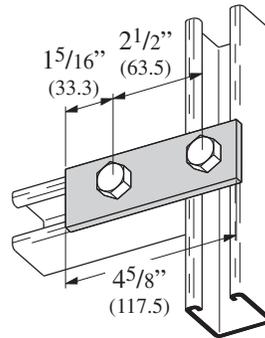
•Standard finishes: ZN, GRN
•Wt./C 34 Lbs. (15.4 kg)



B528

TWO HOLE SPLICE PLATE

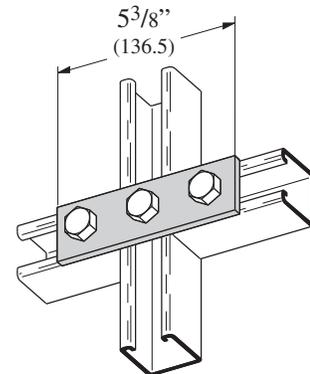
•Standard finishes: ZN, GRN
•Wt./C 50 Lbs. (22.7 kg)



B141

THREE HOLE SPLICE PLATE

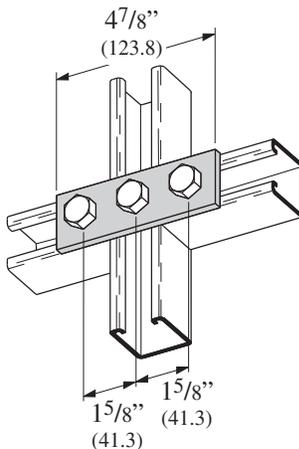
•Standard finishes: ZN, GRN
•Wt./C 55 Lbs. (24.9 kg)



B557

THREE HOLE SPLICE PLATE

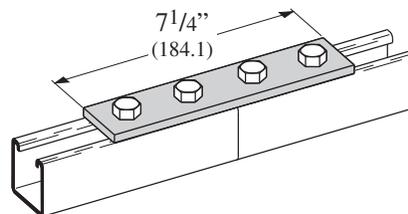
•Standard finishes: ZN, GRN
•Wt./C 50 Lbs. (22.7 kg)



B341

FOUR HOLE SPLICE PLATE

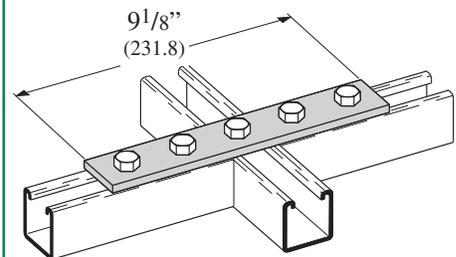
•Standard finishes: ZN, GRN, HDG
•Wt./C 76 Lbs. (34.5 kg)



B342

FIVE HOLE SPLICE PLATE

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

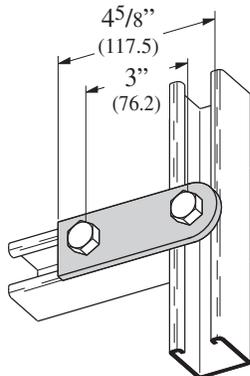


Reference page 58 for general fitting and standard finish specifications.

Flat Plate Fittings

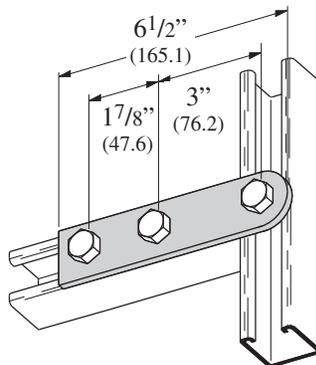
B138 TWO HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 48 Lbs. (21.8 kg)



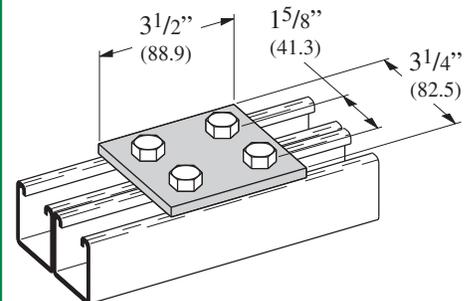
B139 THREE HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 69 Lbs. (31.3 kg)



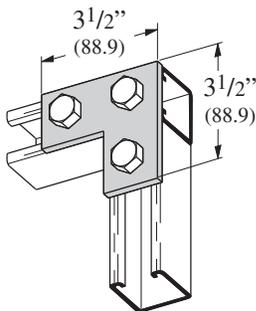
B504 FOUR HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)



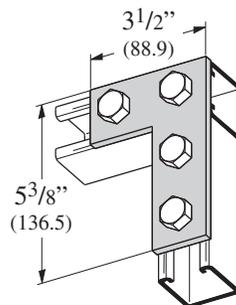
B140 THREE HOLE CORNER PLATE

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)



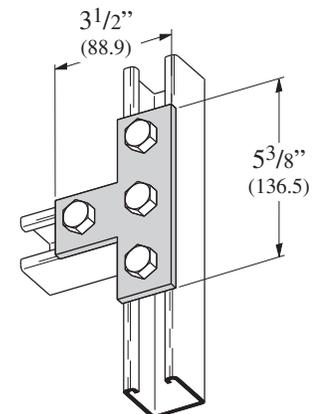
B143 FOUR HOLE CORNER PLATE

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 75 Lbs. (34.0 kg)



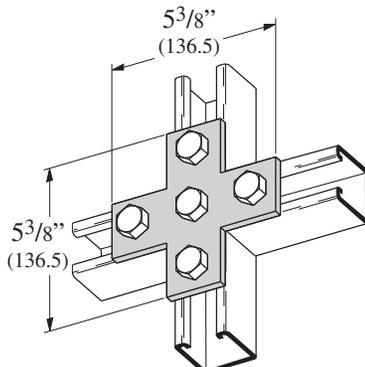
B133 FOUR HOLE TEE PLATE

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



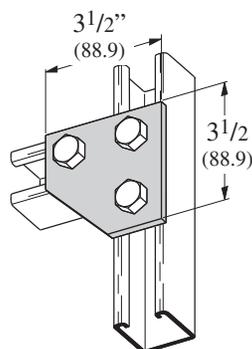
B132 FIVE HOLE CROSS PLATE

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



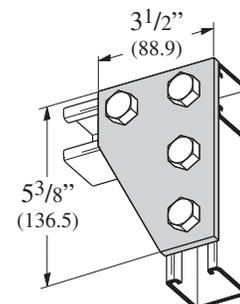
B135 THREE HOLE CORNER GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



B142 FOUR HOLE CORNER GUSSET PLATE

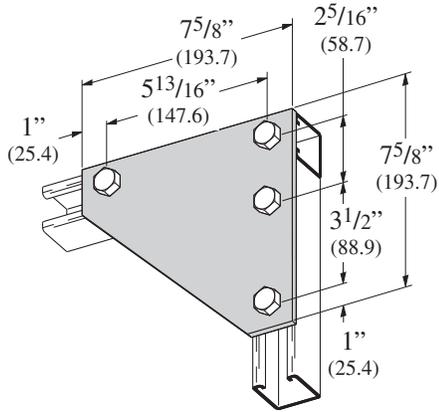
- Standard finishes: ZN, GRN, HDG
- Wt./C 102 Lbs. (46.2 kg)



Reference page 58 for general fitting and standard finish specifications.

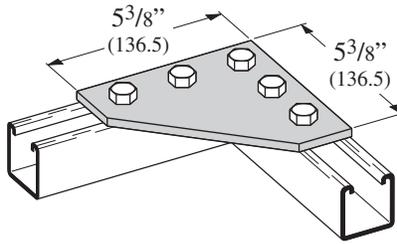
B137
FOUR HOLE CORNER GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 273 Lbs. (123.8 kg)



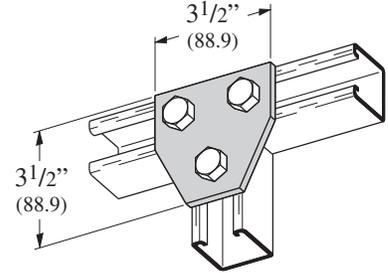
B556
FIVE HOLE CORNER GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 145 Lbs. (65.8 kg)



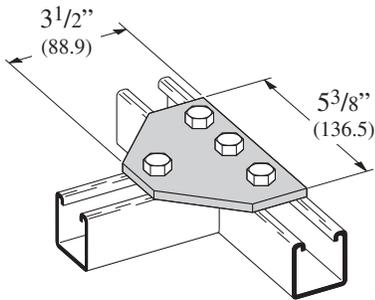
B337
THREE HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



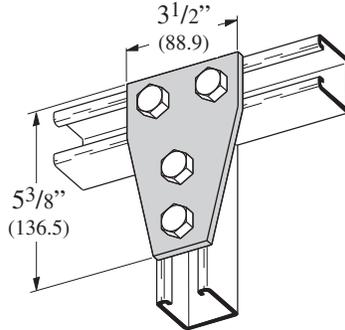
B432
FOUR HOLE TEE GUSSET PLATE

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



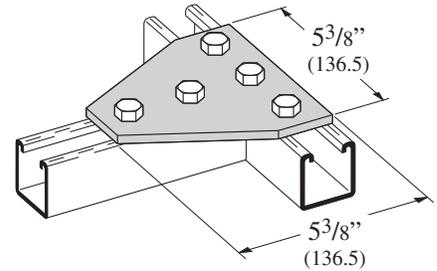
B136
FOUR HOLE TEE GUSSET PLATE

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



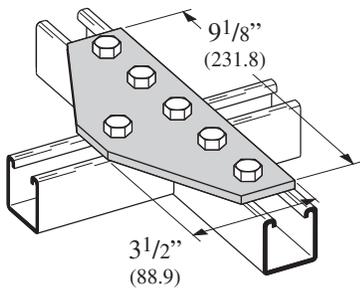
B532
FIVE HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 143 Lbs. (64.8 kg)



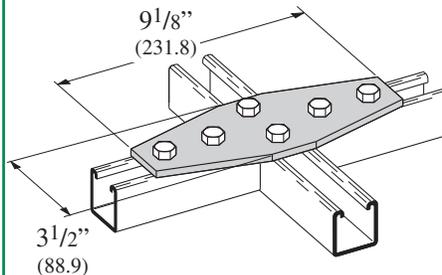
B339
SIX HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 149 Lbs. (67.6 kg)



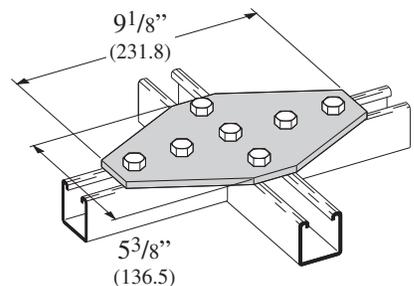
B568
SIX HOLE CROSS GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 166 Lbs. (75.3 kg)



B334
SEVEN HOLE CROSS GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 232 Lbs. (105.2 kg)

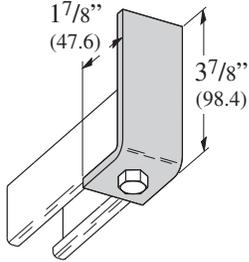


Reference page 58 for general fitting and standard finish specifications.

90° Angle Fittings

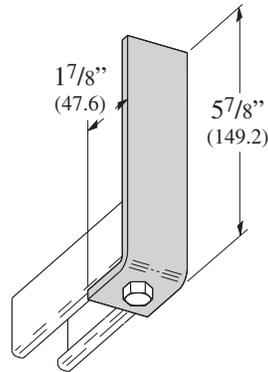
B420-378 ONE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 60 Lbs. (27.2 kg)



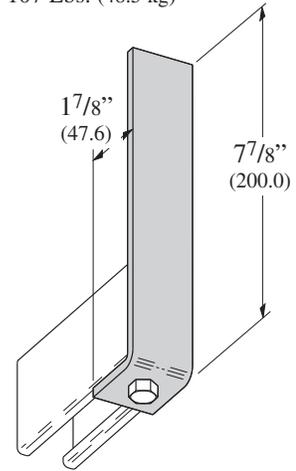
B420-578 ONE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 85 Lbs. (38.5 kg)



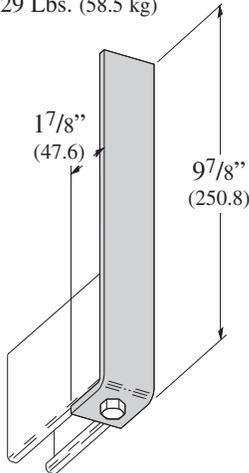
B420-778 ONE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 107 Lbs. (48.5 kg)



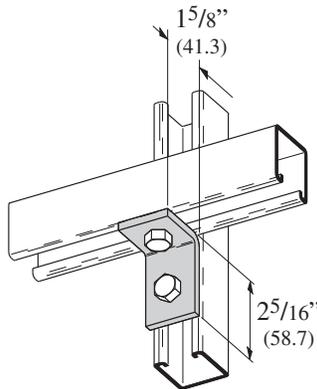
B420-978 ONE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 129 Lbs. (58.5 kg)



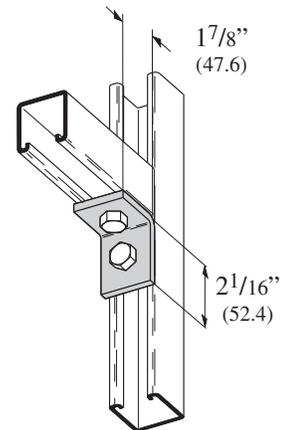
B101 TWO HOLE CORNER ANGLE

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



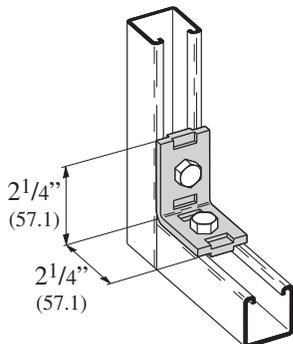
B230 TWO HOLE CORNER ANGLE

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



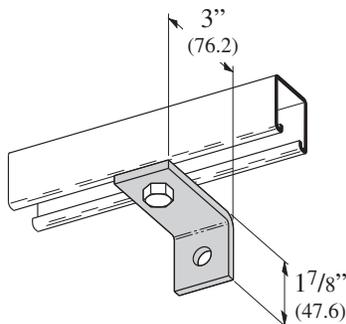
B231 TWO HOLE "NO-TWIST" CORNER ANGLE

- Standard finishes: ZN, GRN, HDG
- Wt./C 41 Lbs. (18.6 kg)



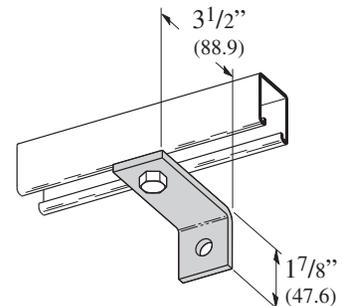
B359 TWO HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 48 Lbs. (21.8 kg)



B360 TWO HOLE CORNER ANGLE

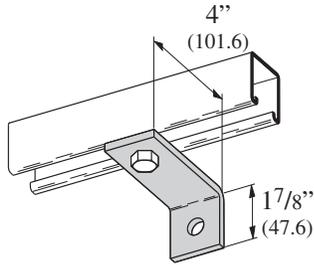
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



Reference page 58 for general fitting and standard finish specifications.

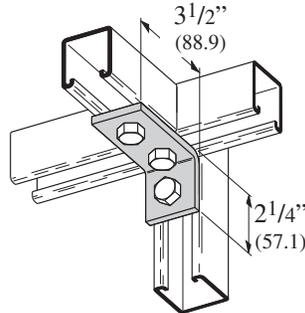
B361
TWO HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 60 Lbs. (27.2 kg)



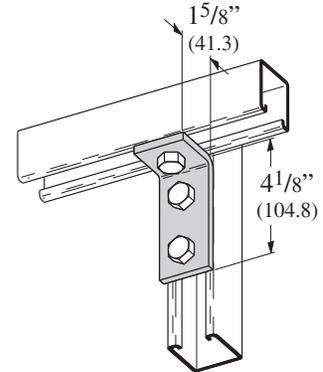
B102
THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)



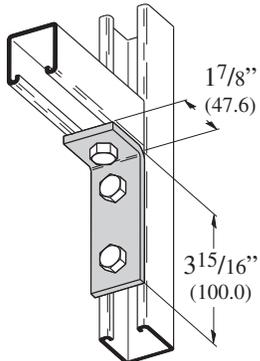
B103
THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)



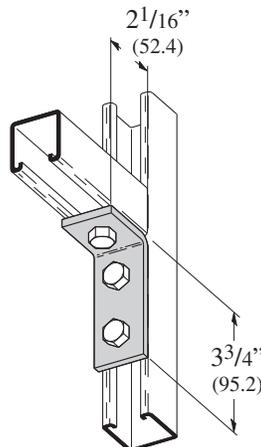
B232
THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)



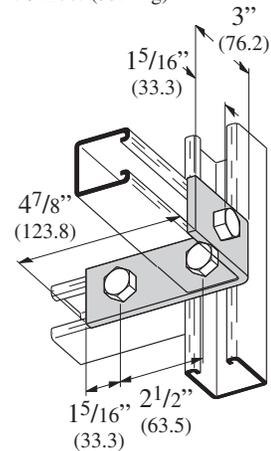
B374
THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN, HDG
- Wt./C 56 Lbs. (25.4 kg)



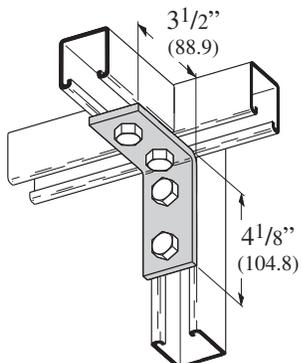
B529
THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 78 Lbs. (35.4 kg)



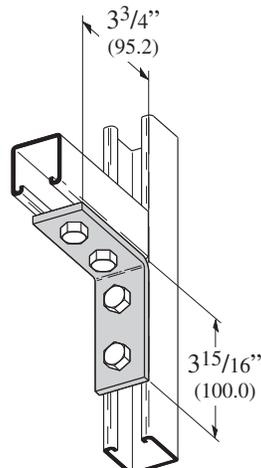
B104
FOUR HOLE CORNER ANGLE

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



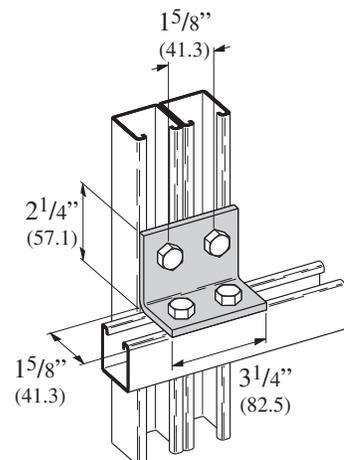
B115
FOUR HOLE CORNER ANGLE

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



B558
FOUR HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)

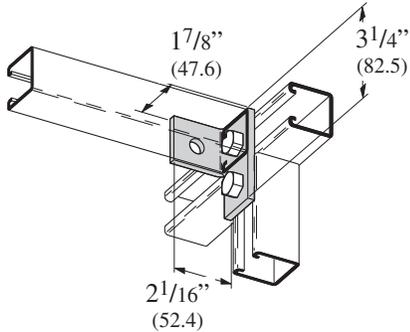


Reference page 58 for general fitting and standard finish specifications.

90° Angle Fittings

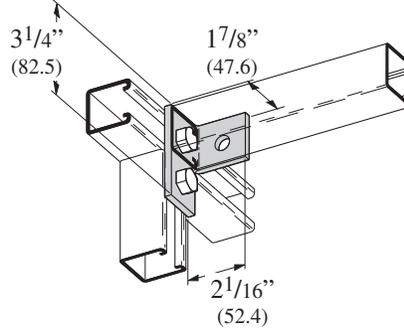
B235R THREE HOLE (RIGHT HAND) OFFSET BENT ANGLE

- 1⁵/₈" (41.3) from center to center of the holes that are shown with bolt heads
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



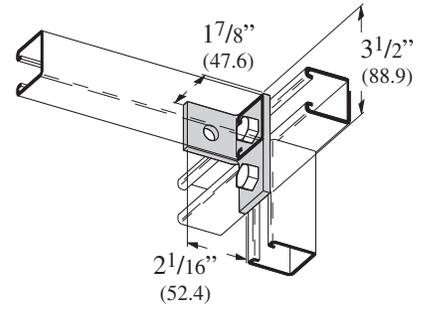
B235L THREE HOLE (LEFT HAND) OFFSET BENT ANGLE

- 1⁵/₈" (41.3) from center to center of the holes that are shown with bolt heads
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



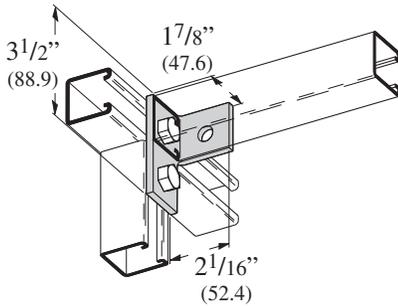
B236R THREE HOLE (RIGHT HAND) OFFSET BENT ANGLE

- Standard finishes: ZN, GRN
- Wt./C 65 Lbs. (29.5 kg)



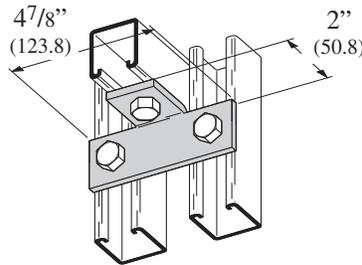
B236L THREE HOLE (LEFT HAND) OFFSET BENT ANGLE

- Standard finishes: ZN, GRN
- Wt./C 65 Lbs. (29.5 kg)



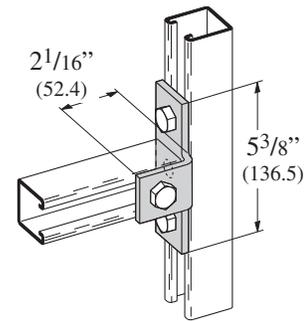
B237 THREE HOLE OFFSET BENT TEE

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



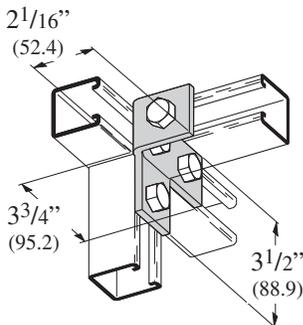
B357 FOUR HOLE OFFSET BENT TEE

- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



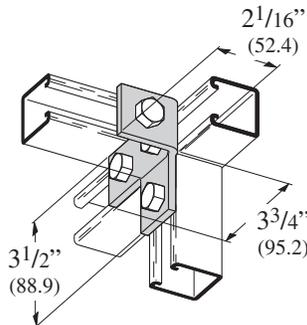
B238R FOUR HOLE (RIGHT HAND) OFFSET BENT TEE

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



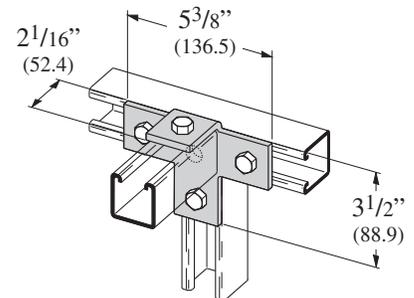
B238L FOUR HOLE (LEFT HAND) OFFSET BENT TEE

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

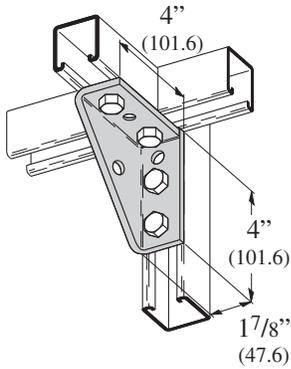


B239 FIVE HOLE OFFSET BENT TEE

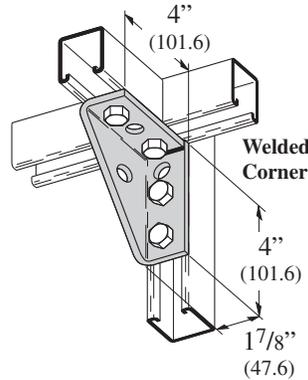
- Standard finishes: ZN, GRN
- Wt./C 96 Lbs. (43.5 kg)



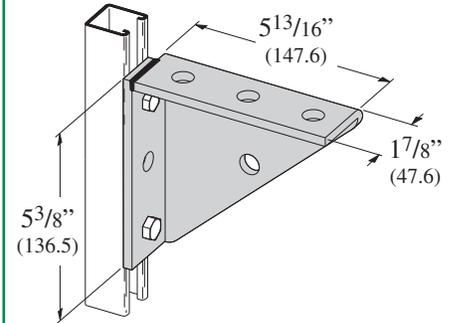
B844
UNIVERSAL SHELF BRACKET
 •Standard finishes: ZN, GRN, HDG, SS4
 •Wt./C 132 Lbs. (59.9 kg)



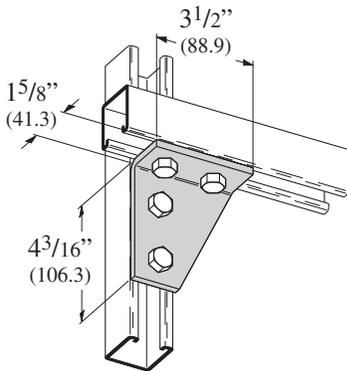
B844W
UNIVERSAL SHELF BRACKET- WELDED
 •Standard finishes: ZN, GRN
 •Wt./C 134 Lbs. (60.8 kg)



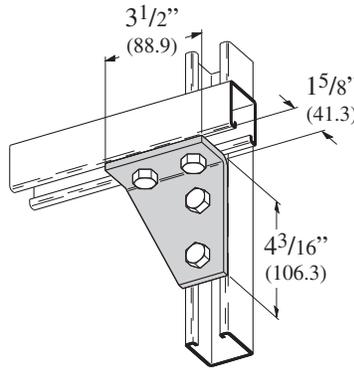
B888W
UNIVERSAL SHELF BRACKET- WELDED
 •Standard finishes: ZN, GRN
 •Wt./C 197 Lbs. (89.4 kg)



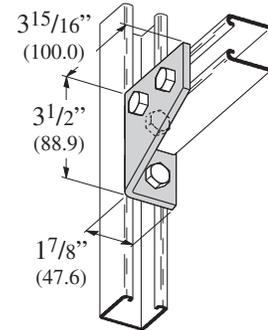
B234R
FOUR HOLE (RIGHT HAND) CORNER GUSSET
 •Standard finishes: ZN, GRN, HDG
 •Wt./C 100 Lbs. (45.3 kg)



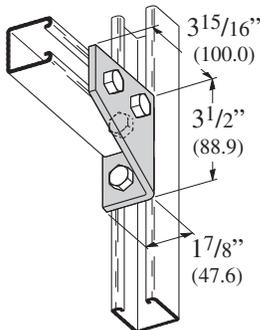
B234L
FOUR HOLE (LEFT HAND) CORNER GUSSET
 •Standard finishes: ZN, GRN, HDG
 •Wt./C 100 Lbs. (45.3 kg)



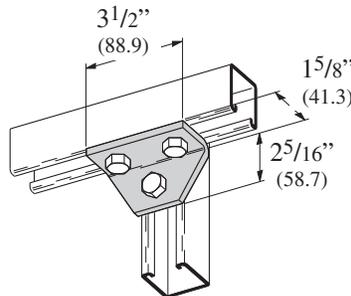
B134R
FOUR HOLE (RIGHT HAND) CORNER GUSSET
 •Standard finishes: ZN, GRN
 •Wt./C 100 Lbs. (45.3 kg)



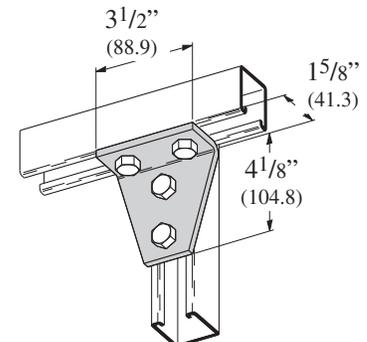
B134L
FOUR HOLE (LEFT HAND) CORNER GUSSET
 •Standard finishes: ZN, GRN
 •Wt./C 100 Lbs. (45.3 kg)



B125
THREE HOLE GUSSETTED SHELF ANGLE
 •Standard finishes: ZN, GRN
 •Wt./C 67 Lbs. (30.4 kg)



B118
FOUR HOLE GUSSETTED SHELF ANGLE
 •Standard finishes: ZN, GRN, HDG
 •Wt./C 102 Lbs. (46.2 kg)

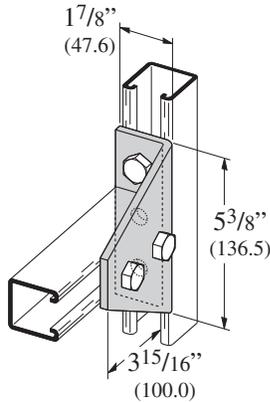


Reference page 58 for general fitting and standard finish specifications.

90° Angle Fittings

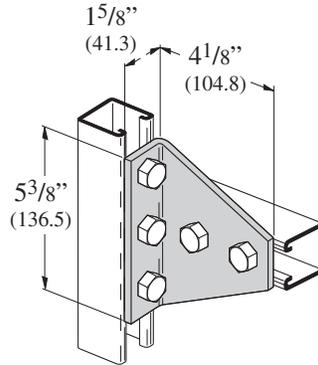
B485 FOUR HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 148 Lbs. (67.1 kg)



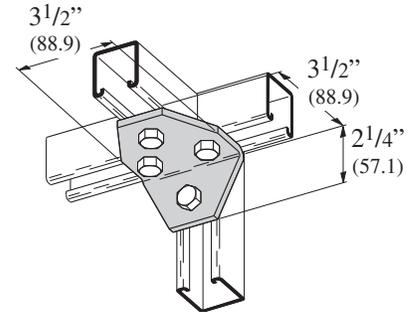
B533 FIVE HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 141 Lbs. (63.9 kg)



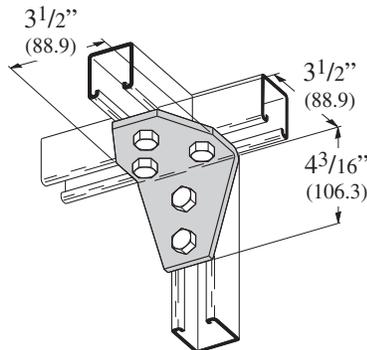
B126 FOUR HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 101 Lbs. (45.8 kg)



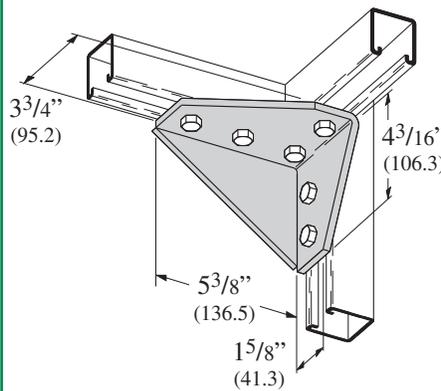
B127 FIVE HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 135 Lbs. (61.2 kg)



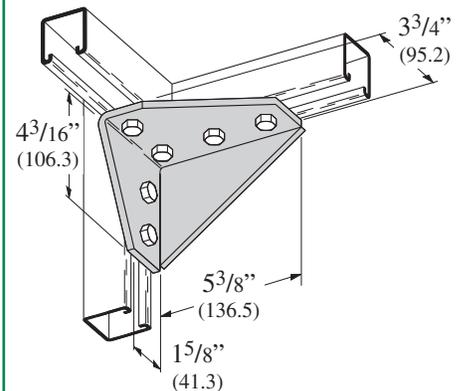
B503R SIX HOLE (RIGHT HAND) GUSSETED CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 229 Lbs. (103.9 kg)



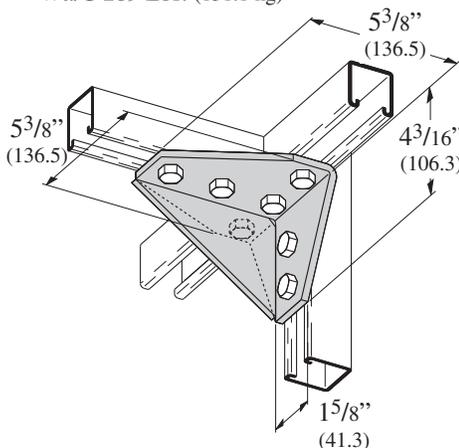
B503L SIX HOLE (LEFT HAND) GUSSETED CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 229 Lbs. (103.9 kg)



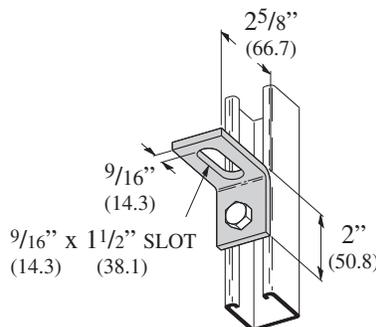
B663 SEVEN HOLE GUSSETED CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 289 Lbs. (131.1 kg)



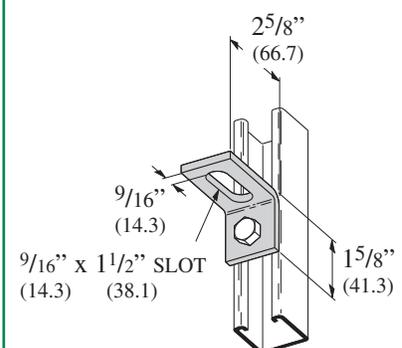
B371 TWO HOLE ADJUSTABLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 41 Lbs. (18.6 kg)



B372 TWO HOLE ADJUSTABLE CORNER ANGLE

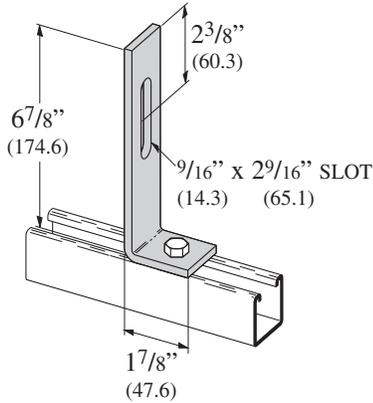
- Standard finishes: ZN, GRN
- Wt./C 38 Lbs. (17.2 kg)



Reference page 58 for general fitting and standard finish specifications.

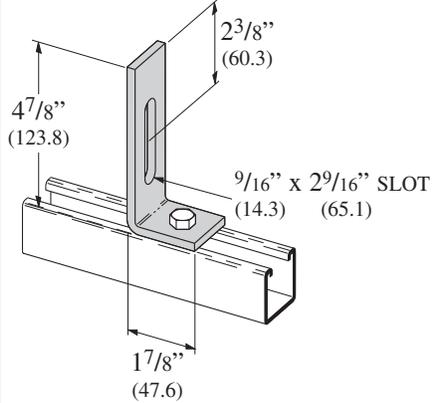
B496
TWO HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 85 Lbs. (38.5 kg)



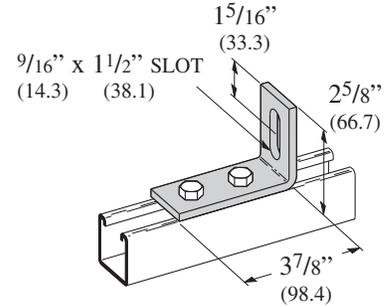
B496-1
TWO HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN, HDG
- Wt./C 58 Lbs. (26.3 kg)



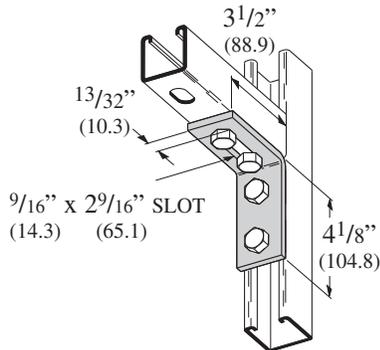
B371-2
THREE HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 61 Lbs. (27.6 kg)



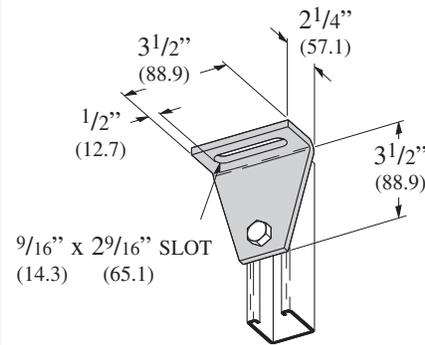
B104SH
THREE HOLE ADJUSTABLE
CORNER ANGLE

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



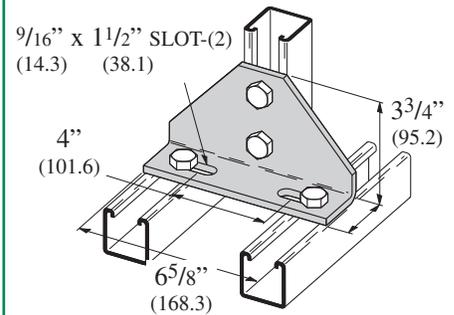
B461
TWO HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 87 Lbs. (39.4 kg)



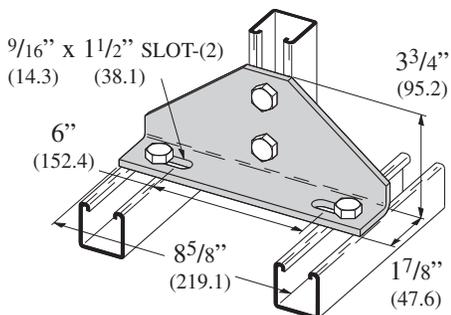
B112
FOUR HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 180 Lbs. (81.6 kg)



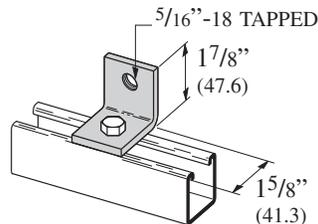
B113
FOUR HOLE ADJUSTABLE
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 256 Lbs. (116.1 kg)



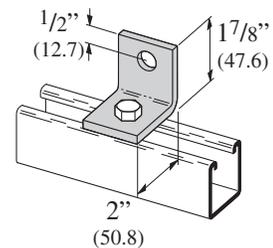
B109S
TWO HOLE TAPPED
CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 33 Lbs. (14.9 kg)



B521
TWO HOLE BUS DUCT ANGLE

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



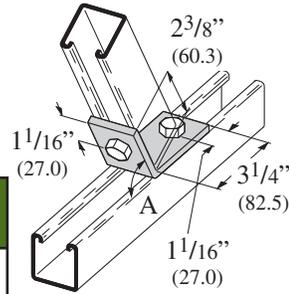
Reference page 58 for general fitting and standard finish specifications.

Angular Fittings

B147-B152 TWO HOLE OPEN ANGLE

•Standard finishes: ZN, GRN

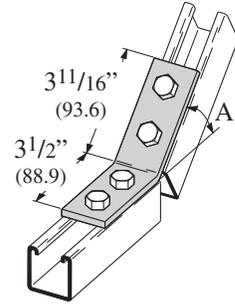
| Part No. | A | Wt./C | |
|----------|------|-------|--------|
| | | Lbs. | kg |
| B147 | 82½° | 63 | (28.6) |
| B148 | 75° | | |
| B149 | 67½° | | |
| B150 | 60° | | |
| B151 | 52½° | | |
| B152 | 37½° | | |



B243-B253 FOUR HOLE OPEN ANGLE

•Standard finishes: ZN, GRN

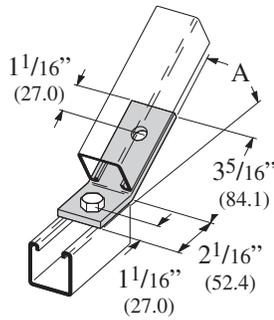
| Part No. | A | Wt./C | |
|----------|------|-------|--------|
| | | Lbs. | kg |
| B243 | 7½° | 77 | (34.9) |
| B244 | 15° | | |
| B245 | 22½° | | |
| B246 | 30° | | |
| B247 | 37½° | | |
| B248 | 45° | | |
| B249 | 52½° | | |
| B250 | 60° | | |
| B251 | 67½° | | |
| B252 | 75° | | |
| B253 | 82½° | | |



B162-B165 TWO HOLE OPEN ANGLE

•Standard finishes: ZN, GRN

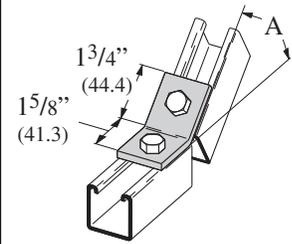
| Part No. | A | Wt./C | |
|----------|------|-------|--------|
| | | Lbs. | kg |
| B162 | 30° | 59 | (26.7) |
| B163 | 22½° | | |
| B164 | 15° | | |
| B165 | 7½° | | |



B322-B332 TWO HOLE OPEN SHORT ANGLE

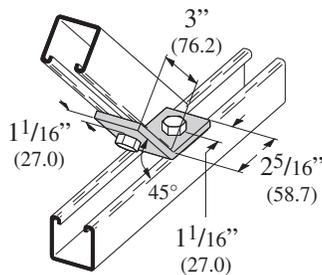
•Standard finishes: ZN, GRN

| Part No. | A | Wt./C | |
|----------|------|-------|--------|
| | | Lbs. | kg |
| B322 | 7½° | 35 | (15.9) |
| B323 | 15° | | |
| B324 | 22½° | | |
| B325 | 30° | | |
| B326 | 37½° | | |
| B327 | 45° | | |
| B328 | 52½° | | |
| B329 | 60° | | |
| B330 | 67½° | | |
| B331 | 75° | | |
| B332 | 82½° | | |



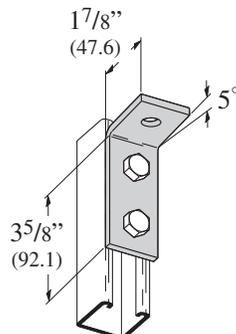
B154 TWO HOLE OPEN ANGLE

•Standard finishes: ZN, GRN, SS4
•Wt./C 58 Lbs. (26.3 kg)



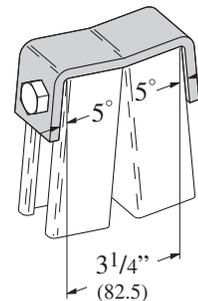
B522 THREE HOLE 95° OPEN ANGLE FITTING

•Standard finishes: ZN, GRN
•Wt./C 54 Lbs. (24.5 kg)



B488 TWO HOLE LEG CONNECTION

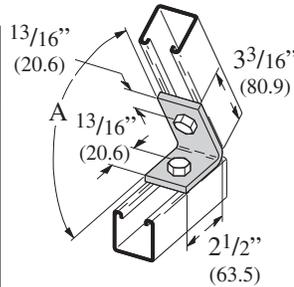
•Standard finishes: ZN, GRN
•Wt./C 100 Lbs. (45.3 kg)



B156 - B161 TWO HOLE CLOSED ANGLE

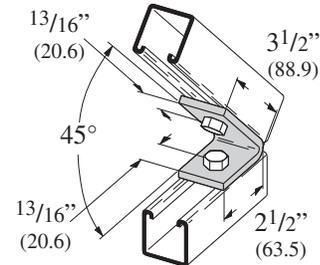
•Standard finishes: ZN, GRN

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



B155 TWO HOLE CLOSED ANGLE

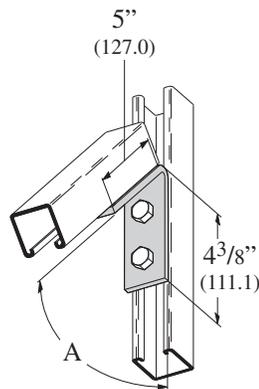
•Standard finishes: ZN, GRN, HDG, SS4
•Wt./C 63 Lbs. (28.6 kg)



B363 - B369 FOUR HOLE CLOSED ANGLE

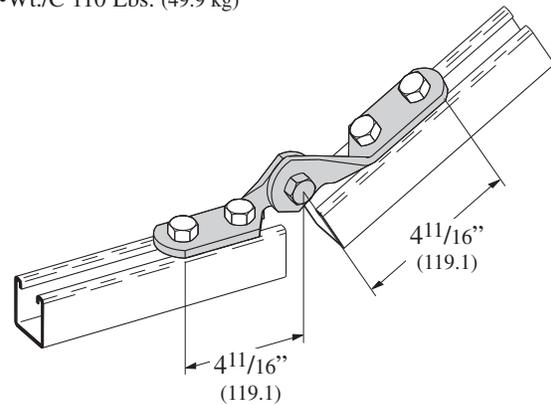
•Standard finishes: ZN, GRN

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



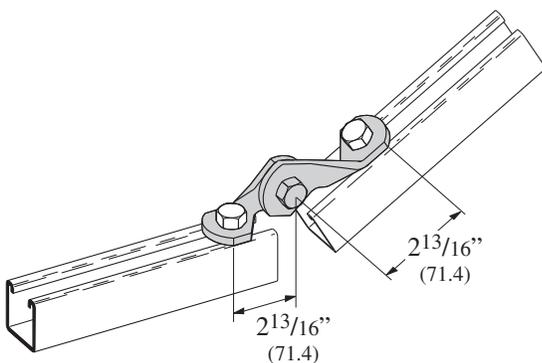
B335 FOUR HOLE ADJUSTABLE HINGE

•Standard finishes: ZN, GRN
•Wt./C 110 Lbs. (49.9 kg)



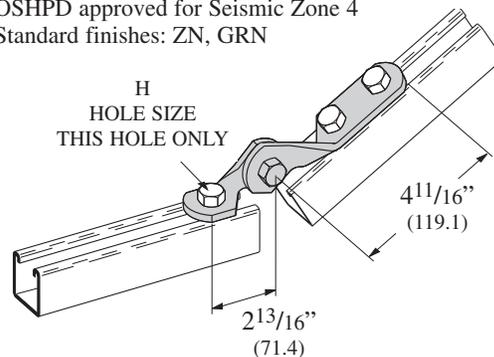
B335-1 TWO HOLE ADJUSTABLE HINGE

•Standard finishes: ZN, GRN
•Wt./C 78 Lbs. (35.4 kg)



B335-2 SERIES THREE HOLE ADJUSTABLE HINGE

•OSHPD approved for Seismic Zone 4
•Standard finishes: ZN, GRN



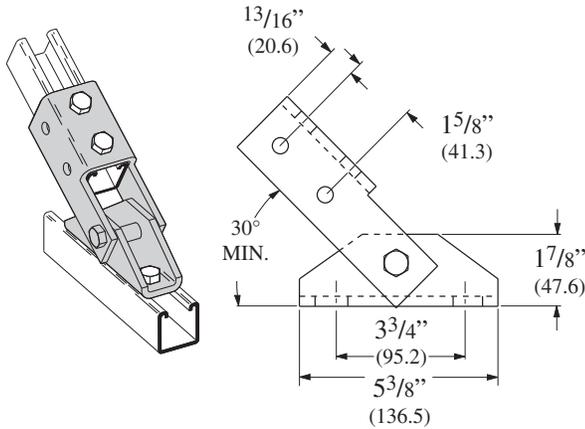
| Part No. & Size | Hole Size H | | Wt./C | |
|-----------------|-------------|--------|-------|--------|
| | H | H | Lbs. | kg |
| B335-2-3/8 | 7/16" | (11.1) | 96 | (43.2) |
| B335-2-1/2 | 9/16" | (14.3) | 94 | (42.3) |
| B335-2-5/8 | 11/16" | (17.4) | 92 | (41.4) |
| B335-2-3/4 | 13/16" | (20.6) |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

Reference page 58 for general fitting and standard finish specifications.

Angular Fittings

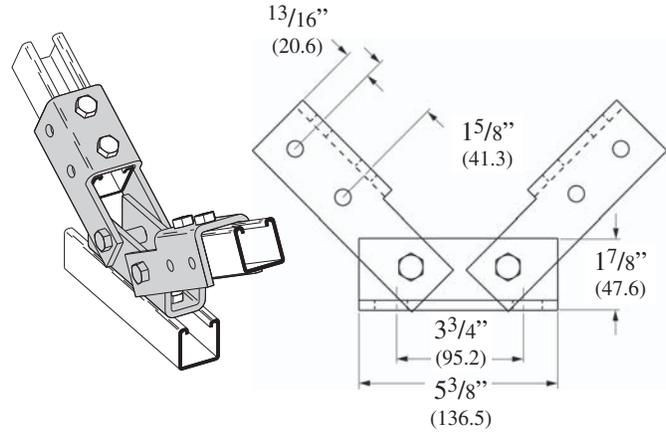
B634 SINGLE CHANNEL ADJUSTABLE BRACE

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



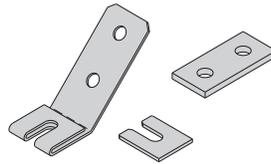
B635 DOUBLE CHANNEL ADJUSTABLE BRACE

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

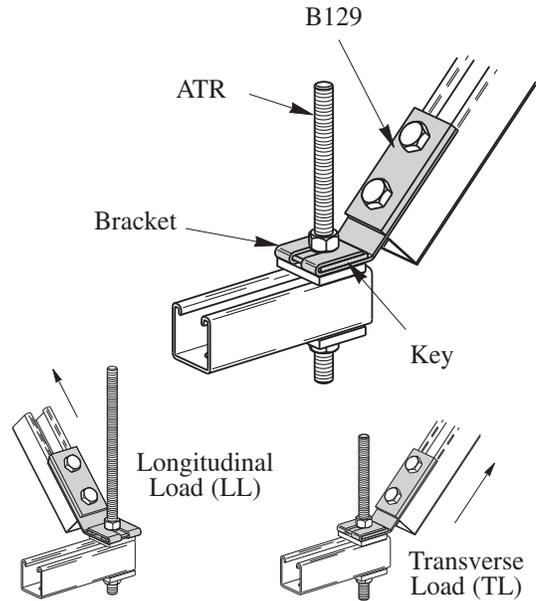


B650 SERIES SEISMIC RETROFIT BRACKET

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



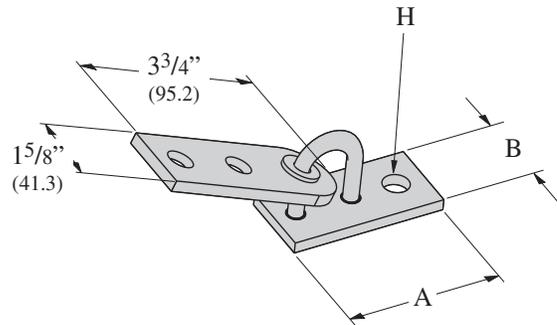
| Part No. & Size | For Rod Size | TL | | LL | | Wt./C | |
|-----------------|--------------|------|--------|------|--------|-------|--------|
| | | Lbs. | kN | Lbs. | kN | Lbs. | kg |
| B650-3/8 | 3/8" | 1100 | (4.89) | 1100 | (4.89) | 92 | (41.4) |
| B650-1/2 | 1/2" | 1500 | (6.67) | 1500 | (6.67)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



B633 ADJUSTABLE SEISMIC HINGE FITTING

- B633-1/2 thru B633-7/8 - OSHPD approved for Seismic Zone 4.
- Use 1/2" Bolt & Channel Nut on two hole side of Connector Fitting (Torque to 50 ft.-lbs.)
- Allows for swivel in two planes.
- Standard finish: ZN

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

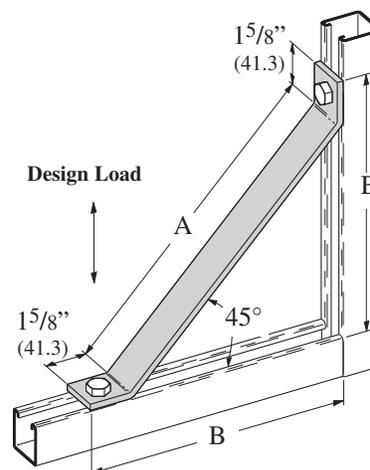


Reference page 58 for general fitting and standard finish specifications.

B261 TWO HOLE 45° KNEE BRACE

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

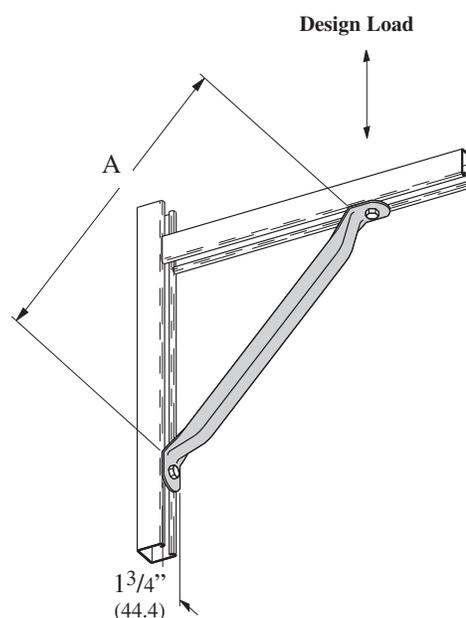
| Part No. | A | (A) | B | (B) | Design Load | | Wt./C | |
|----------|----------------------------------|---------|-----------------------------------|---------|-------------|--------|-------|---------|
| | | | | | Lbs. | kN | Lbs. | kg |
| B261-8 | 8" | (203.2) | 7 ³ / ₈ " | (187.3) | 1500 | (6.67)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



B631 TWO HOLE 45° TUBING KNEE BRACE

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

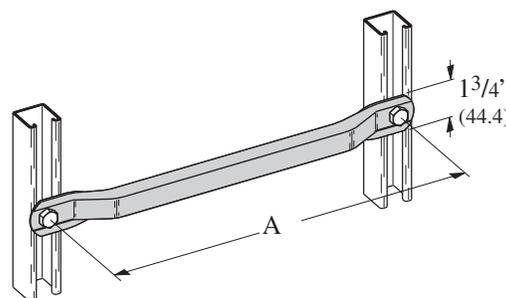
| Part No. | A | (A) | Design Load | | Wt./C | |
|----------|-----|----------|-------------|--------|-------|---------|
| | | | Lbs. | kN | Lbs. | kg |
| B631-18 | 18" | (457.2) | 1500 | (6.67) | 145 | (65.8) |
| B631-24 | 24" | (609.6) | 1500 | (6.67) | 186 | (84.4) |
| B631-30 | 30" | (762.0) | 1500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



B632 TWO HOLE STRAIGHT TUBING BRACE

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

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

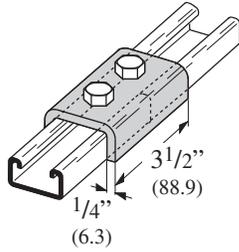


Reference page 58 for general fitting and standard finish specifications.

Clevis Fittings

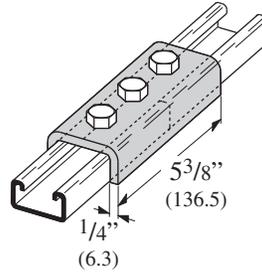
B169 TWO HOLE SPLICE CLEVIS FOR B52

- Standard finishes: ZN, GRN
- Wt./C 84 Lbs. (38.1 kg)



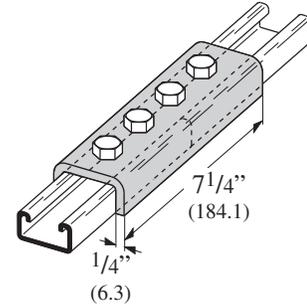
B168 THREE HOLE SPLICE CLEVIS FOR B52

- Standard finishes: ZN, GRN
- Wt./C 126 Lbs. (57.1 kg)



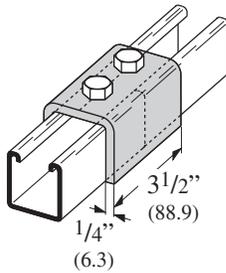
B167 FOUR HOLE SPLICE CLEVIS FOR B52

- Standard finishes: ZN, GRN
- Wt./C 178 Lbs. (80.7 kg)



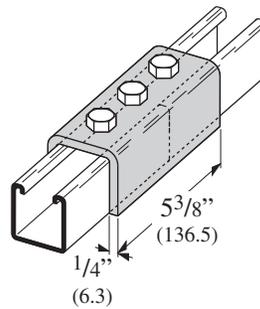
B170 TWO HOLE SPLICE CLEVIS FOR B22 OR B52A

- Standard finishes: ZN, GRN
- Wt./C 123 Lbs. (55.8 kg)



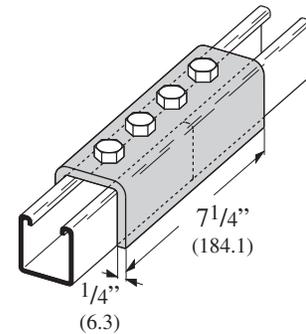
B171 THREE HOLE SPLICE CLEVIS FOR B22 OR B52A

- Standard finishes: ZN, GRN
- Wt./C 195 Lbs. (88.4 kg)



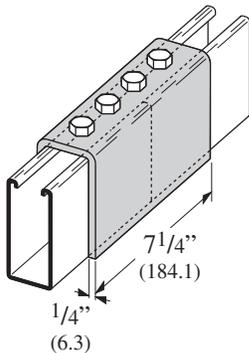
B172 FOUR HOLE SPLICE CLEVIS FOR B22 OR B52A

- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (120.6 kg)



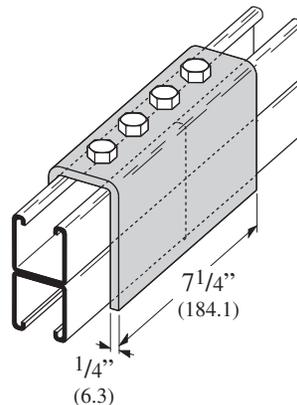
B172-12 FOUR HOLE SPLICE CLEVIS FOR B12

- Standard finishes: ZN, GRN
- Wt./C 326 Lbs. (147.8 kg)



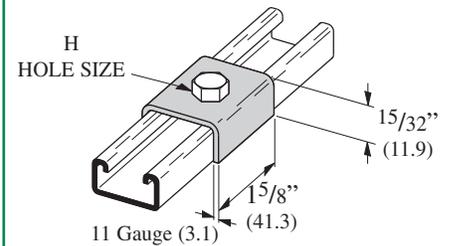
B172-22A FOUR HOLE SPLICE CLEVIS FOR B11 OR B22A

- Standard finishes: ZN, GRN
- Wt./C 406 Lbs. (184.1 kg)



B450 U-WASHER

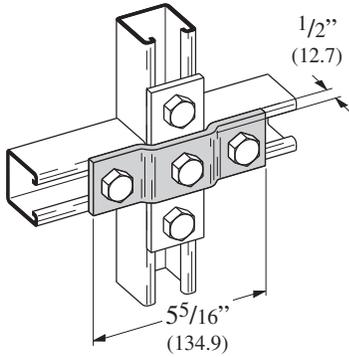
- Material: ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



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

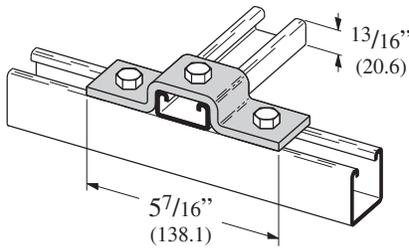
B527
THREE HOLE OFFSET PLATE CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



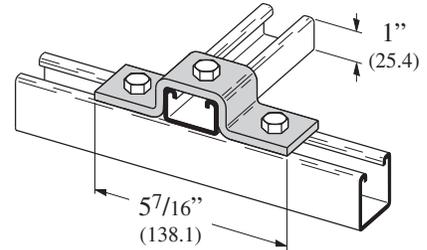
B116-52
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



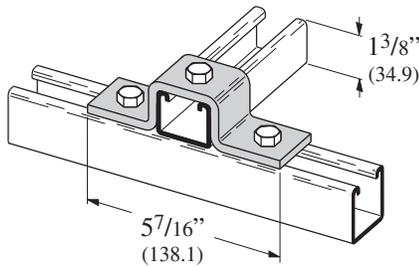
B116-42
THREE HOLE U-SUPPORT

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



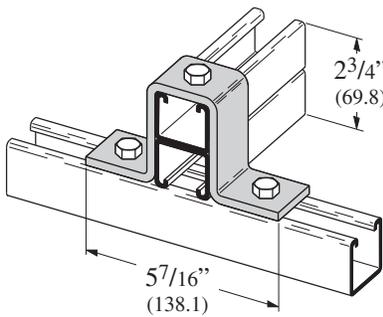
B116-32
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 84 Lbs. (38.1 kg)



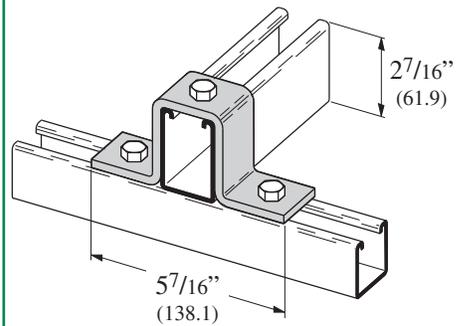
B116-32A
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 116 Lbs. (52.6 kg)



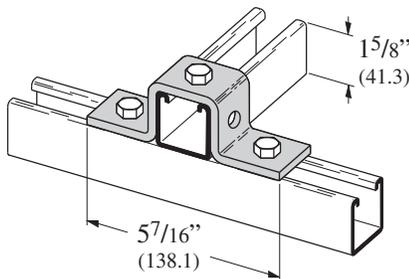
B116-12
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 108 Lbs. (49.0 kg)



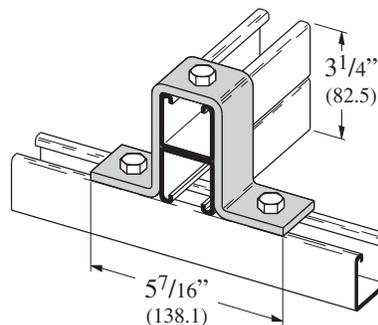
B107
FIVE HOLE U-SUPPORT

- Standard finishes: ZN, GRN, HDG
- Wt./C 85 Lbs. (38.5 kg)



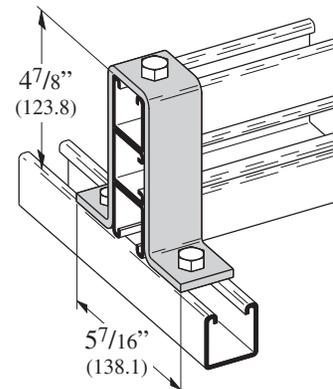
B107-22A
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 126 Lbs. (57.1 kg)



B588
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 157 Lbs. (71.2 kg)

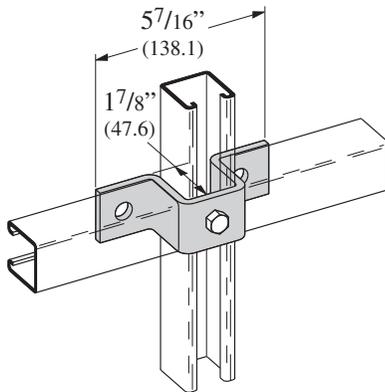


Reference page 58 for general fitting and standard finish specifications.

'U' Fittings

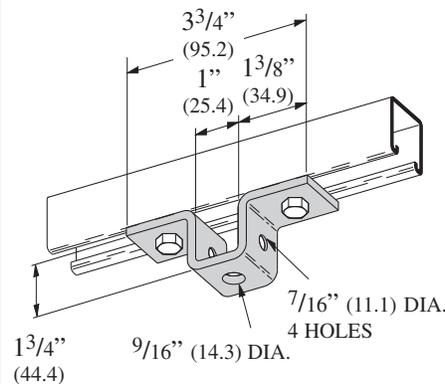
B412 THREE HOLE OFFSET U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 89 Lbs. (40.3 kg)



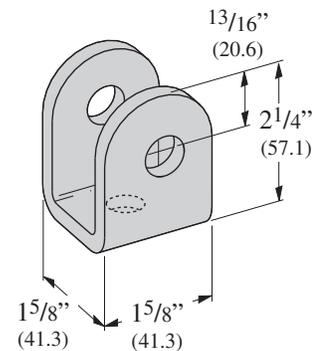
B107S FIVE HOLE U-SUPPORT

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



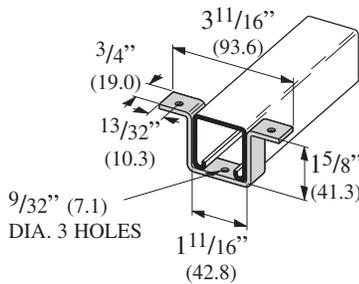
B596 THREE HOLE SWIVEL CLEVIS

- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



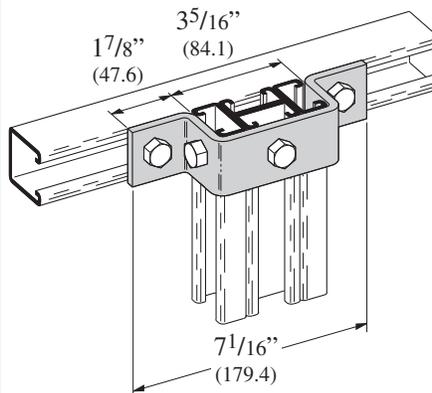
B578 THREE HOLE LIGHT-WEIGHT U-SUPPORT

- Material: 10 Gauge (3.4)
ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 18 Lbs. (8.1 kg)



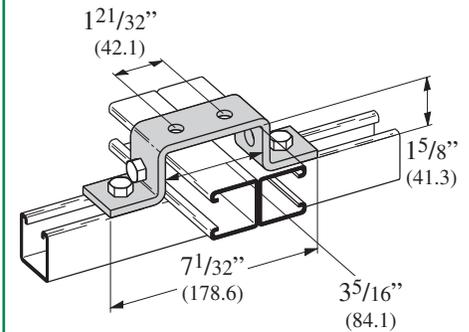
B594 FIVE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 106 Lbs. (48.1 kg)



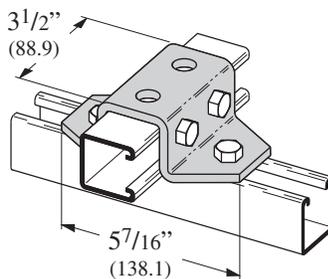
B266 SIX HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 105 Lbs. (47.6 kg)



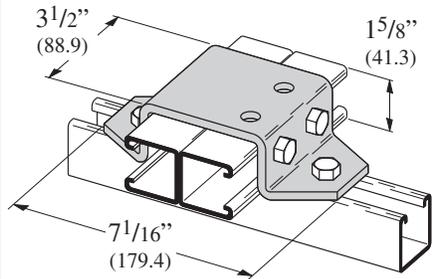
B425 SIX HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 167 Lbs. (75.7 kg)



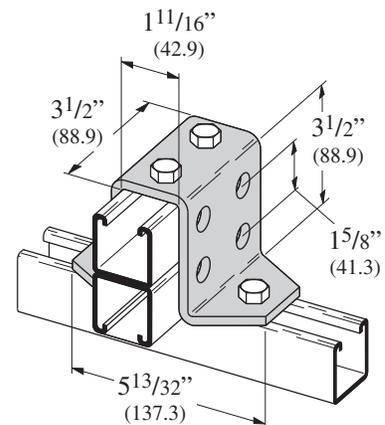
B581 EIGHT HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)



B519 EIGHT HOLE U-SUPPORT

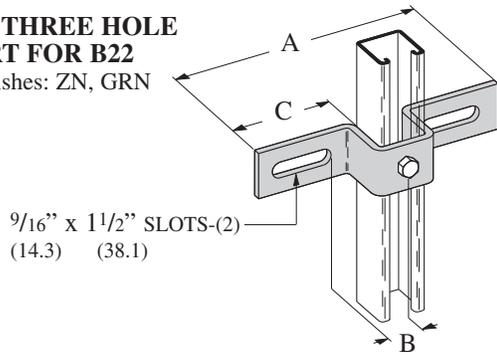
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (102.5 kg)



Reference page 58 for general fitting and standard finish specifications.

B333 SLOTTED THREE HOLE U-SUPPORT FOR B22

•Standard finishes: ZN, GRN



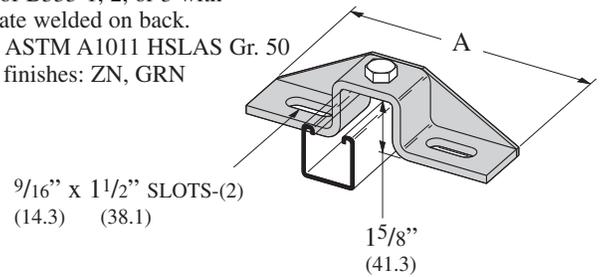
| Part No. | A | | B | | C | | Wt./C | |
|----------|---------|---------|----------|--------|---------|---------|-------|--------|
| | A | (A) | B | (B) | C | (C) | Lbs. | kg |
| B333-1 | 7 1/2" | (190.5) | 1 5/16" | (33.3) | 2 7/8" | (73.0) | 103 | (46.7) |
| B333-2 | 8 1/2" | (215.9) | 1 15/16" | (49.2)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

B451 SLOTTED THREE HOLE U-SUPPORT WITH GUSSET FOR B22

•Consists of B333-1, 2, or 3 with gusset plate welded on back.

•Material: ASTM A1011 HSLAS Gr. 50

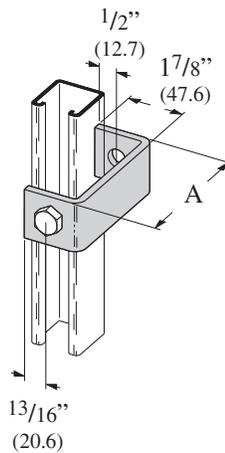
•Standard finishes: ZN, GRN



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

B408 TWO HOLE BUS DUCT CLEVIS

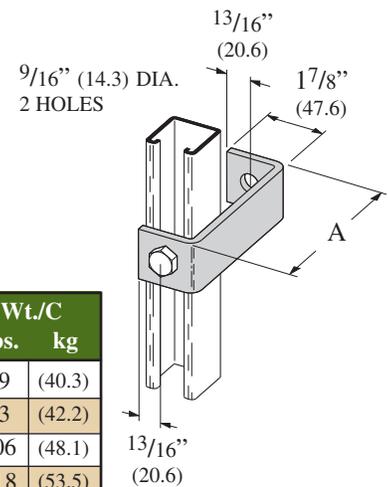
•Standard finishes: ZN, GRN



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

B358 TWO HOLE CLEVIS

•Standard finishes: ZN, GRN

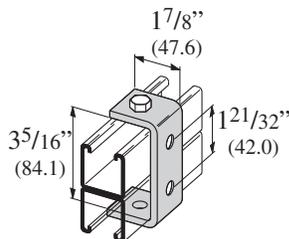


| Part No. | A | | Wt./C | |
|----------|----|---------|-------|--------|
| | A | (A) | Lbs. | kg |
| B358-4 | 4" | (101.6) | 89 | (40.3) |
| B358-5 | 5" | (127.0) | 93 | (42.2) |
| B358-6 | 6" | (152.4) | 106 | (48.1) |
| B358-7 | 7" | (177.8) | 118 | (53.5) |
| B358-8 | 8" | (203.2) | 132 | (59.9)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

B173 FOUR HOLE CLEVIS

•Standard finishes: ZN, GRN

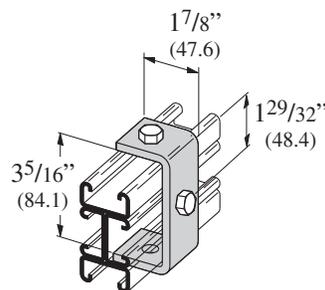
•Wt./C 71 Lbs. (32.2 kg)



B595 THREE HOLE CLEVIS

•Standard finishes: ZN, GRN

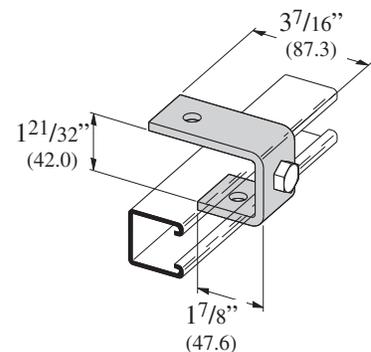
•Wt./C 75 Lbs. (34.0 kg)



B405 THREE HOLE SUSPENSION CLEVIS

•Standard finishes: ZN, GRN

•Wt./C 75 Lbs. (34.0 kg)



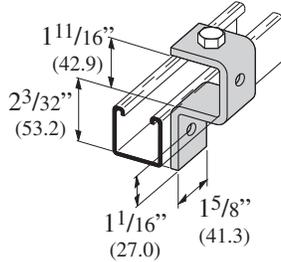
Reference page 58 for general fitting and standard finish specifications.

'U' Fittings

B398-1

THREE HOLE CUP SUPPORT

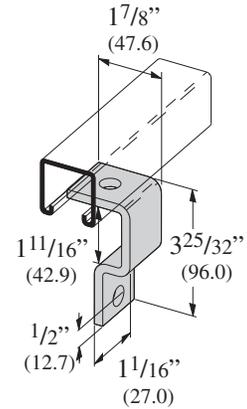
- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)



B415

TWO HOLE BUS DUCT CONNECTION

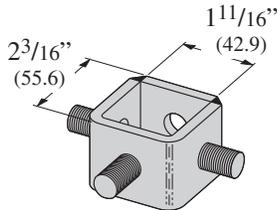
- Standard finishes: ZN, GRN
- Wt./C 56 Lbs. (25.4 kg)



B400

THREE STUD RING CONNECTION

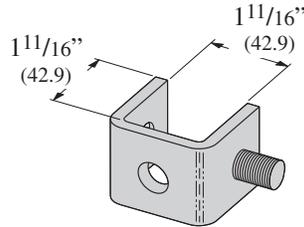
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 85 Lbs. (38.5 kg)



B400-1

ONE STUD RING CONNECTION

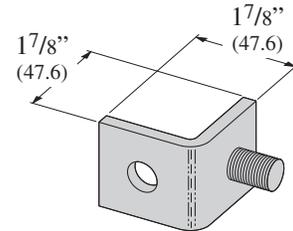
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 53 Lbs. (24.0 kg)



B400-2

ONE STUD RING CONNECTION

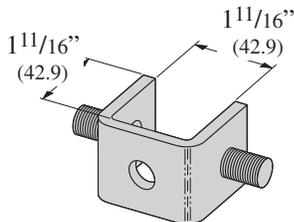
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 40 Lbs. (18.1 kg)



B400-3

TWO STUD RING CONNECTION

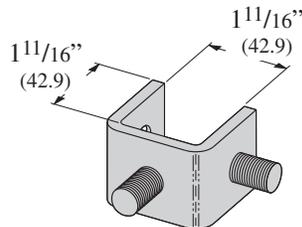
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



B400-4

TWO STUD RING CONNECTION

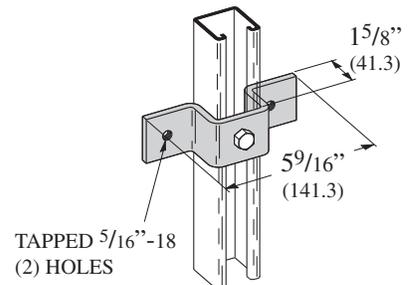
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



B536

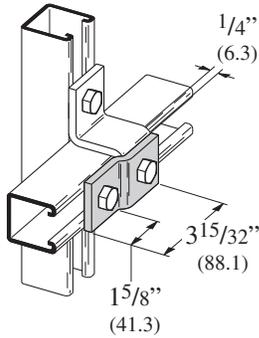
TAPPED U-SUPPORT

- Standard finishes: ZN
- Wt./C 87 Lbs. (39.4 kg)



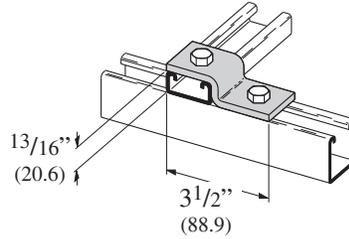
B526
TWO HOLE
OFFSET Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 38 Lbs. (17.2 kg)



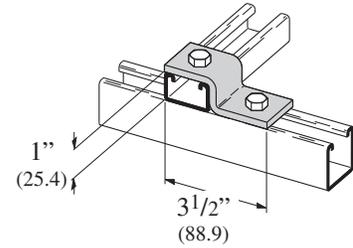
B106-52
TWO HOLE
Z-SUPPORT FOR B52

- Standard finishes: ZN, GRN
- Wt./C 40 Lbs. (18.1 kg)



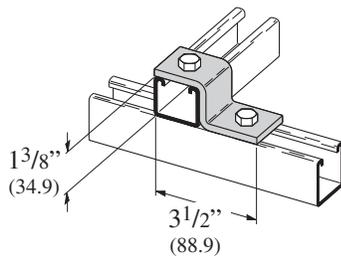
B106-42
TWO HOLE
Z-SUPPORT FOR B42

- Standard finishes: ZN, GRN
- Wt./C 44 Lbs. (20.0 kg)



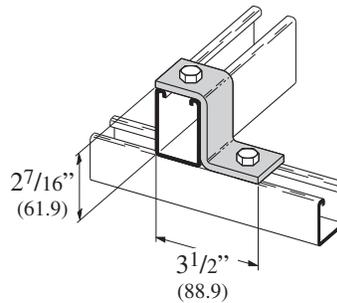
B106-32
TWO HOLE
Z-SUPPORT FOR B32

- Standard finishes: ZN, GRN
- Wt./C 51 Lbs. (23.1 kg)



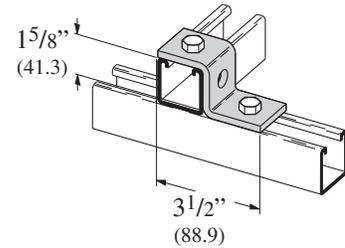
B106-12
TWO HOLE
Z-SUPPORT FOR B12

- Standard finishes: ZN, GRN
- Wt./C 63 Lbs. (28.6 kg)



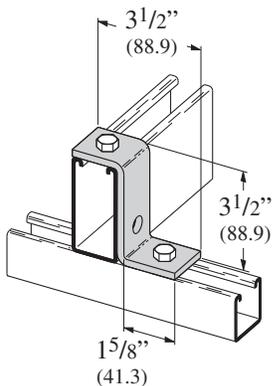
B105
THREE HOLE
Z-SUPPORT FOR B22

- Standard finishes: ZN, GRN, HDG
- Wt./C 51 Lbs. (23.1 kg)



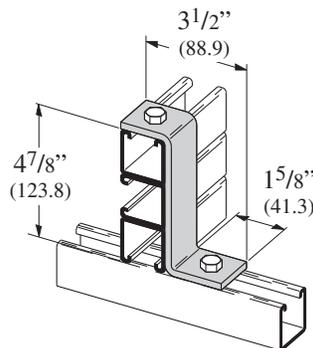
B110
THREE HOLE
Z-SUPPORT FOR B11

- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



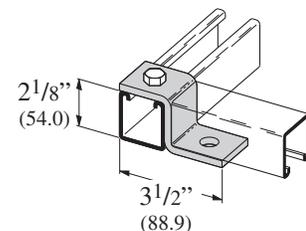
B586
TWO HOLE
Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 90 Lbs. (40.8 kg)



B108
TWO HOLE
OFFSET Z-SUPPORT

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

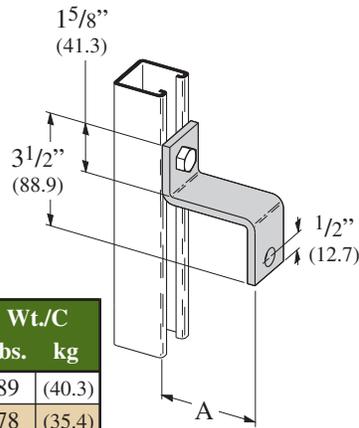


Reference page 58 for general fitting and standard finish specifications.

'Z' Fittings

B387 TWO HOLE Z-BUS DUCT CONNECTION

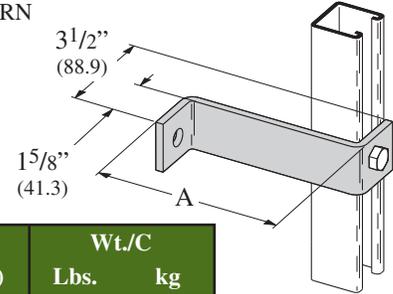
•Standard finishes: ZN, GRN



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

B407 TWO HOLE Z-SUPPORT

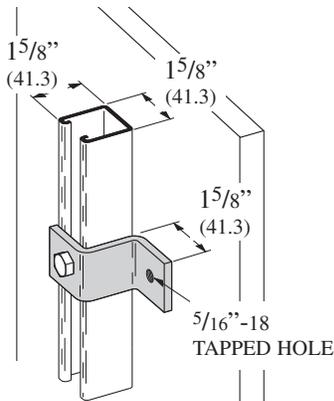
•Standard finishes: ZN, GRN



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

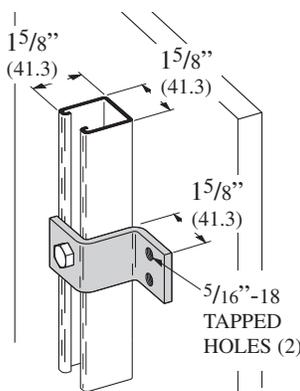
B534 TAPPED Z-SUPPORT

•Standard finishes: ZN
•Wt./C 51 Lbs. (23.1 kg)



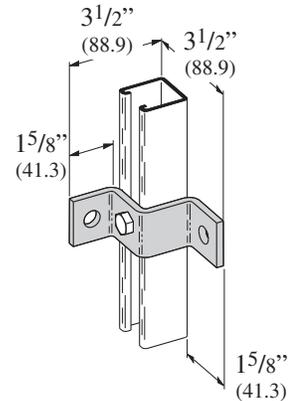
B535 TAPPED Z-SUPPORT

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



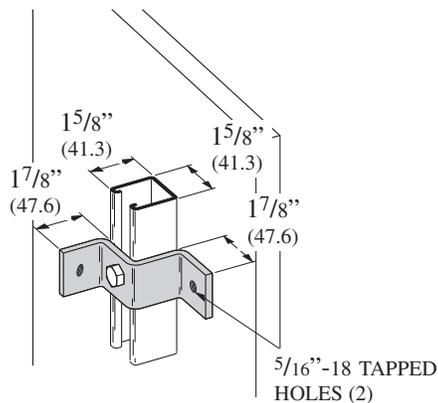
B111 THREE HOLE SHEATH CORNER CONNECTION

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



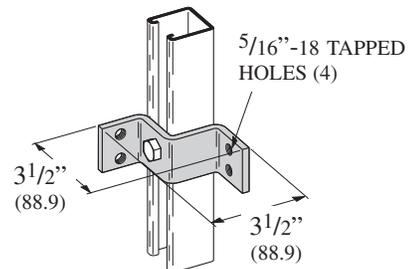
B538 TAPPED CORNER CONNECTION

•Standard finishes: ZN
•Wt./C 71 Lbs. (32.2 kg)



B539 TAPPED CORNER CONNECTION

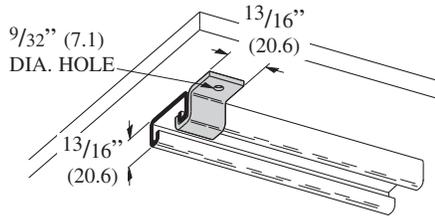
•Standard finishes: ZN
•Wt./C 68 Lbs. (30.8 kg)



Reference page 58 for general fitting and standard finish specifications.

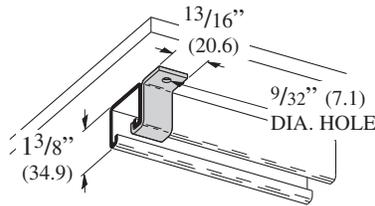
B410-52 CHANNEL HANGER BRACKET FOR B52

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



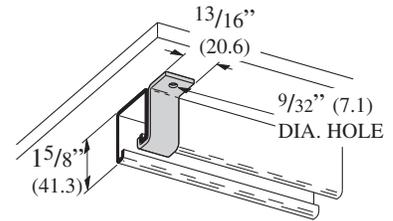
B410-32 CHANNEL HANGER BRACKET FOR B32

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



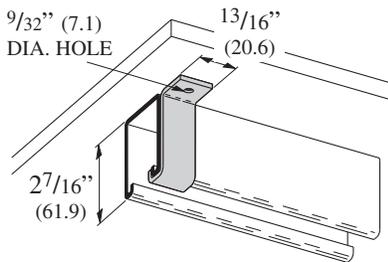
B410-22 CHANNEL HANGER BRACKET FOR B22

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



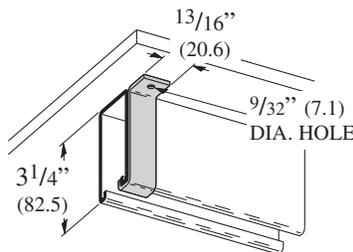
B410-12 CHANNEL HANGER BRACKET FOR B12

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



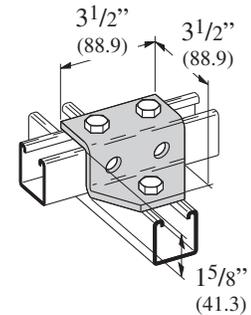
B410-11 CHANNEL HANGER BRACKET FOR B11

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



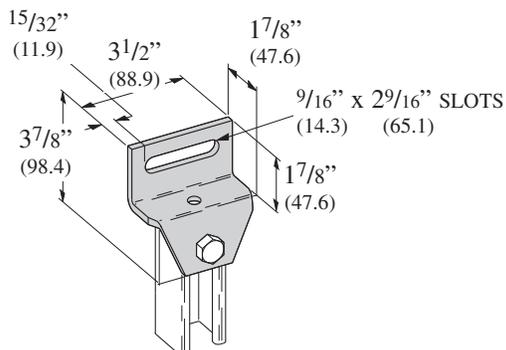
B580 FIVE HOLE GUSSETED Z-SUPPORT

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



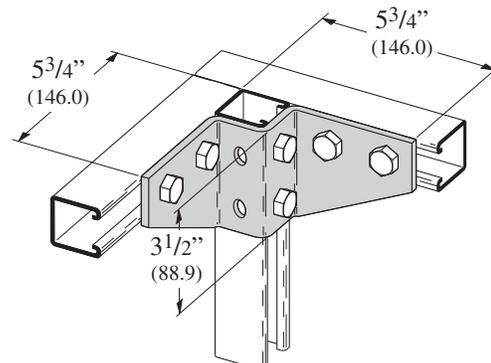
B515 ADJUSTABLE OFFSET GUSSETED Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 93 Lbs. (42.2 kg)



B428 EIGHT HOLE GUSSETED CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 203 Lbs. (92.1 kg)

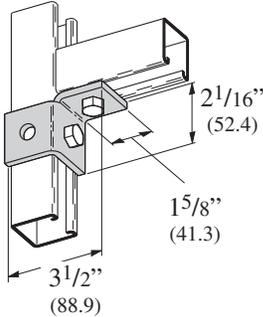


Reference page 58 for general fitting and standard finish specifications.

Wing Fittings

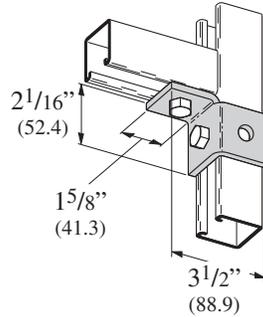
B267R THREE HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



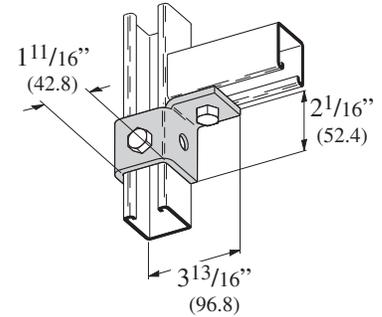
B267L THREE HOLE SINGLE CORNER CONNECTION (LEFT HAND)

- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



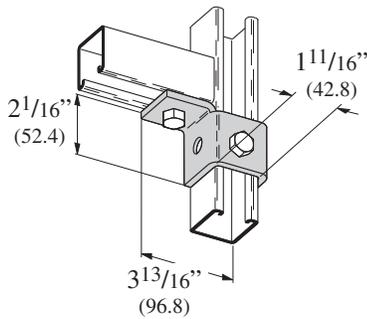
B270R FOUR HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



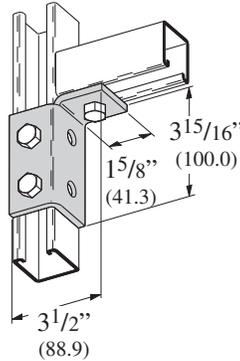
B270L FOUR HOLE SINGLE CORNER CONNECTION (LEFT HAND)

- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



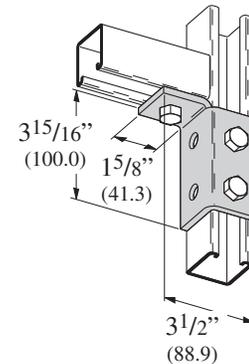
B268R FIVE HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

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



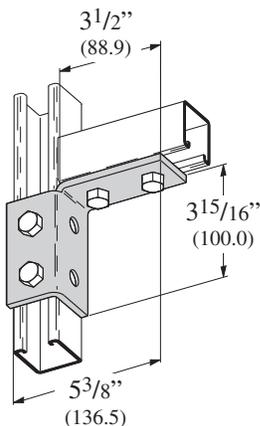
B268L FIVE HOLE SINGLE CORNER CONNECTION (LEFT HAND)

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



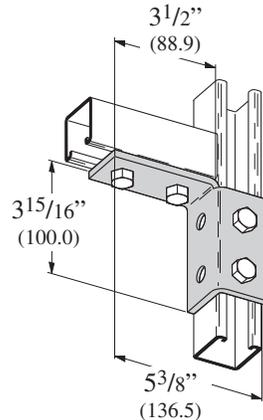
B269R SIX HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

- Standard finishes: ZN, GRN
- Wt./C 120 Lbs. (54.4 kg)



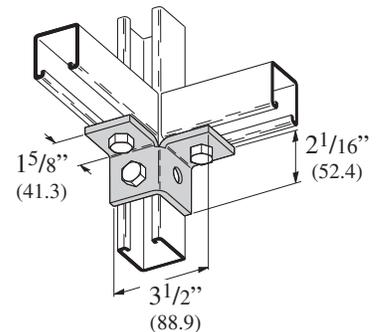
B269L SIX HOLE SINGLE CORNER CONNECTION (LEFT HAND)

- Standard finishes: ZN, GRN
- Wt./C 120 Lbs. (54.4 kg)



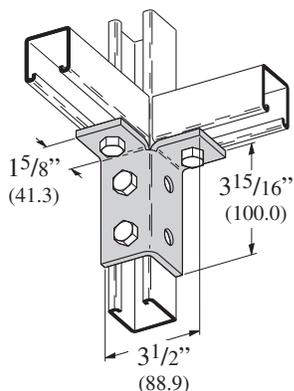
B119 FOUR HOLE DOUBLE CORNER CONNECTION

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



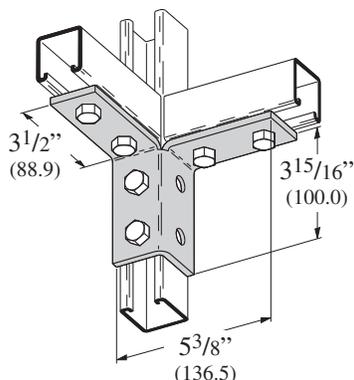
B120 SIX HOLE DOUBLE CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 110 Lbs. (49.9 kg)



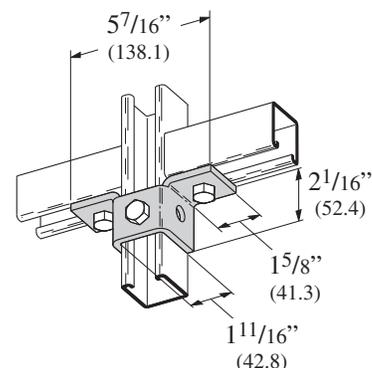
B121 EIGHT HOLE DOUBLE CORNER CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 152 Lbs. (68.9 kg)



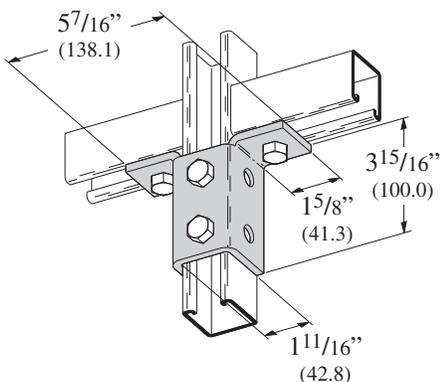
B271 FIVE HOLE DOUBLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 95 Lbs. (43.1 kg)



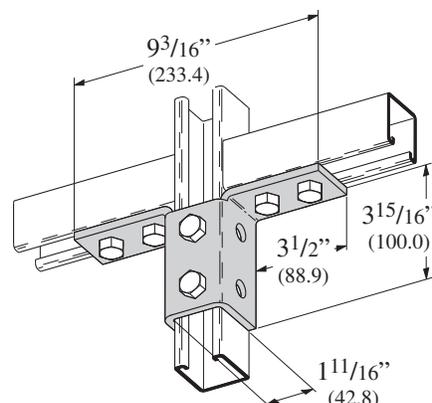
B272 EIGHT HOLE DOUBLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 156 Lbs. (70.7 kg)



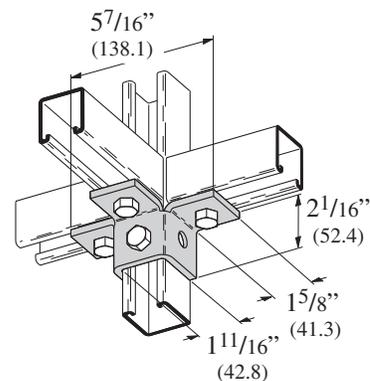
B273 TEN HOLE DOUBLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 185 Lbs. (83.9 kg)



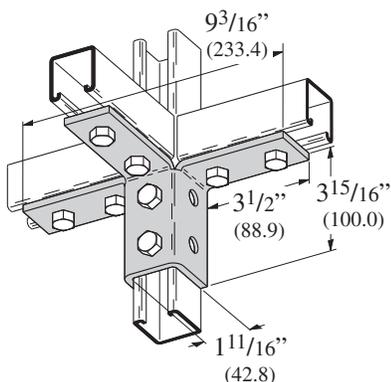
B122 SIX HOLE TRIPLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 110 Lbs. (49.9 kg)



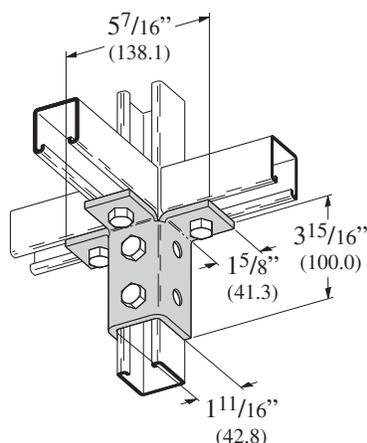
B123 TWELVE HOLE TRIPLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 234 Lbs. (106.1 kg)



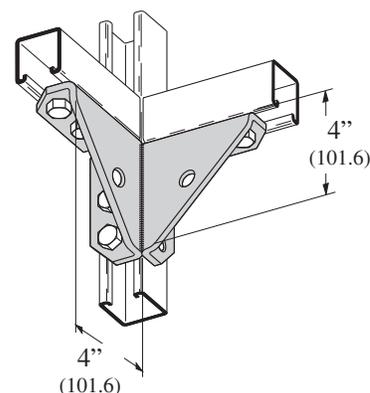
B124 NINE HOLE TRIPLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 177 Lbs. (80.3 kg)



B276 FOURTEEN HOLE DOUBLE CORNER GUSSETED CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 196 Lbs. (88.9 kg)

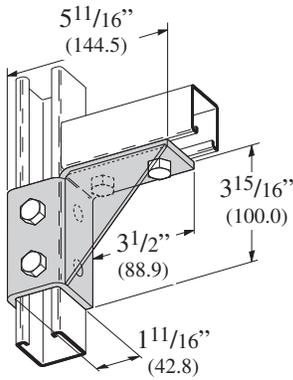


Reference page 58 for general fitting and standard finish specifications.

Wing Fittings

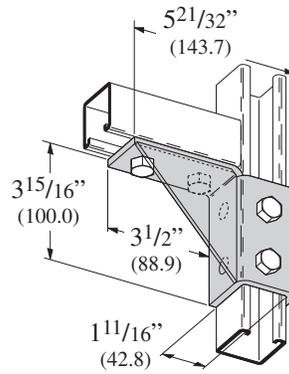
B274R EIGHT HOLE SINGLE CORNER GUSSETED CONNECTION (RIGHT HAND)

- Standard finishes: ZN, GRN
- Wt./C 176 Lbs. (79.8 kg)



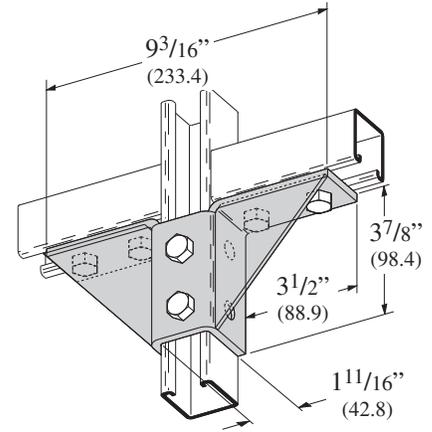
B274L EIGHT HOLE SINGLE CORNER GUSSETED CONNECTION (LEFT HAND)

- Standard finishes: ZN, GRN
- Wt./C 176 Lbs. (79.8 kg)



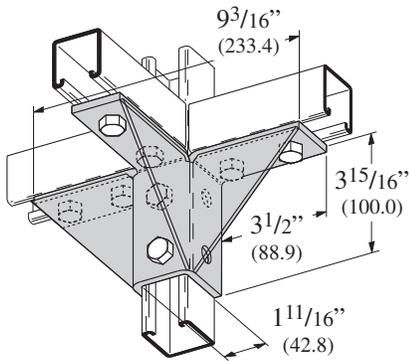
B495 TEN HOLE DOUBLE WING GUSSETED CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 240 Lbs. (108.8 kg)



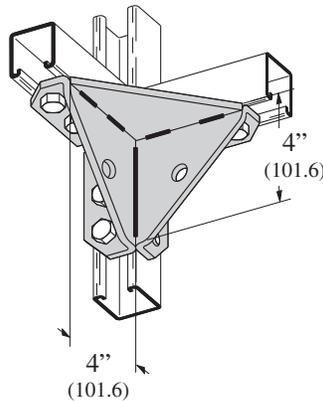
B277 TWELVE HOLE TRIPLE WING GUSSETED CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 285 Lbs. (129.3 kg)



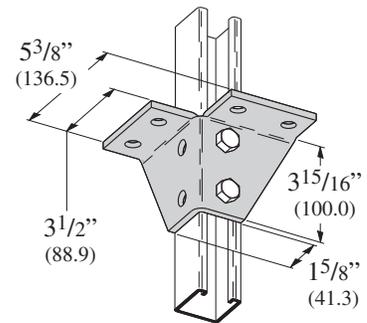
B362 EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 226 Lbs. (102.5 kg)



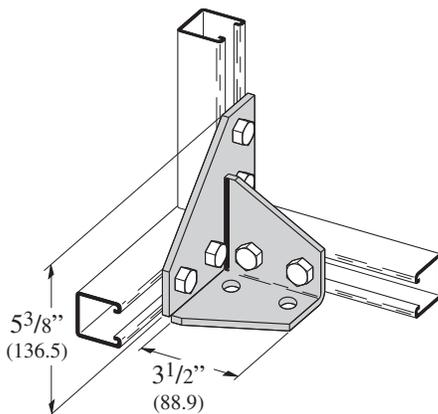
B571 EIGHT HOLE WING CONNECTION

- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)



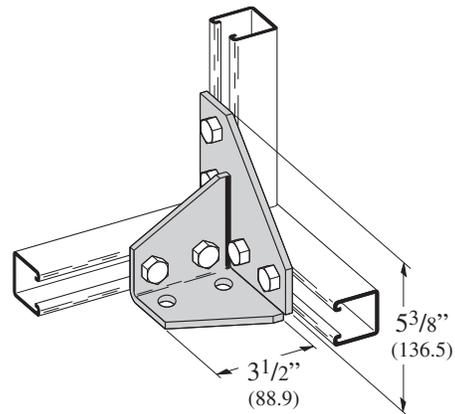
B346L EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION (LEFT HAND)

- Standard finishes: ZN, GRN
- Wt./C 242 Lbs. (109.8 kg)



B346R EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION (RIGHT HAND)

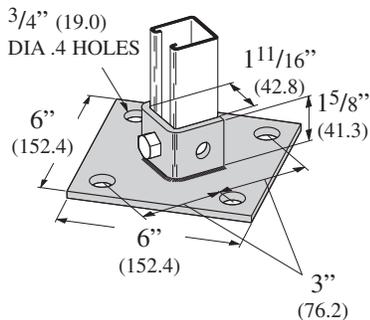
- Standard finishes: ZN, GRN
- Wt./C 242 Lbs. (109.8 kg)



Reference page 58 for general fitting and standard finish specifications.

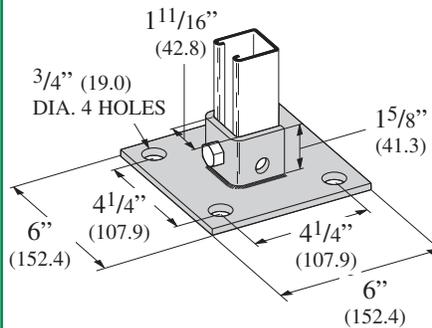
B279 POST BASE FOR B22

- Standard finishes: ZN, GRN
- Wt./C 314 Lbs. (142.4 kg)



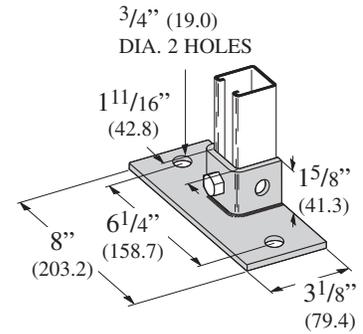
B279SQ POST BASE FOR B22

- Standard finishes: ZN, GRN
- Wt./C 314 Lbs. (142.4 kg)



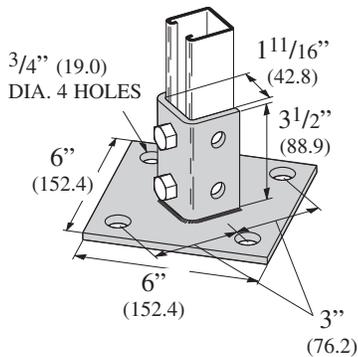
B279FL POST BASE FOR B22

- Standard finishes: ZN, GRN
- Wt./C 230 Lbs. (104.3 kg)



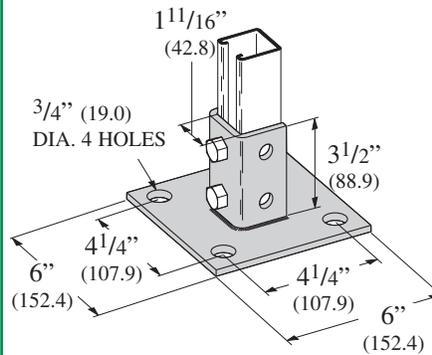
B280 POST BASE FOR B22

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



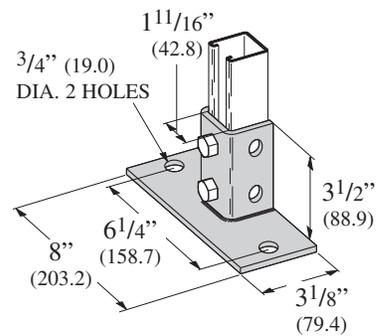
B280SQ POST BASE FOR B22

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



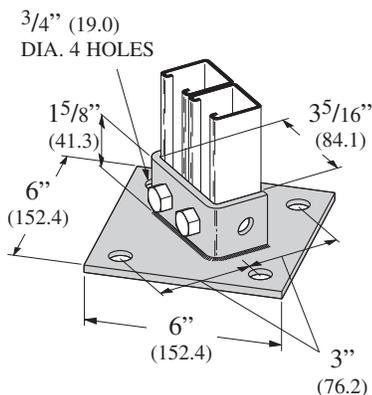
B280FL POST BASE FOR B22

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 312 Lbs. (141.5 kg)



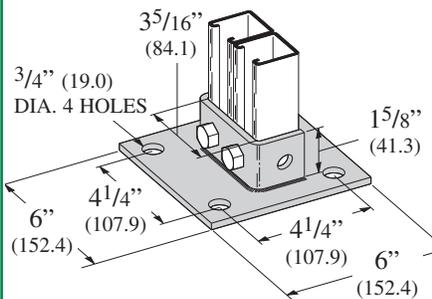
B281A POST BASE FOR B22A, B,C, ETC.

- Standard finishes: ZN, GRN
- Wt./C 330 Lbs. (149.7 kg)



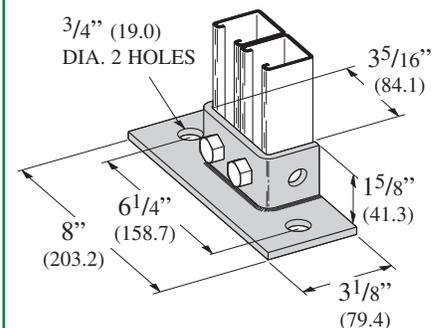
B281ASQ POST BASE FOR B22A, B, C, ETC.

- Standard finishes: ZN, GRN
- Wt./C 330 Lbs. (149.7 kg)



B281AFL POST BASE FOR B22A, B, C, ETC.

- Standard finishes: ZN, GRN
- Wt./C 250 Lbs. (113.4 kg)

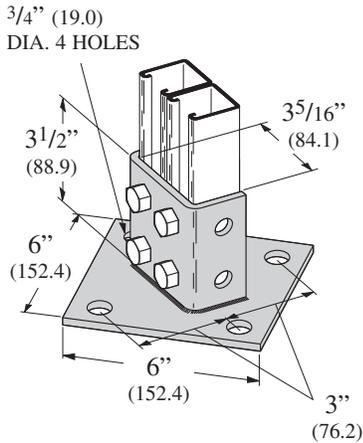


Reference page 58 for general fitting and standard finish specifications.

Post Bases

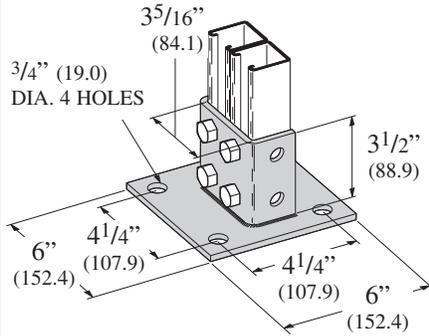
B281 POST BASE FOR B22A, B, C, ETC.

- Standard finishes: ZN, GRN, HDG
- Wt./C 400 Lbs. (181.4 kg)



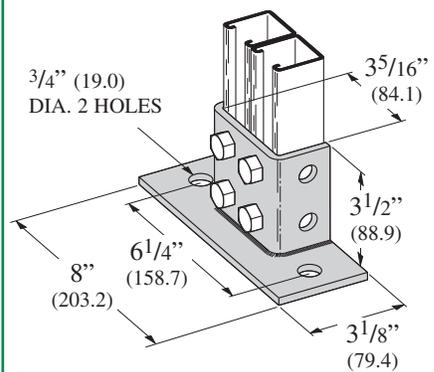
B281SQ POST BASE FOR B22A, B, C, ETC.

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 400 Lbs. (181.4 kg)



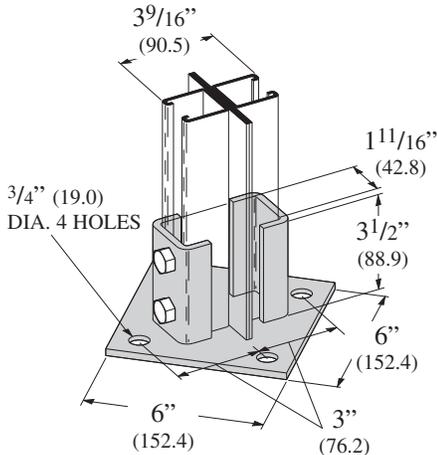
B281FL POST BASE FOR B22A, B, C, ETC.

- Standard finishes: ZN, GRN
- Wt./C 320 Lbs. (145.1 kg)



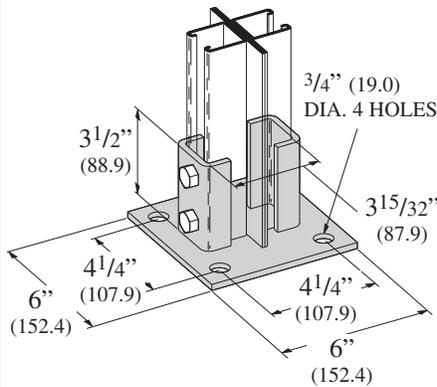
B281M POST BASE FOR B22-2PL

- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)



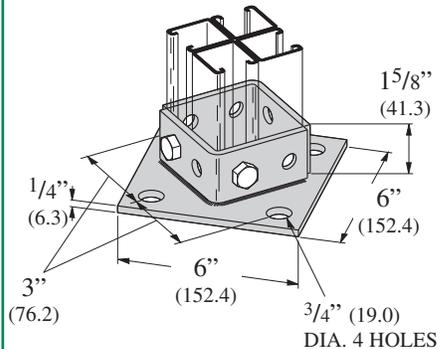
B281MSQ POST BASE FOR B22-2PL

- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)



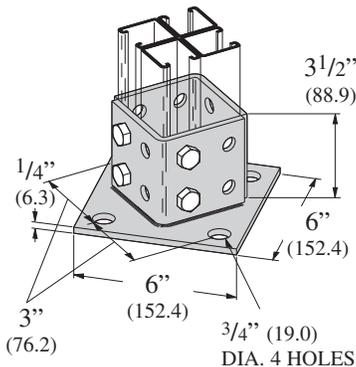
B570 POST BASE FOR FOUR CHANNEL COMBINATIONS

- Standard finishes: ZN, GRN
- Wt./C 397 Lbs. (180.1 kg)



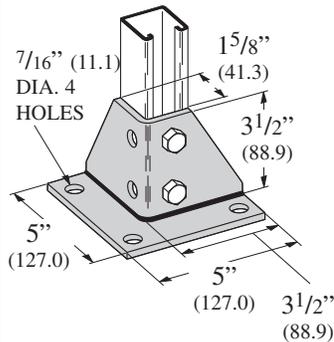
B570A POST BASE FOR FOUR CHANNEL COMBINATIONS

- Standard finishes: ZN, GRN
- Wt./C 550 Lbs. (249.5 kg)



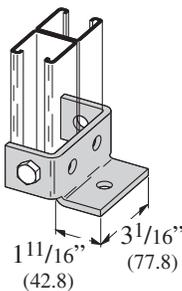
B278 POST BASE FOR B22

- Standard finishes: ZN, GRN
- Wt./C 288 Lbs. (130.6 kg)



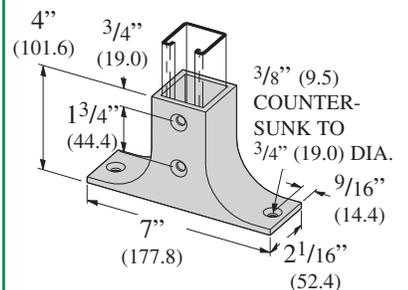
B585 POST BASE FOR B22A

- Standard finishes: ZN, GRN
- Wt./C 97 Lbs. (44.0 kg)



B300 POST BASE

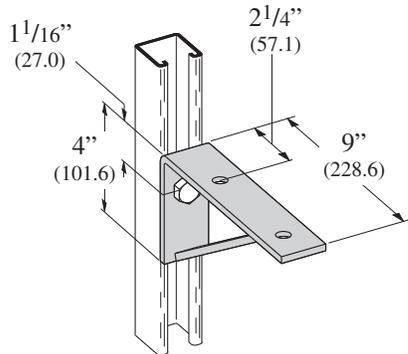
- Material: Malleable Iron
- Standard finishes: ZN, GRN
- Wt./C 259 Lbs. (117.5 kg)



Reference page 58 for general fitting and standard finish specifications.

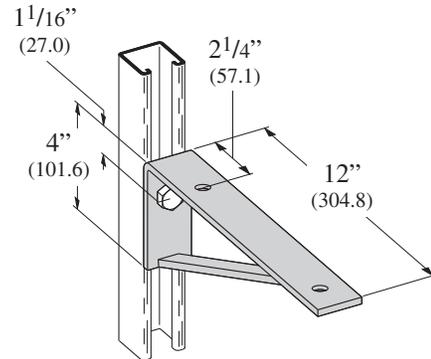
B187 BRACKET

- Uniform Loading 1450 Lbs. (6.45 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 5⁵/₁₆" (150.8) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 193 Lbs. (87.5 kg)



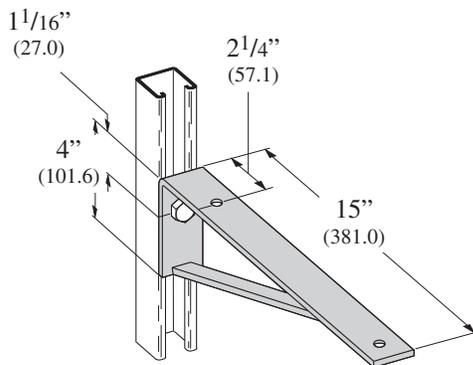
B188 BRACKET

- Uniform Loading 1080 Lbs. (4.80 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 8⁵/₁₆" (227.0) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 241 Lbs. (109.3 kg)



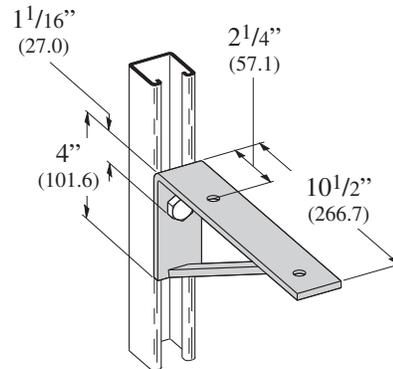
B189 BRACKET

- Uniform Loading 870 Lbs. (3.87 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 11⁵/₁₆" (303.2) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 308 Lbs. (139.7 kg)



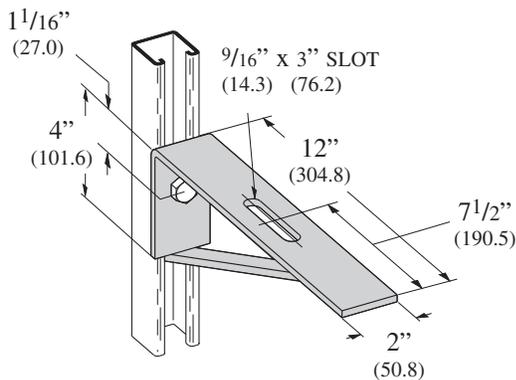
B541 BRACKET

- Uniform Loading 1240 Lbs. (5.51 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 7⁷/₁₆" (188.9) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)



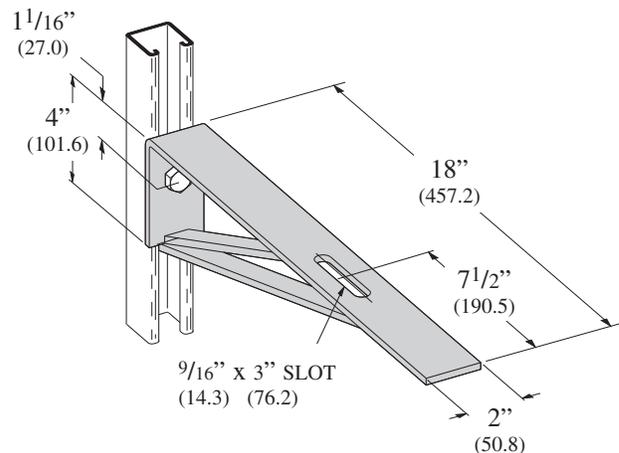
B190 12" (304.8) BRACKET

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



B191-18 18" (457.2) BRACKET

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

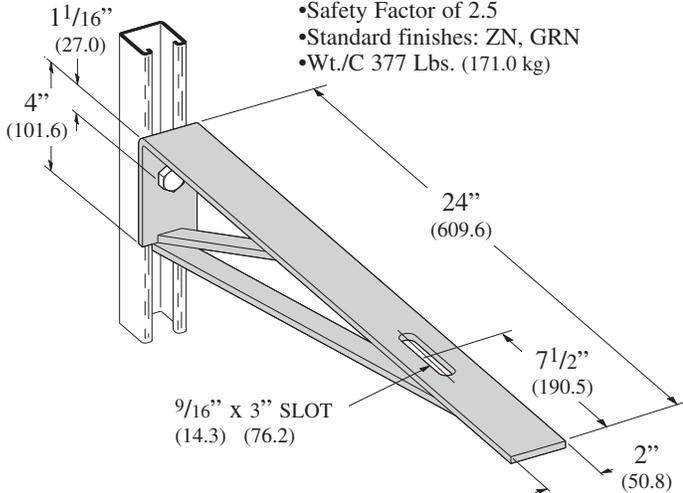


Reference page 58 for general fitting and standard finish specifications.

Brackets

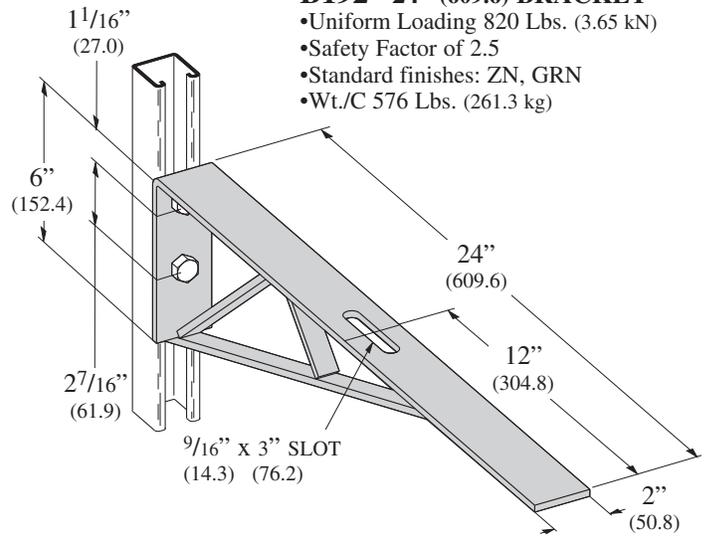
B191-24 24" (609.6) BRACKET

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



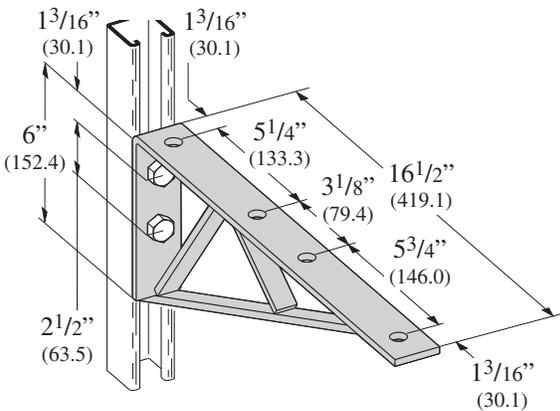
B192 24" (609.6) BRACKET

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



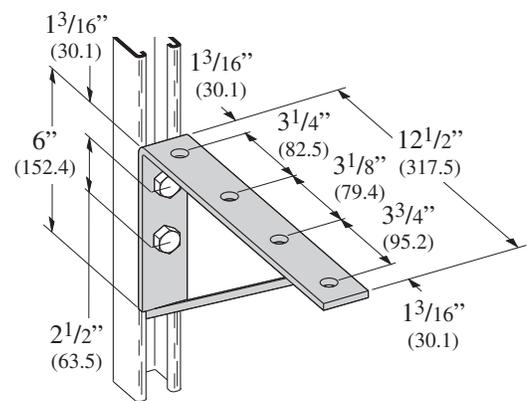
B290 16 1/2" (419.1) BRACKET

- Uniform Loading 1200 Lbs. (5.34 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 405 Lbs. (183.7 kg)



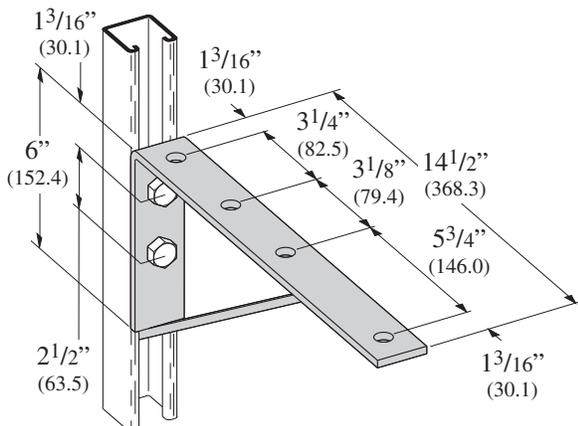
B289-12 12 1/2" (317.5) BRACKET

- Uniform Loading 1040 Lbs. (4.63 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 285 Lbs. (129.3 kg)



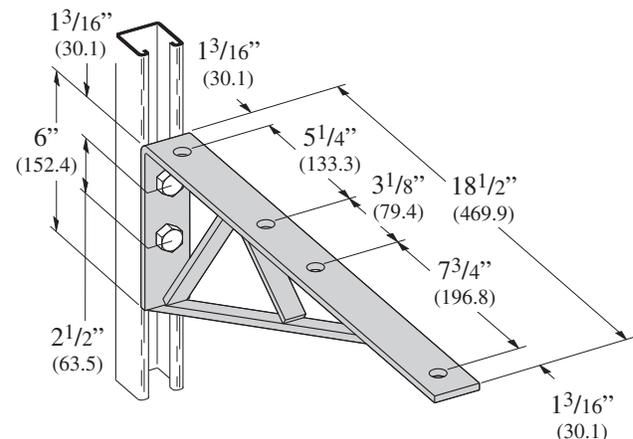
B289-14 14 1/2" (368.3) BRACKET

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



B291 18 1/2" (469.9) BRACKET

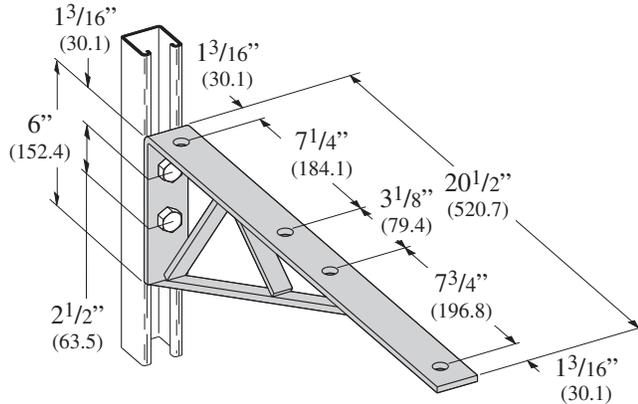
- Uniform Loading 1070 Lbs. (4.76 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 468 Lbs. (212.3 kg)



Reference page 58 for general fitting and standard finish specifications.

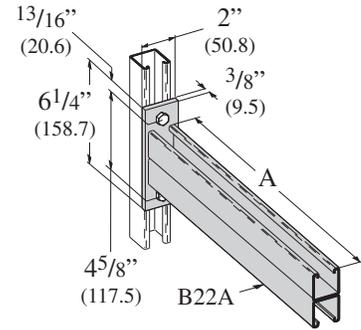
B292 20¹/₂" (520.7) BRACKET

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



B297 DOUBLE CHANNEL BRACKET

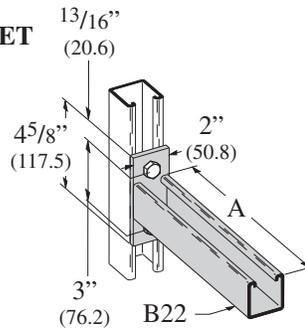
- Safety Factor of 2.5
- Standard finishes: ZN, GRN, HDG



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

B409 SINGLE CHANNEL BRACKET

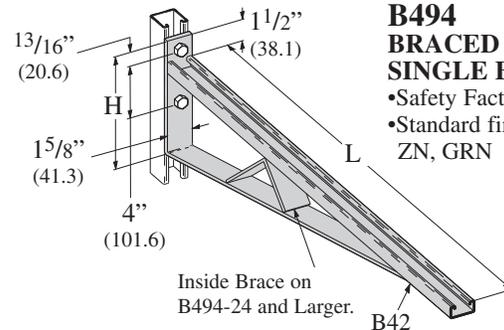
- Safety Factor of 2.5
- Standard finishes: ZN, GRN, SS4



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

B494 BRACED SINGLE BRACKET

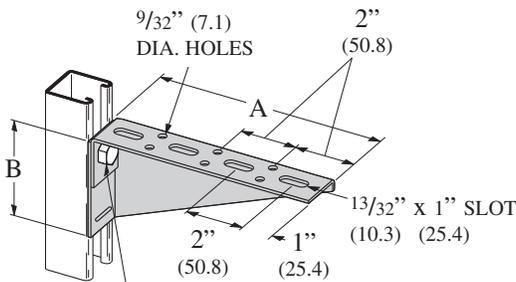
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



| Part No. | L | H | Uniform Load | | Wt./C | |
|----------|--------------|--|--------------|--------|-------|---------|
| | | | Lbs. | kN | Lbs. | kg |
| B494-12 | 12" (304.8) | 8 ³ / ₄ " (222.2) | 1580 | (7.02) | 364 | (165.1) |
| B494-18 | 18" (475.2) | 8 ³ / ₄ " (222.2) | 1000 | (4.45) | 479 | (217.3) |
| B494-24 | 24" (609.6) | 8 ³ / ₄ " (222.2) | 996 | (4.43) | 716 | (324.8) |
| B494-30 | 30" (762.0) | 11 ¹ / ₄ " (285.7) | 924 | (4.11) | 927 | (420.5) |
| B494-36 | 36" (914.4) | 11 ¹ / ₄ " (285.7) | 864 | (3.84) | 1095 | (496.7) |
| B494-42 | 42" (1066.8) | 16" (406.4) | 580 | (2.58) | 1400 | (635.0) |
| B494-48 | 48" (1219.2) | 16" (406.4) | 500 | (2.22) | 1510 | (684.9) |

B174SH-B186SH L&R SLOTTED BRACKET

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



MOUNTING HOLE
7/16" (11.1) DIA.

Right bracket shown, left bracket
gussett on opposite side.

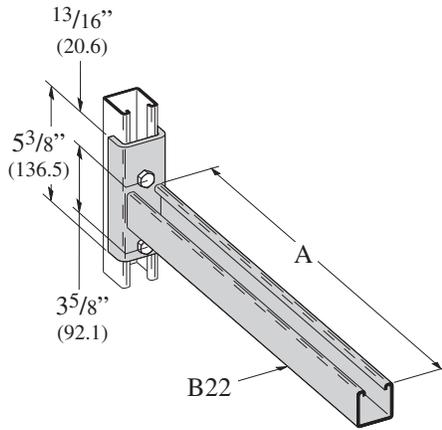
| Part No. | A | B | Uniform Load | | Wt./C | |
|----------|-------------|---|--------------|--------|-------|---------|
| | | | Lbs. | kN | Lbs. | kg |
| B174SH | 24" (609.6) | 6 ⁷ / ₁₆ " (163.5) | 225 | (1.00) | 370 | (167.8) |
| B175SH | 26" (660.4) | 6 ¹⁵ / ₁₆ " (176.2) | 225 | (1.00) | 425 | (192.8)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

Reference page 58 for general fitting and standard finish specifications.

Brackets

B196 CHANNEL CLEVIS BRACKET

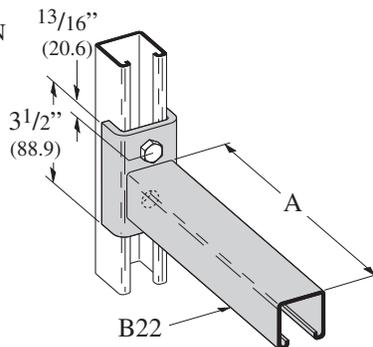
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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

B198A CHANNEL CLEVIS BRACKET

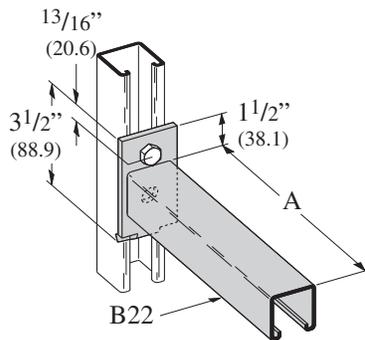
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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

B293A CHANNEL BRACKET

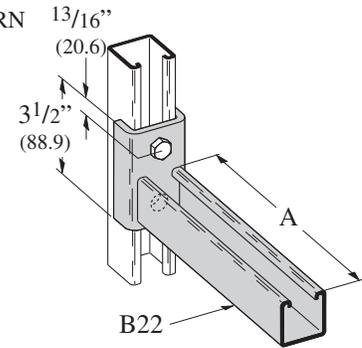
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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

B198 CHANNEL CLEVIS BRACKET

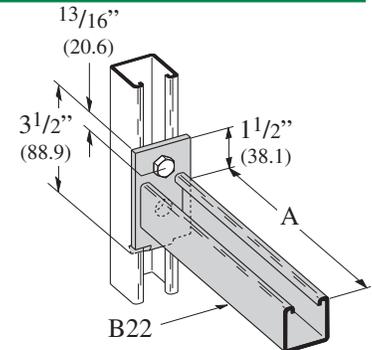
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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

B293 CHANNEL BRACKET

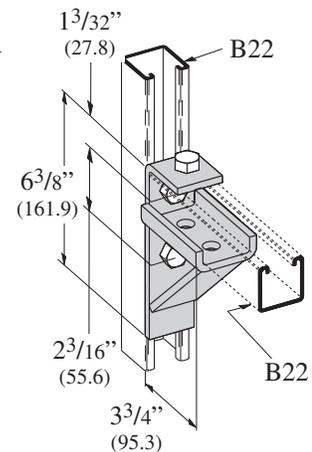
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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

B194 BRACKET FOR B22 & B24

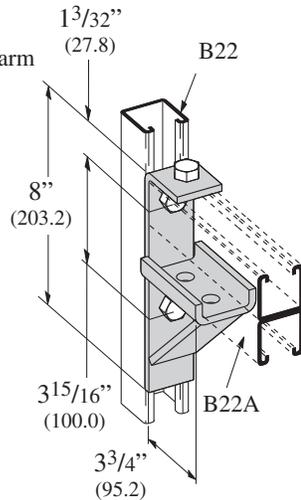
- Safety Factor of 2.5
- 6300 In.-Lbs (712 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 217 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 210 Lbs. (95.2 kg)



Reference page 58 for general fitting and standard finish specifications.

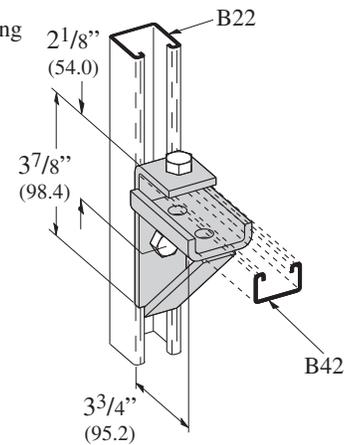
B370 BRACKET FOR B22A & B11

- Safety Factor of 2.5
- 13000 In.-Lbs (1469 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 217 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (120.6 kg)



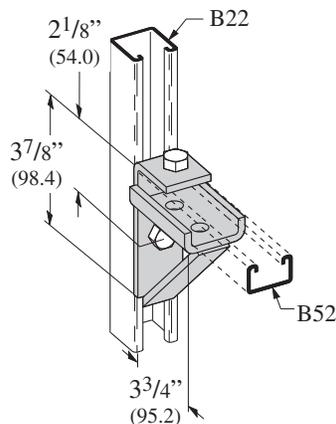
B195 BRACKET FOR B42

- Safety Factor of 2.5
- 2500 In.-Lbs (282 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 217 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 174 Lbs. (78.9 kg)



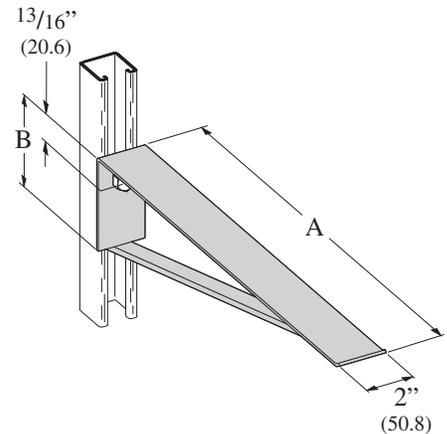
B440 BRACKET FOR B52 & B54

- Safety Factor of 2.5
- 2000 In.-Lbs (226 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 217 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 177 Lbs. (80.3 kg)



B449-4, 8 & 12 CABLE SADDLE BRACKET

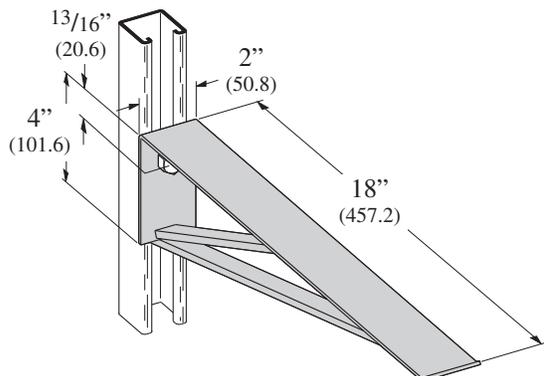
- Safety Factor of 2.5
- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



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

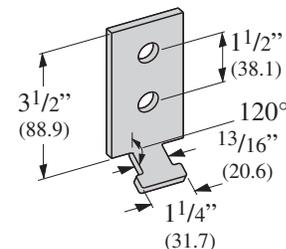
B449-18 18" (457.2) CABLE SADDLE BRACKET

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



B293PL BRACKET PLATE ONLY

- Standard finishes: ZN, GRN
- Wt./C 46 Lbs. (20.8 kg)

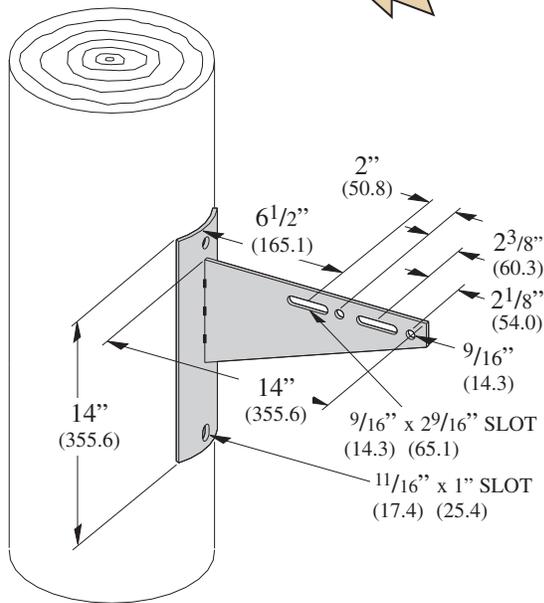


Reference page 58 for general fitting and standard finish specifications.

Brackets

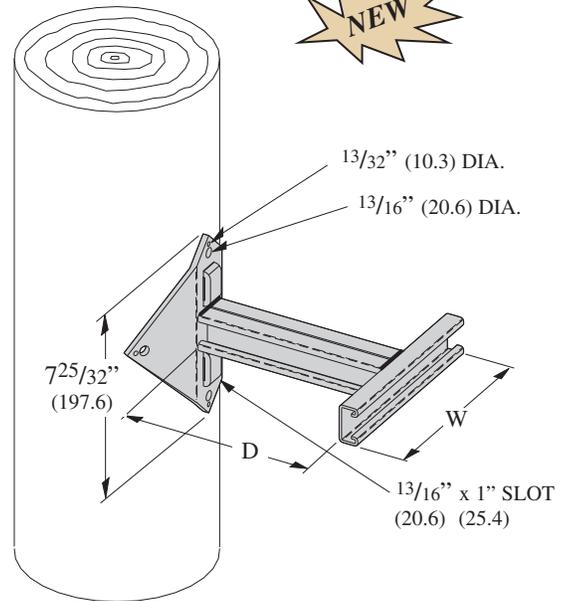
B816

•Standard finishes: ZN, HDG



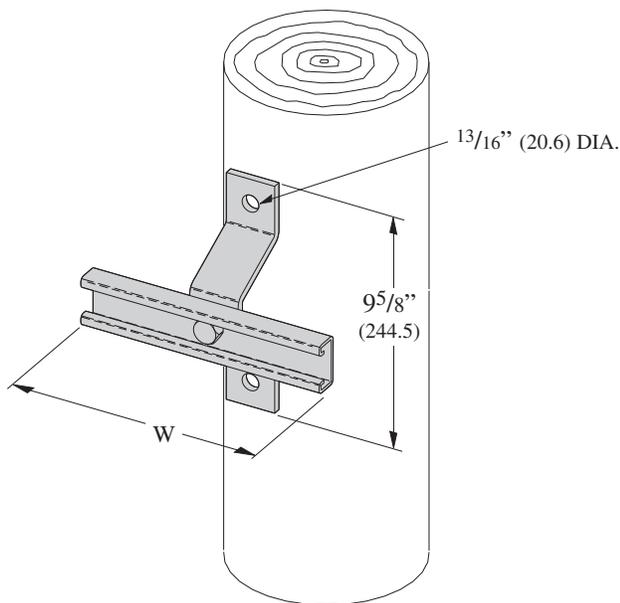
B852S-W-D

•Specify W = 8, 12, 16
 •Specify D = 6, 8, 10, 12, 16, 18, 24
 • $1\frac{3}{16}$ " (20.6mm) x 1" (25.4mm) banding slots for steel band
 •Standard finishes: ZN, HDG



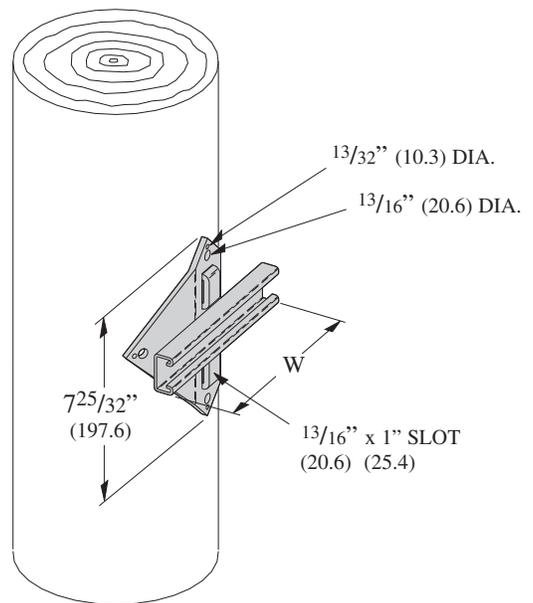
B802D-W

•Specify W = 8, 12, 16
 •Standard finishes: ZN, HDG



B810-W

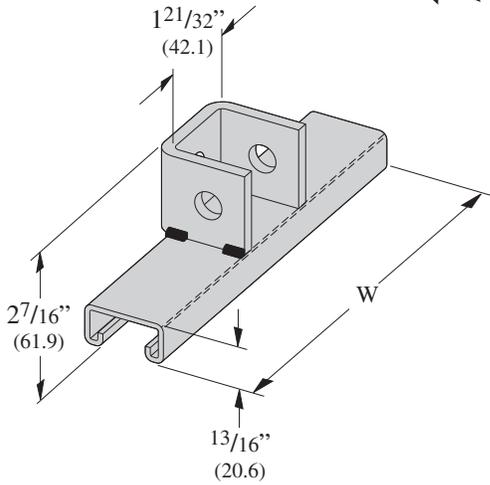
•Specify W = 8, 12, 16
 • $1\frac{3}{16}$ " (20.6mm) x 1" (25.6mm) banding slots for steel band
 •Standard finishes: ZN, HDG



Reference page 58 for general fitting and standard finish specifications.

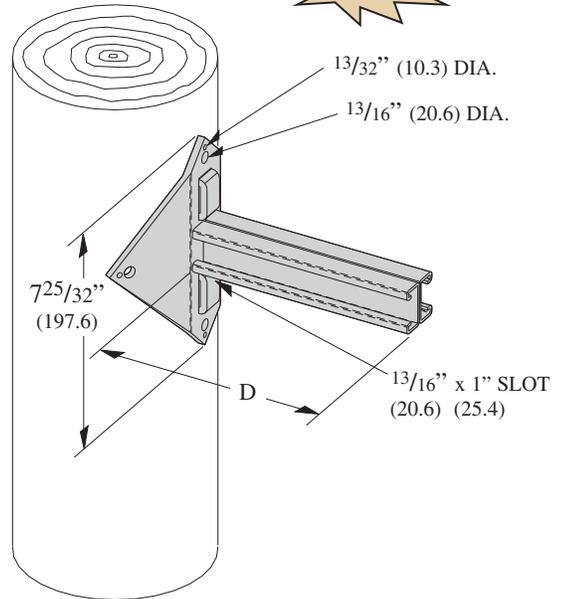
B811-W

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



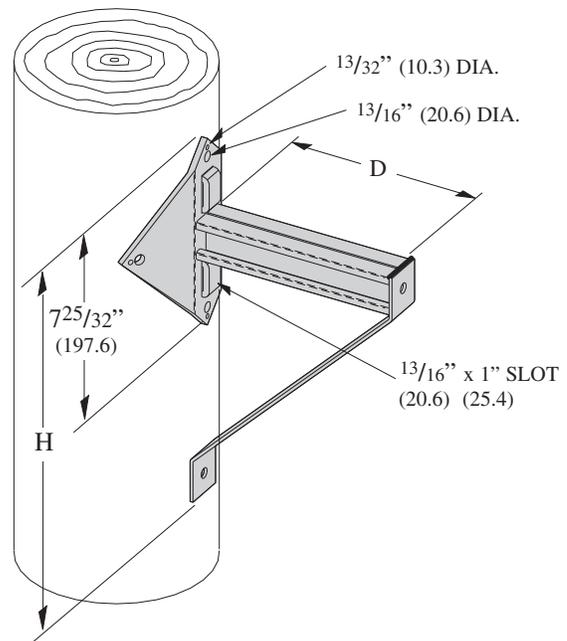
B812-*

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



B809B-*

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



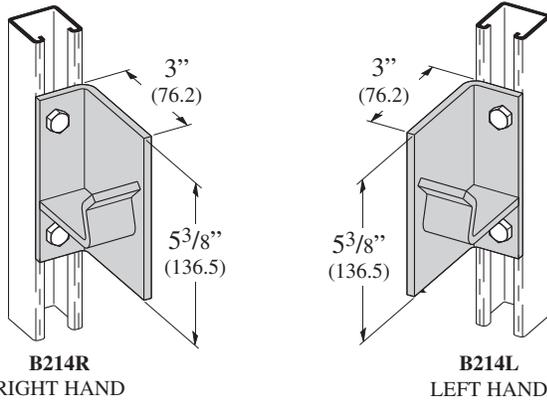
| Part No. | D | | H | |
|----------|-----|---------|----------------------------------|---------|
| | In. | mm | In. | mm |
| B809B-6 | 6" | (152.4) | 12 ³ / ₄ " | (323.9) |
| B809B-8 | 8" | (203.2) | 14 ³ / ₄ " | (374.7) |
| B809B-10 | 10" | (254.0) | 16 ³ / ₄ " | (425.5) |
| B809B-12 | 12" | (304.8)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

Reference page 58 for general fitting and standard finish specifications.

Miscellaneous Fittings

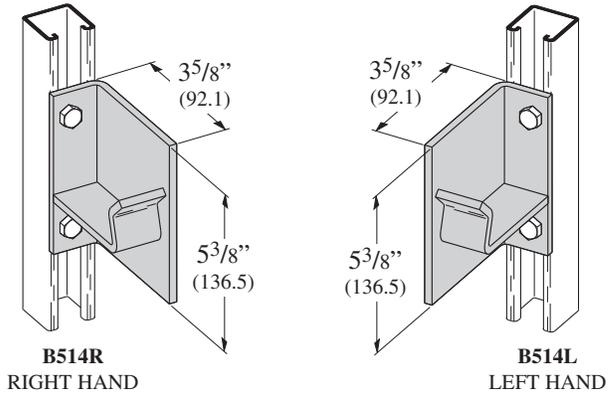
B214 R&L REEL RACK SUPPORT FOR 1 1/4" (32) PIPE

- Standard finishes: ZN, GRN
- Wt./C 200 Lbs. (90.7 kg)



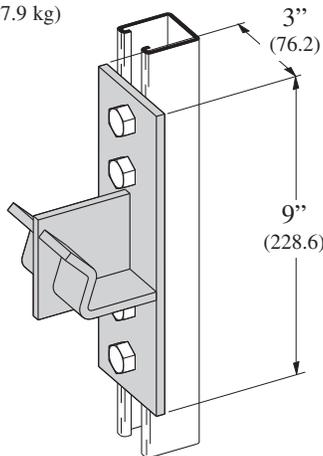
B514 R&L REEL RACK SUPPORT FOR 2" (50) PIPE

- Standard finishes: ZN, GRN
- Wt./C 246 Lbs. (111.6 kg)



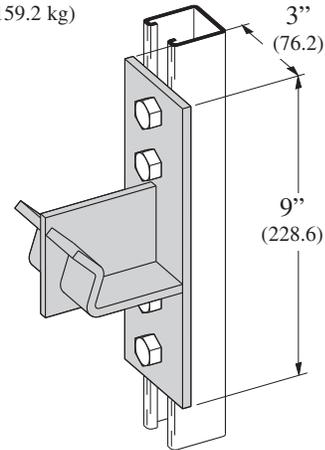
B475 DOUBLE REEL RACK SUPPORT ON SINGLE CHANNEL FOR 1 1/4" (32) PIPE

- Standard finishes: ZN, GRN
- Wt./C 326 Lbs. (147.9 kg)



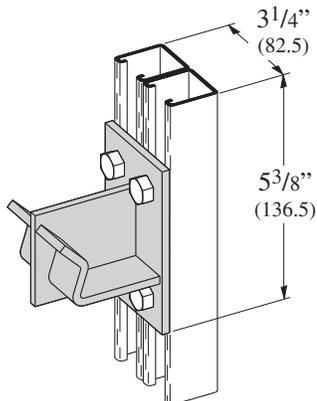
B473 DOUBLE REEL RACK SUPPORT ON SINGLE CHANNEL FOR 2" (50) PIPE

- Standard finishes: ZN, GRN
- Wt./C 351 Lbs. (159.2 kg)



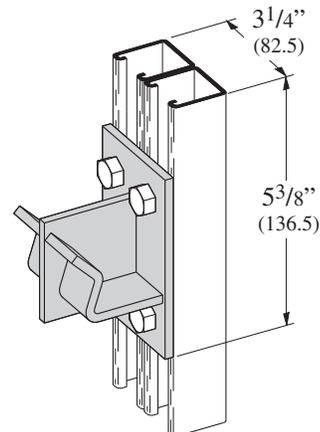
B474 DOUBLE REEL RACK CHANNEL FOR 1 1/4" (32) PIPE

- Standard finishes: ZN, GRN
- Wt./C 257 Lbs. (116.6 kg)



B472 DOUBLE REEL RACK SUPPORT ON DOUBLE CHANNEL FOR 2" (50) PIPE

- Standard finishes: ZN, GRN
- Wt./C 299 Lbs. (135.6 kg)

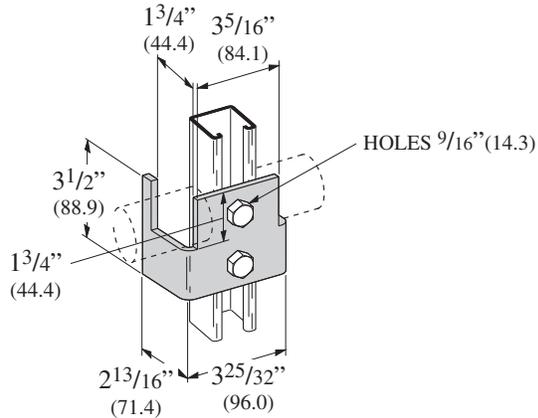


Reference page 58 for general fitting and standard finish specifications.

B664

DOUBLE PIPE SUPPORT FOR 1¹/₄" (32) PIPE

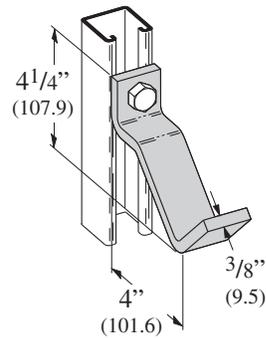
- Standard finishes: ZN, GRN
- Wt./C 154 Lbs. (69.8 kg)



B438

PIPE SUPPORT BRACKET

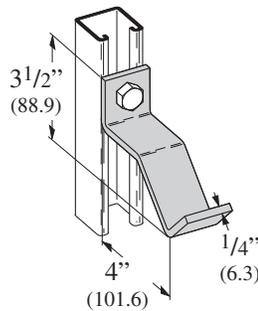
- Standard finishes: ZN, GRN
- Material: ASTM A36
- Wt./C 132 Lbs. (59.9 kg)



B439

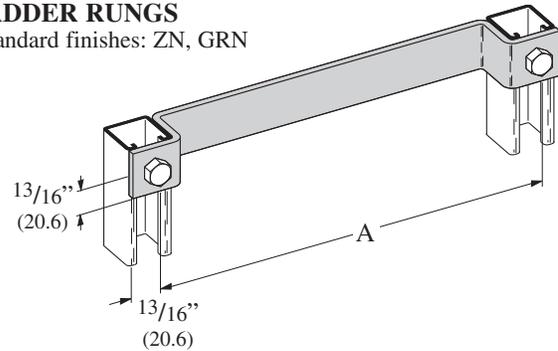
PIPE SUPPORT BRACKET

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



B411 SERIES LADDER RUNGS

- Standard finishes: ZN, GRN

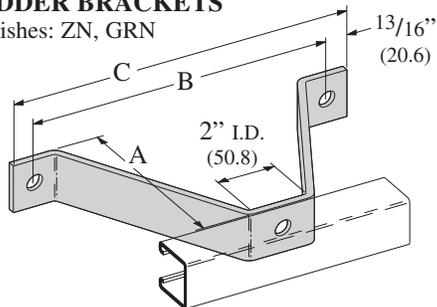


| Part No. | A | (A) | Wt./C | |
|----------|-----|---------|-------|---------|
| | | | Lbs. | kg |
| B411-12 | 12" | (304.8) | 176 | (79.8) |
| B411-15 | 15" | (381.0) | 202 | (91.6) |
| B411-18 | 18" | (457.2) | 234 | (106.1) |

B381-B385

WALL LADDER BRACKETS

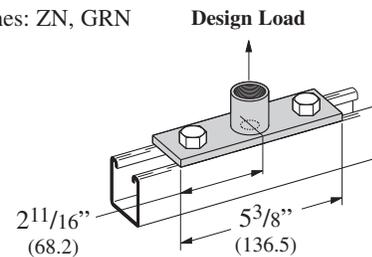
- Standard finishes: ZN, GRN



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

B587-1/2, 3/4 & 1 PIPE COUPLING FITTING

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



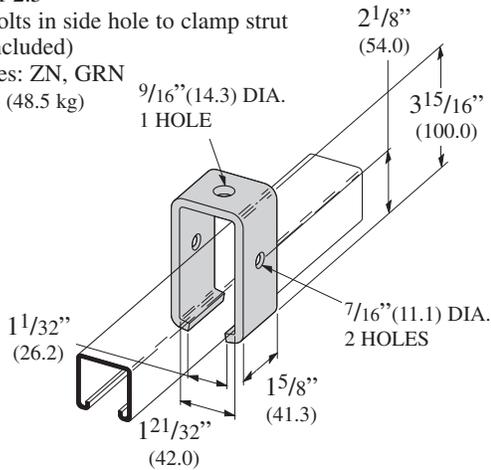
| Part No. | For Pipe Size | Wt./C | Design Load | | | |
|----------|---------------|-------|-------------|--------|------|--------|
| | | | Lbs. | kN | | |
| B587-1/2 | 1/2" | (15) | 77 | (34.9) | 1000 | (4.45) |
| B587-3/4 | 3/4" | (20) | 84 | (38.1) | 1400 | (6.23) |
| B587-1 | 1" | (25) | 105 | (47.6)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

Reference page 58 for general fitting and standard finish specifications.

Miscellaneous Fittings

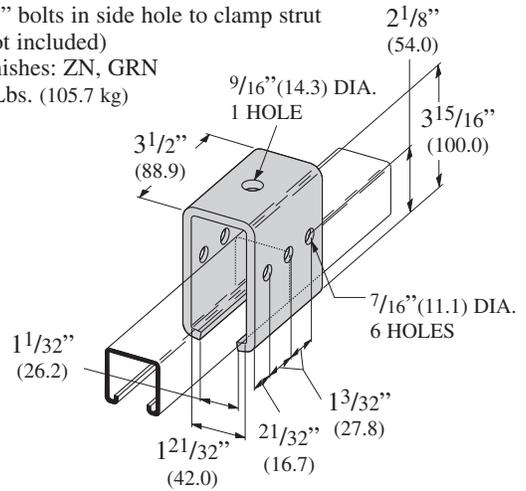
B349 TROLLEY BEAM SUPPORT

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



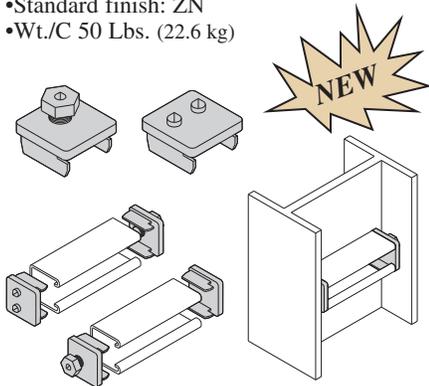
B350 TROLLEY BEAM JOINT SUPPORT

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



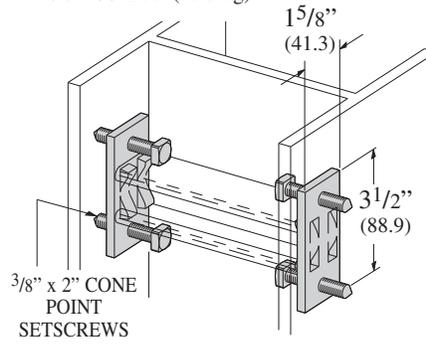
B614 COLUMN SUPPORT FOR B22

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



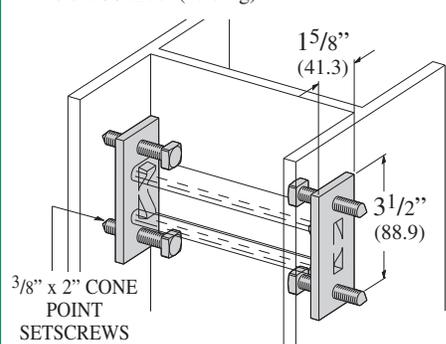
B613 COLUMN SUPPORT FOR B22

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



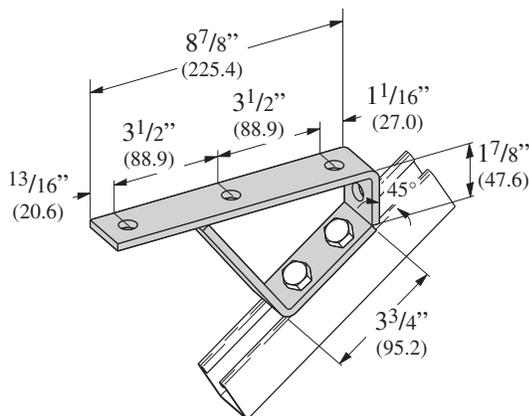
B613A COLUMN SUPPORT FOR B52

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



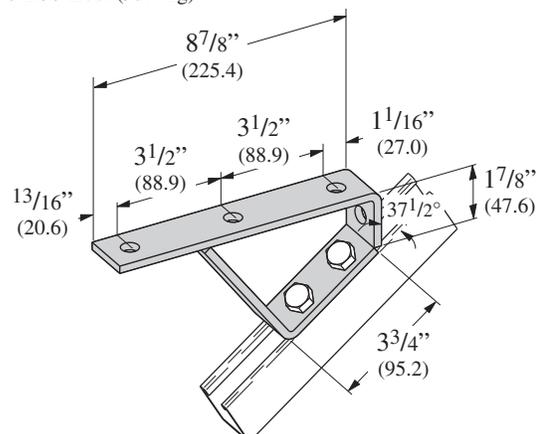
B560 45° STAIR SUPPORT

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



B562 37-1/2° STAIR SUPPORT

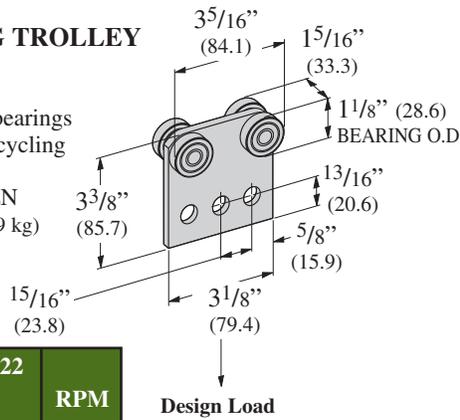
- Standard finishes: ZN, GRN
- Wt./C 206 Lbs. (93.4 kg)



Reference page 58 for general fitting and standard finish specifications.

B376 FOUR BEARING TROLLEY ASSEMBLY

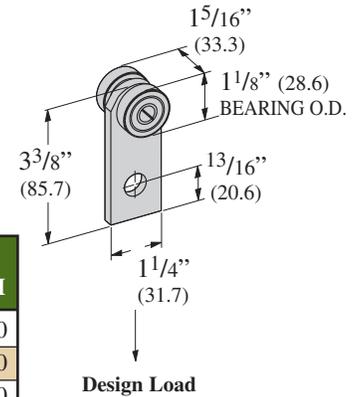
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Standard finishes: ZN
- Wt./C 110 Lbs. (49.9 kg)



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

B377 TWO BEARING TROLLEY ASSEMBLY

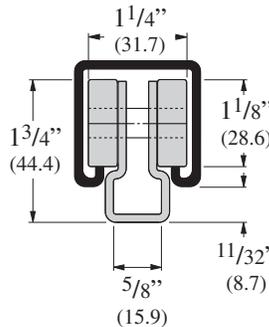
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Standard finishes: ZN
- Wt./C 48 Lbs. (21.8 kg)



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

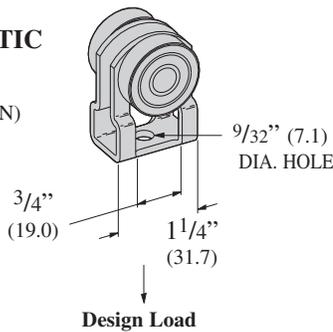
B477 TWO BEARING LIGHT DUTY TROLLEY ASSEMBLY

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



B477P WITH PLASTIC BEARINGS

- Design Load 10 Lbs. (.045 kN)

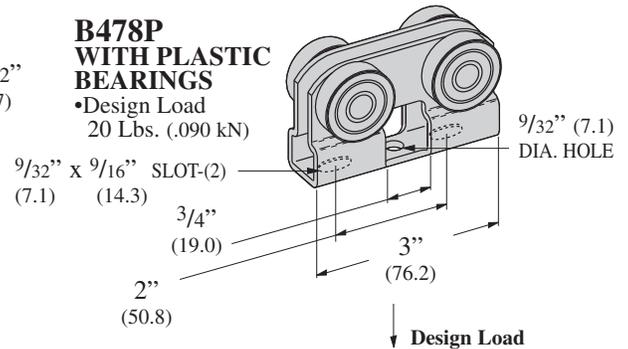


B478 FOUR BEARING LIGHT DUTY TROLLEY ASSEMBLY

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

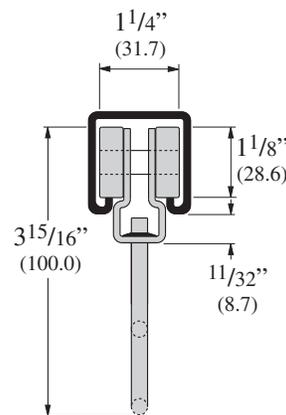
B478P WITH PLASTIC BEARINGS

- Design Load 20 Lbs. (.090 kN)



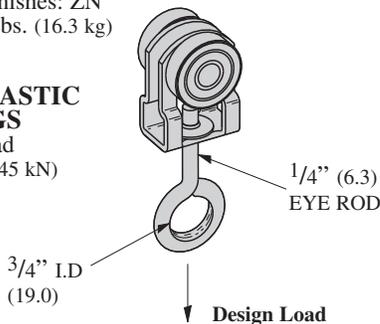
B477H TWO BEARING LIGHT DUTY TROLLEY ASSEMBLY WITH EYE HOOK

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



B477HP WITH PLASTIC BEARINGS

- Design Load 10 Lbs. (.045 kN)

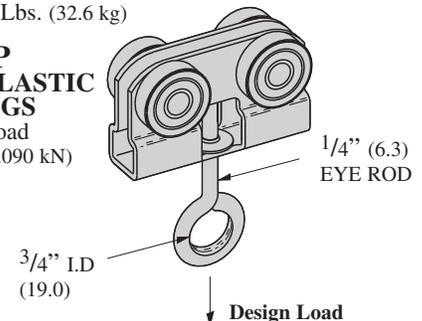


B478H FOUR BEARING LIGHT DUTY TROLLEY ASSEMBLY WITH EYE HOOK

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

B478HP WITH PLASTIC BEARINGS

- Design Load 20 Lbs. (.090 kN)

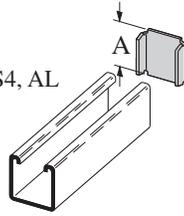


Reference page 58 for general fitting and standard finish specifications.

Miscellaneous Fittings

B203-B206 & B220-B223 CHANNEL END CAPS TYPE X

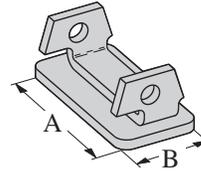
- Material: ASTM A1011 CS Type B
- Standard finishes: ZN, GRN, HDG, SS4, AL



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

B283-B286 CHANNEL END CAPS

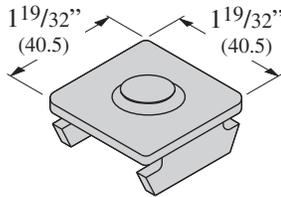
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



| Part No. | Use With | A | (A) | B | (B) | Wt./C | |
|----------|-----------|-----------------------------------|--------|-----------------------------------|--------|-------|-------|
| | | | | | | Lbs. | kg |
| B283 | B52 | 1 ¹⁹ / ₃₂ " | (40.5) | 2 ⁵ / ₃₂ " | (19.8) | 6 | (2.7) |
| B284 | B54 & B56 | 1 ¹⁹ / ₃₂ " | (40.5) | 2 ⁵ / ₃₂ " | (19.8) | 6 | (2.7) |
| B285 | B22 | 1 ¹⁹ / ₃₂ " | (40.5) | 1 ¹⁹ / ₃₂ " | (40.5) | 13 | (5.9) |
| B286 | B24 & B26 | 1 ¹⁹ / ₃₂ " | (40.5) | 1 ¹⁹ / ₃₂ " | (40.5) | 14 | (6.3) |

B287 & B288 CHANNEL END CAPS

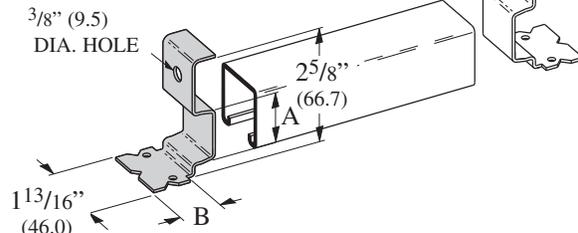
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



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

B3322, B3332, B3342, B3352 ANCHOR END CAPS TYPE Y

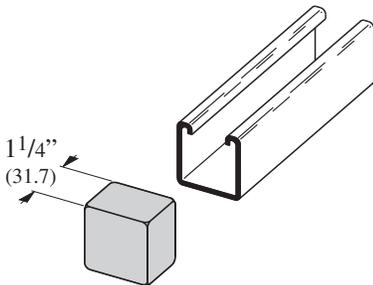
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN



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

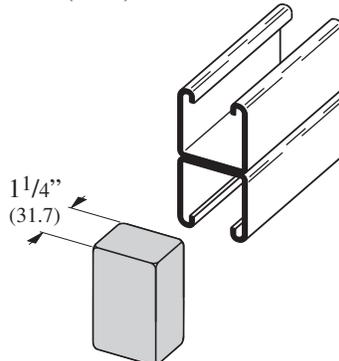
B822 PLASTIC END CAP FOR B22 & B24

- Material: Soft White PVC
- Wt./C 3 Lbs. (1.3 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



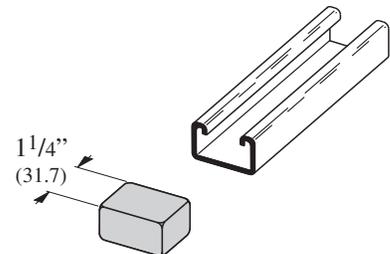
B822A PLASTIC END CAP FOR B22A & B11

- Material: Soft White PVC
- Wt./C 5 Lbs. (2.2 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



B852 PLASTIC END CAP FOR B52

- Material: Soft White PVC
- Wt./C 2.5 Lbs. (1.1 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



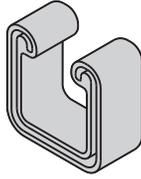
Reference page 58 for general fitting and standard finish specifications.

B823 PROFILE END CAPS

- Material: PVC
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



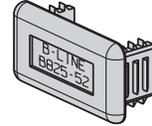
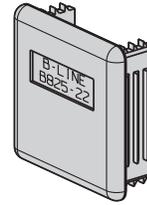
Approx. 3/4" deep
(19.0)



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

B825 PLASTIC END CAPS

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



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

Reference page 58 for general fitting and standard finish specifications.

Beam Clamps

B-Line's beam attachments and pipe supports offered in this section are designed to provide supports without drilling or welding. A complete selection of beam clamps, pipe clamps, rollers, supports and accessories are designed for use with B-Line channels and offer many installation advantages.

Materials & Finishes (Unless otherwise noted)

Pipe clamps, pipe hangers, beam clamps, brackets, and rollers are made from low carbon steel strips, plates or rod unless noted.

| Finish Code | Finish | Specification |
|-------------|--------------------------|---|
| PLN | Plain | ASTM A1018 Gr. 33 ASTM A1011 SS Grade 33 |
| ZN | Electro-Plated Zinc | ASTM B633 SC3 Type III |
| GRN | Dura-Green | |
| - | Malleable Iron | ASTM A47 Gr. 32510 |
| HDG | Hot-Dipped Galvanized | ASTM A123 |
| CZ | Chromium Zinc | ASTM F1136 |
| SS4 | Stainless Steel Type 304 | ASTM A240 |
| SS6 | Stainless Steel Type 316 | ASTM A240 |
| AL | Aluminum | ASTM B209 |

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

Load Data

The load data published includes a safety factor of 5.0 unless noted (safety factor = ratio of ultimate load to the design load).

Recommended Torque For Setscrews (unless noted)

| Setscrew Size | 1/4"-20 | 3/8"-16 | 1/2"-13 |
|---------------|---------|---------|---------|
| Foot/Lbs. | 4 | 5 | 11 |
| Nm | 5 | 7 | 15 |

| Setscrew Size | 5/8"-11 | 3/4"-10 |
|---------------|---------|---------|
| Foot/Lbs. | 21 | 34 |
| Nm | 28 | 46 |

See chart on page 58 for bolt torque.

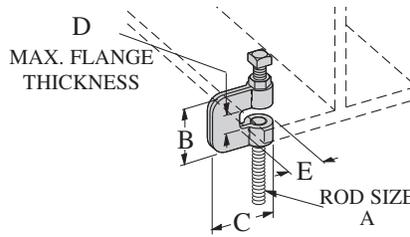
Metric

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



B351L STEEL C-CLAMP WITH LOCKNUT

- Safety Factor of 5
- Setscrew and locknut included
- When Retaining Strap is required, order B3362, B3363 or B3365 separately
- Standard finishes: ZN, SS4, PLN

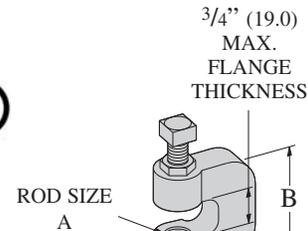


*
3/8 THRU 3/4
SIZES ONLY

| Part Number With Locknut | Rod Size A | B | | C | | D | | E | | Design Load | | Wt./C | |
|--------------------------|------------|--------|--------|--------|--------|------|--------|--------|--------|-------------|--------|-------|--------|
| | | Lbs. | kg | Lbs. | kg | Lbs. | kg | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B351L-3/8 * | 3/8"-16 | 2 3/8" | (60.3) | 2 3/8" | (60.3) | 3/4" | (19.0) | 1 3/8" | (34.9) | 230 | (1.03) | 41 | (18.6) |
| B351L-1/2 * | 1/2"-13 | 2 3/8" | (60.3) | 2 3/8" | (60.3) | 3/4" | (19.0) | 1 3/8" | (34.9) | 380 | (1.71) | 41 | (18.6) |
| B351L-5/8 * | 5/8"-11 | 2 3/8" | (60.3) | 2 1/4" | (57.1) | 3/4" | (19.0) | 1 3/8" | (34.9) | 550 | (2.47) | 60 | (27.2) |
| B351L-3/4 * | 3/4"-10 | 2 3/8" | (60.3) | 3 1/4" | (82.5) | 3/4" | (19.0) | 1 3/8" | (34.9) | 630 | (2.83) | 71 | (32.2) |
| B351L-7/8 | 7/8"-9 | 3" | (76.2) | 3 1/4" | (82.5) | 1" | (25.4) | 1 7/8" | (47.6) | 1200 | (5.34) | 184 | (83.4) |

B3036L C-CLAMP WITH LOCKNUT

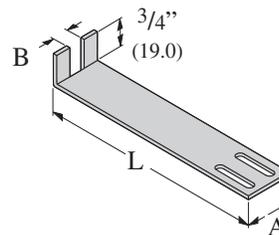
- Safety Factor of 5
- When Retaining Strap is required, order B3363 or B3364 separately
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN



| Part Number With Locknut | Rod Size A | B | | C | | Design Load | | Wt./C | |
|--------------------------|------------|--------|--------|--------|--------|-------------|--------|-------|--------|
| | | Lbs. | kg | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B3036L-3/8 | 3/8"-16 | 1 3/4" | (44.4) | 1 3/4" | (44.4) | 400 | (1.78) | 29 | (13.1) |
| B3036L-1/2 | 1/2"-13 | 1 3/4" | (44.4) | 1 3/4" | (44.4) | 400 | (1.78) | 28 | (12.7) |
| B3036L-5/8 | 5/8"-11 | 2" | (50.8) | 1 7/8" | (47.6) | 450 | (2.00) | 55 | (24.9) |
| B3036L-3/4 | 3/4"-10 | 2" | (50.8) | 2" | (50.8) | 500 | (2.22) | 72 | (32.6) |

B3362 THRU B3365 RETAINING STRAP

- *When ordering specify L (Length) as a suffix to the part number
- Material: 14 Gauge (1.9)
- Standard finishes: ZN, SS4, PLN

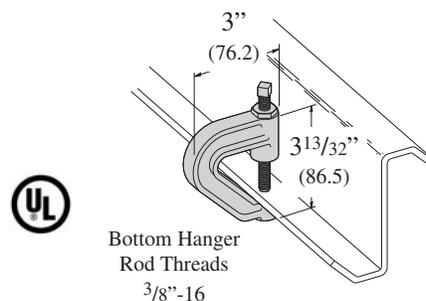


| Part No. | Wt./C for Length L of | | | | A | B | For Use With |
|----------|-----------------------|------------|-------------|-------------|---------------|---------------|--------------------------------|
| | 6" (152.4) | 8" (203.2) | 10" (254.0) | 12" (304.8) | | | |
| B3362* | 17 (7.7) | 24 (10.9) | 31 (14.0) | 38 (17.2) | 1 1/4" (31.7) | 7/16" (11.1) | B351-3/8 & 1/2 |
| B3363* | 16 (7.2) | 23 (10.4) | 30 (13.6) | 37 (16.8) | 1 1/4" (31.7) | 5/8" (15.9) | B351-5/8 & 3/4 B3036-3/8 & 1/2 |
| B3364* | 16 (7.2) | 23 (10.4) | 30 (13.6) | 37 (16.8) | 1 1/4" (31.7) | 11/16" (17.4) | B3036-5/8 & 3/4 |
| B3365* | 21 (9.5) | 29 (13.1) | 37 (16.8) | 46 (20.8) | 1 1/2" (38.1) | 3/4" (19.0) | B351-7/8 |

*See note above.

B3037 Z-PURLIN C-CLAMP

- Design Load 500 Lbs. (2.22 kN)
- Safety Factor of 5
- Designed for attaching a 3/8"-16 hanger rod to the bottom flange of a Z-purlin
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN



Reference page 98 for general fitting and standard finish specifications.

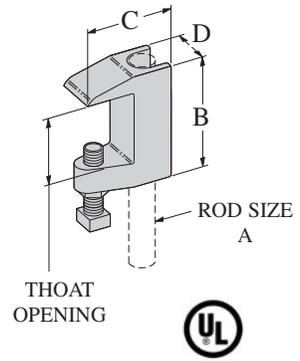
Beam Clamps

B3033 REVERSIBLE WIDE JAW WEDGE C-CLAMP (MALLEABLE IRON)

- Safety Factor of 5
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN

THROAT OPENINGS

- 1¹/₄" (31.7) FOR
3/8 & 1/2 SIZES
- 1⁵/₁₆" (33.3) FOR
5/8 & 3/4 SIZES



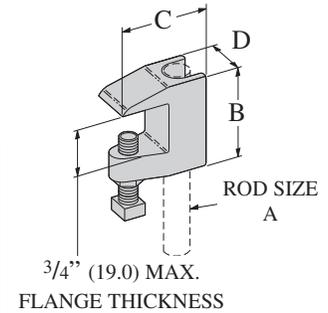
| Part No. | Rod Size A | B | C | D | Design Load Lbs. kN | Wt./C Lbs. kg | UL Max. Pipe Size |
|-----------|------------|--|---|---|------------------------|------------------|----------------------|
| B3033-3/8 | 3/8"-16 | 2 ¹ / ₄ " (57.1) | 2" (50.8) | 1 ¹ / ₈ " (28.6) | 500 (2.22) | 46 (20.8) | 4" (100) |
| B3033-1/2 | 1/2"-13 | 2 ⁵ / ₁₆ " (58.7) | 2 ³ / ₁₆ " (55.5) | 1 ¹ / ₄ " (31.7) | 810 (3.60) | 64 (29.0) | 8" (200) |
| B3033-5/8 | 5/8"-11 | 2 ⁵ / ₈ " (66.7) | 2 ¹ / ₂ " (63.5) | 1 ³ / ₈ " (34.9) | 1000 (4.48) | 116 (52.6) | 8" (200) |
| B3033-3/4 | 3/4"-10 | 2 ¹¹ / ₁₆ " (68.3) | 2 ¹ / ₂ " (63.5) | 1 ⁷ / ₁₆ " (36.5) | 1400 (6.22) | 140 (63.5) | 10" (250) |

B3034 WEDGE C-CLAMP

- Safety Factor of 5
- 3/4" (19.0) Max. Flange Thickness
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN

NOTE:
3/8" & 1/2" SIZES
ARE REVERSIBLE
STYLE

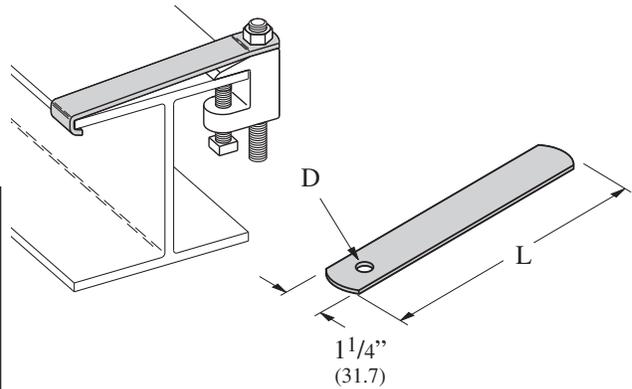
*
3/8 & 1/2
SIZES ONLY



| Part No. | Rod Size A | B | C | D | Design Load Lbs. kN | Wt./C Lbs. kg | UL Max. Pipe Size |
|------------|------------|--|---|---|------------------------|------------------|----------------------|
| B3034-3/8* | 3/8"-16 | 1 ⁵ / ₈ " (41.3) | 2" (50.8) | 7/8" (22.2) | 560 (2.49) | 54 (24.5) | 4" (100) |
| B3034-1/2* | 1/2"-13 | 1 ¹³ / ₁₆ " (46.0) | 2 ³ / ₁₆ " (55.5) | 1 ³ / ₁₆ " (30.2) | 810 (3.60) | 51 (23.1) | 8" (200) |
| B3034-5/8 | 5/8"-11 | 1 ³ / ₄ " (44.5) | 2 ¹ / ₈ " (54.0) | 1 ¹ / ₈ " (28.6) | 1000 (4.48) | 70 (31.7) | -- -- |
| B3034-3/4 | 3/4"-10 | 2" (50.8) | 2 ¹ / ₄ " (57.2) | 1 ¹ / ₈ " (28.6) | 1500 (6.67) | 98 (44.4) | -- -- |

B3367 RETAINING STRAP

- Available in 'L' lengths of 6" (152.4), 8" (203.2), 9" (228.6), 10" (254.0), 12" (304.8), 14" (355.6), 16" (406.4), 18" (457.2)
- Material: Steel
- Standard finishes: ZN, PLN

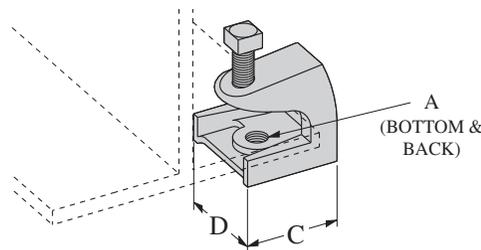


| Part No. | Hole Dia. D | For Use With | Wt./C** Lbs. kg |
|-------------|----------------|-----------------------|--------------------|
| B3367-3/8-L | 7/16" (30.1) | B3033-3/8 & B3034-3/8 | 23.9 (10.8) |
| B3367-1/2-L | 9/16" (30.1) | B3033-1/2 & B3034-1/2 | 23.6 (10.7) |
| B3367-5/8-L | 11/16" (50.8) | B3033-5/8 | 23.2 (10.5) |
| B3367-3/4-L | 13/16" (63.5) | B3033-3/4 | 22.7 (10.3) |

** Wt./C based on 6" (152.4) length. For each additional inch in strap length add 4.2 Lbs (1.9 kg) to Wt./C.

B444 SERIES ROD SUPPORT

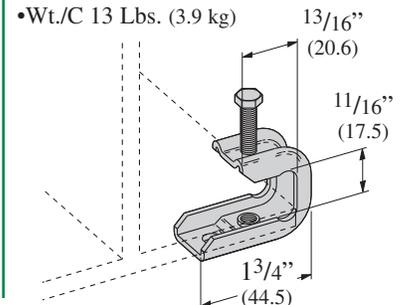
- Safety Factor of 5
- Max. Flange Thickness
3/4" (19.0) for 1/4 & 5/16 sizes
1" (25.4) for 3/8 & 1/2 sizes
- Setscrew included
- Material: Malleable iron
- Standard finish: ZN
- Available in HDG with CZ Hardware



| Part No. | Thread Size A | Set Screw | C | D | Design Load Lbs. kN | Wt./C Lbs. kg |
|-----------|------------------|--------------|--|---|------------------------|------------------|
| B444-1/4 | 1/4"-20 | 1/4"-20 | 1 ³ / ₈ " (34.9) | 1 ³ / ₁₆ " (30.1) | 150 (.66) | 24 (10.9) |
| B444-5/16 | 5/16"-18 | 1/4"-20 | 1 ³ / ₈ " (34.9) | 1 ³ / ₁₆ " (30.1) | 150 (.66) | 23 (10.4) |
| B444-3/8 | 3/8"-16 | 1/2"-13 | 1 ⁷ / ₈ " (47.6) | 2" (50.8) | 350 (7.12) | 65 (29.5) |
| B444-1/2 | 1/2"-13 | 5/8"-11 | 2 ³ / ₈ " (60.3) | 2 ¹ / ₂ " (63.5) | 1000 (4.45) | 132 (59.9) |

BC442 LIGHT DUTY BEAM CLAMP

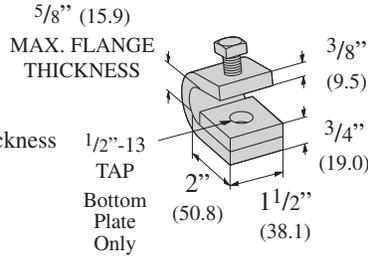
- Design Load 75 Lbs. (.33 kN)
- Safety Factor of 5
- 1¹/₁₆" (17.5) Max. Flange Thickness
- Setscrew included
- Holes tapped 1/4"-20 (Bottom & Back)
- Material: 13 Gauge (2.3)
- Standard finish: ZN
- Wt./C 13 Lbs. (3.9 kg)



Reference page 98 for general fitting and standard finish specifications.

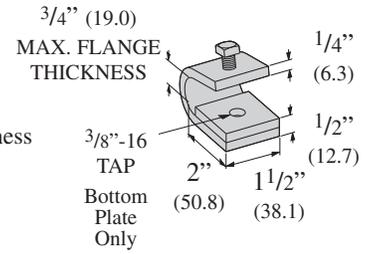
B210 BEAM CLAMP

- Design Load 800 Lbs. (3.56 kN)
- Safety Factor of 5
- 5/8" (15.9) Max. Flange Thickness
- 1/2"-13 Setscrew included
- Standard finish: ZN
- Wt./C 100 Lbs. (45.3 kg)



B210A BEAM CLAMP

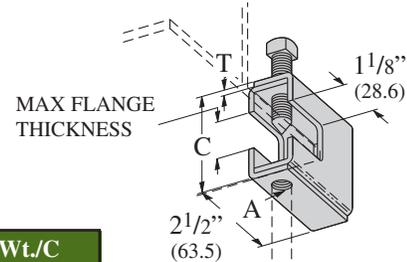
- Design Load 300 Lbs. (1.33 kN)
- Safety Factor of 5
- 3/4" (19.0) Max. Flange Thickness
- 3/8"-16 Setscrew included
- Standard finish: ZN
- Wt./C 60 Lbs. (27.2 kg)



B303 THRU B309 BEAM CLAMPS

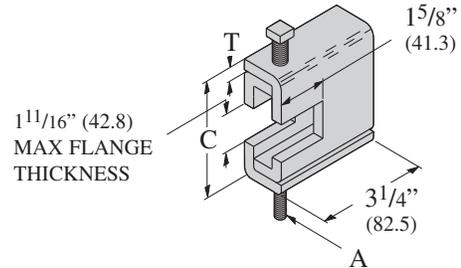
- Safety Factor of 5
- Max. Flange Thickness 1/16" (1.6) thru 7/8" (22.2)
- Setscrew included
- When Retaining Strap is required, order B312 separately
- Recommended Setscrew Torque: 3/8"-16 150 in.-lbs. (16.9 N•m)
1/2"-13 350 in.-lbs. (39.5 N•m)
- Standard finishes: ZN, HDG

| Part No. | Rod Size A | Set Screw | C | T | Design Load | | Wt./C | |
|----------|------------|-----------|----------------|--------------|-------------|--------|-------|--------|
| | | | | | Lbs. | kN | Lbs. | kg |
| B303 | 1/4"-20 | 3/8"-16 | 2 5/16" (58.7) | 11 Ga. (3.0) | 400 | (1.78) | 72 | (32.6) |
| B304 | 5/16"-18 | 3/8"-16 | 2 5/16" (58.7) | 11 Ga. (3.0) | 600 | (2.67) | 72 | (32.6) |
| B305 | 3/8"-16 | 3/8"-16 | 2 5/16" (58.7) | 11 Ga. (3.0) | 600 | (2.67) | 72 | (32.6) |
| B306 | 3/8"-16 | 1/2"-13 | 2 7/16" (61.9) | 7 Ga. (4.5) | 1100 | (4.89) | 97 | (44.0) |
| B307 | 1/2"-13 | 1/2"-13 | 2 7/16" (61.9) | 7 Ga. (4.5) | 1100 | (4.89) | 97 | (44.0) |
| B308 | 1/2"-13 | 1/2"-13 | 2 9/16" (65.1) | 1/4" (6.3) | 1500 | (6.67) | 133 | (60.3) |
| B309 | 5/8"-11 | 1/2"-13 | 2 9/16" (65.1) | 1/4" (6.3) | 1500 | (6.67) | 133 | (60.3) |



B321 SERIES BEAM CLAMPS

- Safety Factor of 5
- 1 1/16" (42.8) Max. Flange Thickness
- Setscrew included
- When Retaining Strap is required, order B312 separately
- Recommended Setscrew Torque: 1/2"-13 350 in.-lbs. (39.5 N•m)
5/8"-11 700 in.-lbs. (79.0 N•m)
- Minimum flange thickness: B321-1 thru B321-3 1/4" (6.3)
B321-4 and B321-5 3/8" (9.5)
- Standard finishes: ZN, HDG

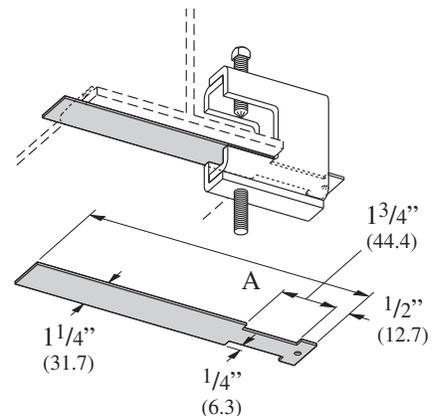


| Part No. | Rod Size A | Setscrew | C | T | Design Load | | Wt./C | |
|----------|------------|----------|-----------------|-------------|-------------|--------|-------|---------|
| | | | | | Lbs. | kN | Lbs. | kg |
| B321-1 | 3/8"-16 | 1/2"-13 | 3 9/16" (92.1) | 1/4" (6.3) | 1300 | (5.78) | 187 | (84.8) |
| B321-2 | 1/2"-13 | 1/2"-13 | 3 9/16" (92.1) | 1/4" (6.3) | 1400 | (6.23) | 186 | (84.3) |
| B321-3 | 5/8"-11 | 1/2"-13 | 3 9/16" (92.1) | 1/4" (6.3) | 1600 | (7.12) | 185 | (83.9) |
| B321-4 | 5/8"-11 | 5/8"-11 | 3 23/32" (94.4) | 5/16" (7.9) | 1800 | (8.00) | 239 | (108.4) |
| B321-5 | 3/4"-10 | 5/8"-11 | 3 23/32" (94.4) | 5/16" (7.9) | 2000 | (8.89) | 238 | (107.9) |

B312 SERIES RETAINING STRAP FOR USE WITH B303 THRU B309 AND B321 SERIES

- 3/4" (19.0) Max. Flange Thickness
- For thicker beams, step up one flange width size
- Material: 14 Gauge (1.9)
- Standard finishes: ZN, HDG

| Part No. | For Flange Width | | A | Wt./C | |
|----------|------------------|---------|-----|---------|-----------|
| | | | | Lbs. | kg |
| B312-6 | 6" | (152.4) | 9" | (228.6) | 22 (10.0) |
| B312-9 | 9" | (228.6) | 12" | (304.8) | 30 (13.6) |
| B312-12 | 12" | (304.8) | 15" | (381.0) | 40 (18.1) |
| B312-15 | 15" | (381.0) | 18" | (457.2) | 49 (22.2) |

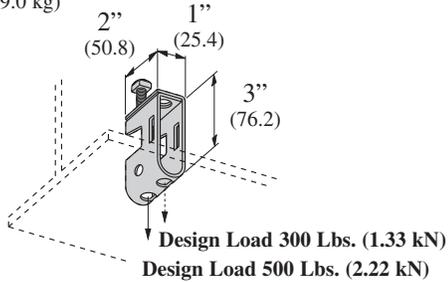


Reference page 98 for general fitting and standard finish specifications.

Beam Clamps

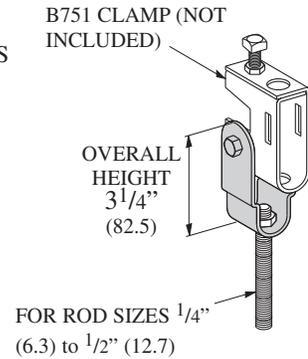
B751 BEAM CLAMP

- Safety Factor of 5
- $3/4$ " (19.0) Max. Flange Thickness
- Setscrew and Locknut included
- Maximum ATR Size $1/2$ "
- Use B753 Swivel Nut (not included)
- Material: 12 Gauge (2.6)
- Standard finish: ZN, HDG
- Wt./C 42 Lbs. (19.0 kg)



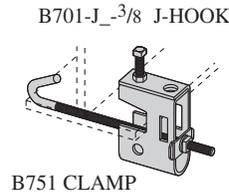
B752 BEAM CLAMP SWIVEL

- Design Load 500 Lbs. (2.22 kN)
- Safety Factor of 5
- Material: 12 Gauge (2.6)
- Use B753 Swivel Nut (not included)
- Includes:
1 pc. B752 Swivel Body
1 pc. $5/16$ "-18 x $1 3/4$ " HHCS
1 pc. $5/16$ "-18 Hex Nut
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



B751-J- $3/8$ BEAM CLAMP ASSEMBLY

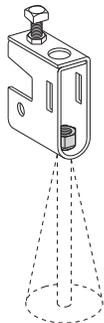
- Includes:
1 pc. B751 Beam Clamp
1 pc. B701 Type J-Hook only
1 pc. SA203-158 Clip
1 pc. $3/8$ "-16 Hex Nut
- $1/4$ " (6.3) Diameter J-Hook available upon request
Part Number changes to B751-J- $1/4$ and a $1/4$ -20 Machine Square Nut (MSQN) is used
- Use B753 Swivel Nut (not included)
- Standard finishes: ZN



| Part No. | For Flange Width | | Wt./C | |
|-----------------|------------------|---------------|-------|--------|
| | | | Lbs. | kg |
| B751-J4- $3/8$ | 3"-6" | (76.2-152.4) | 70 | (31.7) |
| B751-J6- $3/8$ | 5"-9" | (127.0-228.6) | 78 | (35.4) |
| B751-J9- $3/8$ | 8"-12" | (203.2-304.8) | 83 | (37.6) |
| B751-J12- $3/8$ | 11"-15" | (279.4-381.0) | 88 | (39.9) |

B753 SWIVEL NUT

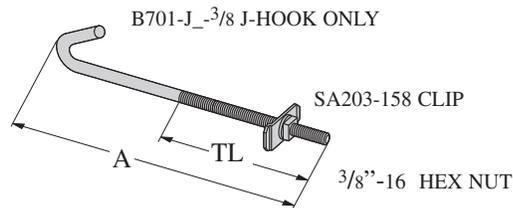
- Provides a full swivel of 15° in any direction
Specify rod size
- Standard finish: ZN



| Part No. | For Rod Size | Wt./C | |
|-------------|--------------|-------|-------|
| | | Lbs. | kg |
| B753- $3/8$ | $3/8$ "-16 | 4.0 | (1.8) |
| B753- $1/2$ | $1/2$ "-13 | 3.4 | (1.5) |

B701 SERIES J-HOOK

- $1/4$ " (6.3) Diameter J-Hook available upon request
Part Number changes to B751-J- $1/4$ and a $1/4$ -20 Machine Square Nut (MSQN) is used
- Standard finish: ZN

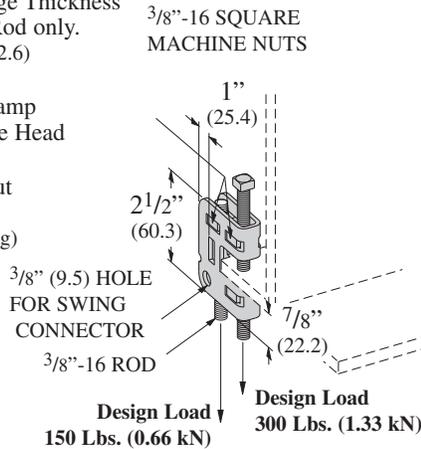


| Part No. | A | Thread Length TL | | Wt./C | |
|-----------------|------------|------------------|-------------------|-------|--------|
| | | Lbs. | kg | Lbs. | kg |
| B701-J4- $3/8$ | $8 3/4$ " | (222.2) | $5 1/2$ " (139.7) | 26 | (11.8) |
| B701-J6- $3/8$ | $11 3/4$ " | (298.4) | $6 1/2$ " (165.1) | 34 | (15.4) |
| B701-J9- $3/8$ | $14 3/4$ " | (374.6) | $6 1/2$ " (165.1) | 41 | (18.6) |
| B701-J12- $3/8$ | $17 3/4$ " | (450.8) | $6 1/2$ " (165.1) | 48 | (21.8) |

Reference page 98 for general fitting and standard finish specifications.

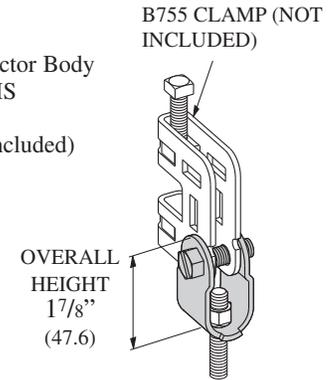
B755 3/8" BEAM CLAMP

- Safety Factor of 5
- 5/8" (15.9) Max. Flange Thickness
- For 3/8"-16 Hanger Rod only.
- Material: 12 Gauge (2.6)
- Includes:
 - 1 pc. B755 Beam Clamp
 - 1 pc. 3/8" x 2" Square Head Set Screw
 - 2 pcs. 3/8" Square Nut
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



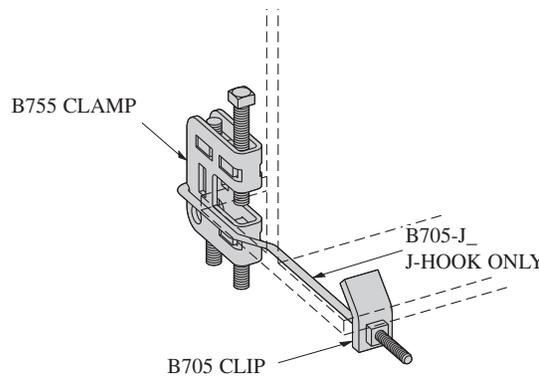
B756-3/8 SWING CONNECTOR

- Design Load 150 Lbs. (0.66 kN)
- Safety Factor of 5
- Material: 12 Gauge (2.6)
- Includes:
 - 1 pc. B756-3/8 Swing Connector Body
 - 1 pc. 5/16"-18 x 1 1/4" SHHMS
 - 1 pc. 5/16"-18 Square Nut
- Use B753 Swivel Nut (not included)
- Standard finish: ZN
- Wt./C 15 Lbs. (6.8 kg)



B755-3/8-J BEAM CLAMP ASSEMBLY

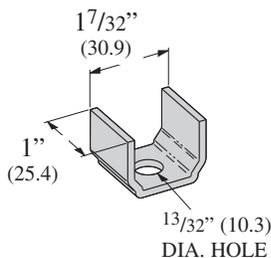
- Includes:
 - 1 pc. B755-3/8 Beam Clamp
 - 1 pc. B705 Type J-Hook only
 - 1 pc. B705 Clip
 - 1 pc. 1/4"-20 Square Nut
- Standard finish: ZN



| Part No. | For Flange Width | | Wt./C | |
|--------------|------------------|---------------|-------|--------|
| | | | Lbs. | kg |
| B755-3/8-J4 | 4"-6" | (101.6-152.4) | 47 | (21.3) |
| B755-3/8-J6 | 6"-10" | (152.4-254.0) | 51 | (23.1) |
| B755-3/8-J10 | 10"-12" | (254.0-304.8) | 53 | (24.0) |
| B755-3/8-J12 | 12"-14" | (304.8-355.6) | 55 | (24.9) |

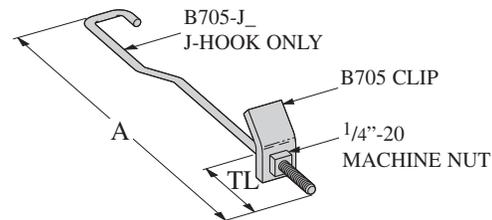
B702 CLEAT

- To eliminate the swiveling of the rod when required, use the B702 Cleat and a locking nut. This can be used with the B751 Beam Clamp, B752 Swivel or B756 Swing Connector.
- Material: 12 Gauge (2.6)
- Standard finish: ZN
- Wt./C 6 Lbs. (2.7 kg)



B705 SERIES J-HOOK

- Use with B755-3/8
- Standard finish: ZN



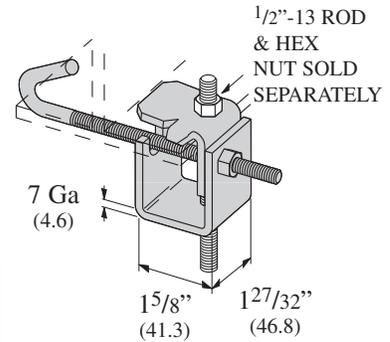
| Part No. | A | Thread Length TL | | Wt./C | | |
|----------|---------|------------------|--------|---------|----|--------|
| | | Lbs. | kg | Lbs. | kg | |
| B705-J4 | 7 3/8" | (187.3) | 3" | (76.2) | 17 | (7.7) |
| B705-J6 | 11 3/8" | (288.9) | 4 1/2" | (114.3) | 21 | (9.5) |
| B705-J10 | 13 3/8" | (339.7) | 4 1/2" | (114.3) | 23 | (10.4) |
| B705-J12 | 15 3/8" | (390.5) | 4 1/2" | (114.3) | 25 | (11.3) |

Reference page 98 for general fitting and standard finish specifications.

Beam Clamps

B750 SERIES BEAM CLAMP

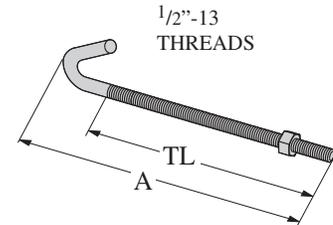
- Safety Factor of 5
- Design Load 500 Lbs. (2.22 kN)
- Recommended Torque:
J-Hook Nut 125 in-lbs. (14.1 N•m)
- Maximum Flange Thickness $\frac{5}{8}$ " (15.9)
- Standard finish: ZN



| Part No. | For Flange Width | | Wt./C | |
|-----------------|------------------|---------------|-------|--------|
| | | | Lbs. | kg |
| B750-J4 | 3"-6" | (76.2-152.4) | 109 | (49.4) |
| B750-J6 | 5"-9" | (127.0-228.6) | 124 | (56.2) |
| B750-J9 | 8"-12" | (203.2-304.8) | 135 | (61.2) |
| B750-J12 | 11"-15" | (279.4-381.0) | 147 | (66.7) |

B700 SERIES J-HOOK

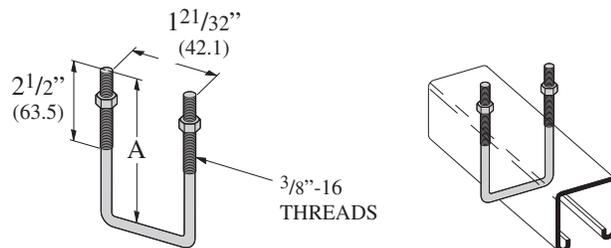
- Includes:
1 pc. J-Bolt
1 pc. Hex Nut
- Maximum Flange Thickness $\frac{5}{8}$ " (15.9)
- Standard finish: ZN



| Part No. | A | | Thread Length TL | | Wt./C | |
|-----------------|--------------------|---------|--------------------|---------|-------|--------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B700-J4 | 8 $\frac{1}{2}$ " | (215.9) | 6 $\frac{3}{4}$ " | (171.4) | 44 | (19.9) |
| B700-J6 | 11 $\frac{1}{2}$ " | (292.1) | 9 $\frac{3}{4}$ " | (247.6) | 53 | (24.0) |
| B700-J9 | 14 $\frac{1}{2}$ " | (368.3) | 12 $\frac{3}{4}$ " | (323.8) | 63 | (28.6) |
| B700-J12 | 17 $\frac{1}{2}$ " | (444.5) | 15 $\frac{3}{4}$ " | (400.0) | 78 | (35.4) |

B500 SERIES SQUARE U-BOLT

- Includes:
1 pc. U-Bolt only
2 pcs. $\frac{3}{8}$ "-16 Hex Nuts
- Additional sizes available
- Standard finish: ZN, SS4

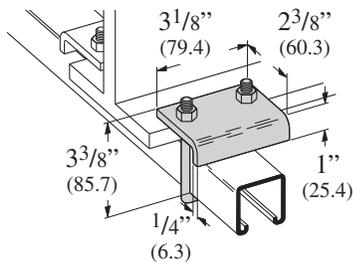


| Part No. | A | | Channel Size | Wt./C | |
|-------------------|-------------------|---------|---------------------------------------|-------|--------|
| | Lbs. | kg | | Lbs. | kg |
| B500-3-3/8 | 3 $\frac{3}{8}$ " | (85.7) | 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " | 25 | (11.3) |
| B500-5 | 5" | (127.0) | 3 $\frac{1}{4}$ " x 1 $\frac{5}{8}$ " | 33 | (14.9) |

Reference page 98 for general fitting and standard finish specifications.

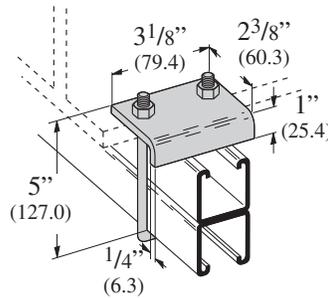
B441-22 BEAM CLAMP

- Design Load 1200 Lbs. (5.34 kN) when used in pairs
- Safety Factor of 5
- $3/4''$ (19.0) Max. Flange Thickness
- For use with $13/16''$ (20.6) to $15/8''$ (41.3) high channel
- Recommended Torque: 150 in-lbs. (16.9 N•m)
- Sold in pieces
- Other flange thickness variations are available, contact B-Line Engineering for sizes
- Standard finishes: ZN, HDG, SS4
- Wt./C 87 Lbs. (39.4 kg)



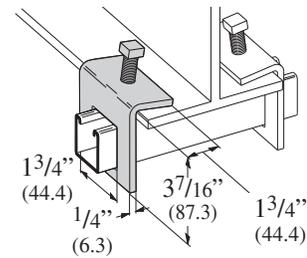
B441-22A BEAM CLAMP

- Design Load 1200 Lbs. (5.34 kN) when used in pairs
- Safety Factor of 5
- $3/4''$ (19.0) Max. Flange Thickness
- For use with $15/8''$ (41.3) to $31/4''$ (82.5) high channel
- Recommended Torque: 150 in-lbs. (16.9 N•m)
- Sold in pieces
- Other flange thickness variations are available, contact B-Line Engineering for sizes
- Standard finishes: ZN, HDG, SS4
- Wt./C 93 Lbs. (42.2 kg)



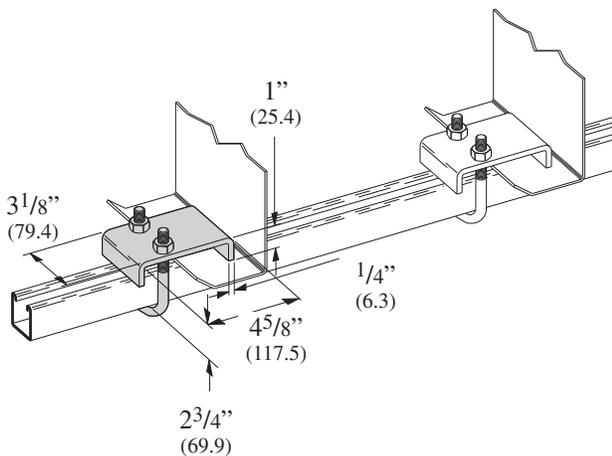
B314 BEAM CLAMP

- Design Load 900 Lbs. (4.00 kN) when used in pairs
- Safety Factor of 5
- $5/8''$ (15.9) Max. Flange Thickness
- For use with channel $15/8''$ (41.3) in height
- Setscrew included
- Sold in pieces.
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 105 Lbs. (47.6 kg)



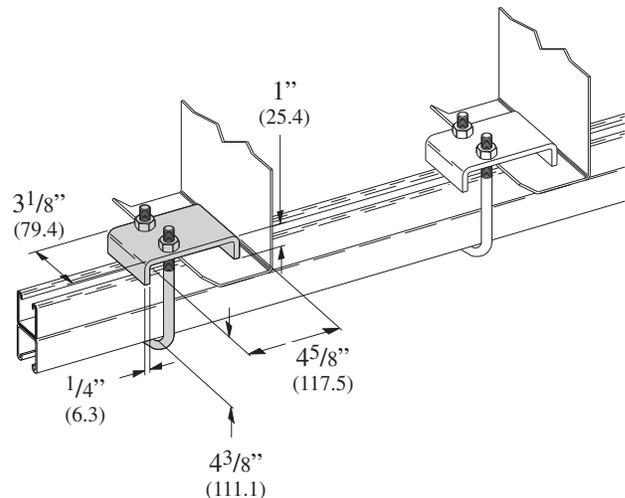
B441Z-22 BEAM CLAMP

- Design Load 1200 Lbs. (5.34 kN) when used in series
- Safety Factor of 5
- Sold in pieces
- For use with $13/16''$ (20.6) to $15/8''$ (41.3) high channel
- Recommended Torque: 150 in-lbs. (16.9 N•m)
- Standard finishes: ZN
- Wt./C 95 Lbs. (43.1 kg)



B441Z-22A BEAM CLAMP

- Design Load 1200 Lbs. (5.34 kN) when used in series
- Safety Factor of 5
- Sold in pieces
- For use with $15/8''$ (41.3) to $31/4''$ (82.5) high channel
- Recommended Torque: 150 in-lbs. (16.9 N•m)
- Standard finishes: ZN
- Wt./C 101 Lbs. (45.8 kg)

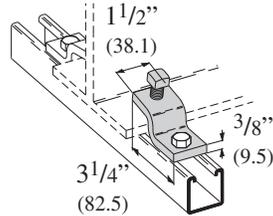


Reference page 98 for general fitting and standard finish specifications.

Beam Clamps

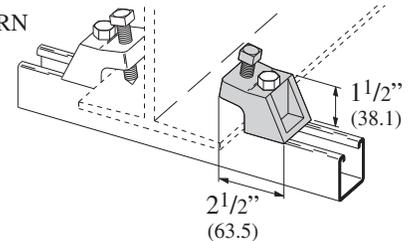
B211 ZEE BEAM CLAMP

- Design Load 600 Lbs. (2.67 kN) when used in pairs
- Safety Factor of 5
- 1" (25.4) Max. Flange Thickness
- 1/2"-13 Setscrew included
- Sold in pieces
- Order 1/2"-13 HHCS and Channel Nut separately
- Standard finishes: ZN, HDG
- Wt./C 66 Lbs. (29.9 kg)



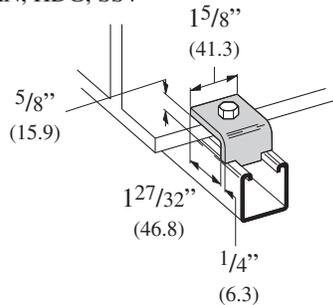
B213 I-BEAM CLAMP

- Design Load 900 Lbs. (4.00 kN) when used in pairs
- Safety Factor of 5
- 7/8" (22.2) Max. Flange Thickness
- 1/2"-13 Setscrew included
- Sold in pieces
- Order 1/2"-13 x 2 1/4" HHCS and Channel Nut separately
- Material: Malleable iron
- Standard finishes: ZN, GRN
- Wt./C 95 Lbs. (43.1 kg)



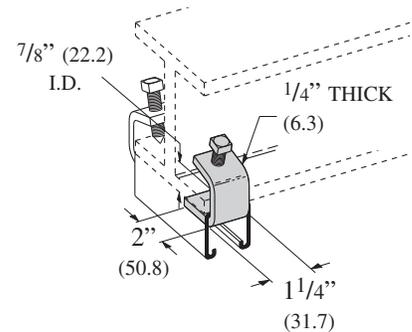
B355 BEAM CLAMP

- Design Load 1200 Lbs. (5.34 kN) when used in pairs
- Safety Factor of 5
- 5/8" (15.9) Max. Flange Thickness
- Sold in pieces
- Order 1/2"-13 x 1 1/2" HHCS and Channel Nut separately
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 30 Lbs. (13.6 kg)



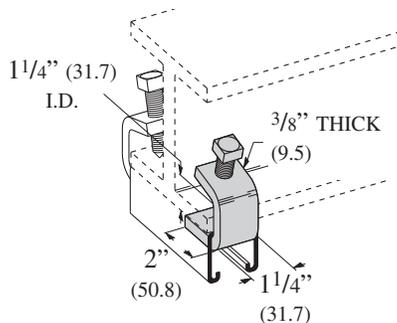
B212-1/4 I-BEAM CLAMP

- Design Load 600 Lbs. (2.67 kN) when used in pairs
- Safety Factor of 5
- 7/8" (22.2) Max. Flange Thickness
- 3/8"-16 Setscrew included
- Sold in pieces
- Standard finish: ZN
- Wt./C 41 Lbs. (18.6 kg)



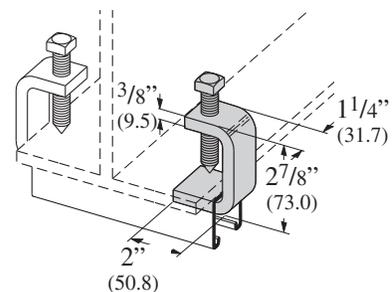
B212-3/8 I-BEAM CLAMP

- Design Load 1000 Lbs. (4.45 kN) when used in pairs
- Safety Factor of 5
- 1 1/8" (28.6) Max. Flange Thickness
- 1/2"-13 Setscrew included
- Sold in pieces
- Standard finishes: ZN, HDG
- Wt./C 62 Lbs. (28.1 kg)



B435 BEAM CLAMP

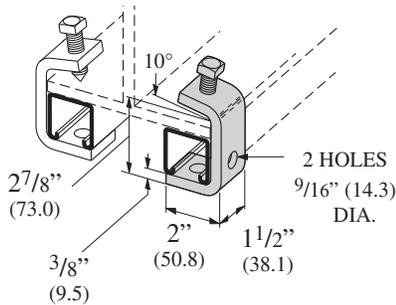
- Design Load 900 Lbs. (4.00 kN) when used in pairs
- Safety Factor of 5
- 2 1/8" (54.0) Max. Flange Thickness
- 1/2"-13 x 2" Setscrew included
- Sold in pieces
- Standard finish: ZN
- Wt./C 82 Lbs. (37.2 kg)



Reference page 98 for general fitting and standard finish specifications.

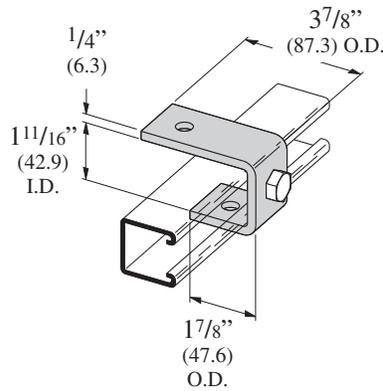
B427 BEAM CLAMP

- Design Load 1100 Lbs. (4.89 kN) when used in pairs
- Safety Factor of 5
- 2 1/2" (63.5) Max. Flange Thickness without channel
- 1/2"-13 x 1 1/2" Setscrew included
- Sold in pieces
- Standard finish: ZN
- Wt./C 92 Lbs. (41.7 kg)



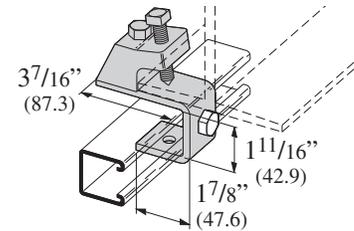
B405 SUSPENSION MEMBER

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



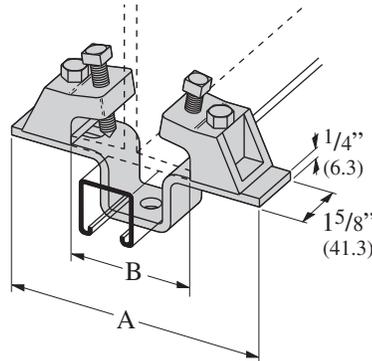
B405A SUSPENSION MEMBER WITH BEAM CLAMP

- 7/8" (22.2) Max. Flange Thickness
- Includes:
 - 1 pc. B405 Suspension Member
 - 1 pc. B213 I-Beam Clamp
 - 1 pc. 1/2"-13 x 2 1/2" HHCS
 - 1 pc. 1/2"-13 Hex Nut
- Material: Malleable iron
- Standard finishes: ZN, GRN
- Wt./C 183 Lbs. (83.0 kg)



B318 THRU B320 BEAM CLAMP ASSEMBLY

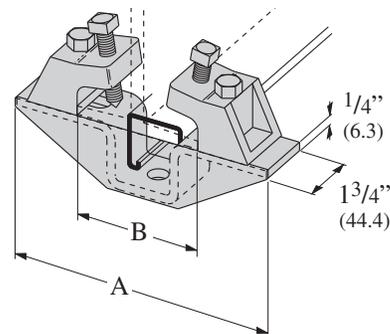
- Safety Factor of 5
- 7/8" (22.2) Max. Flange Thickness
- Includes:
 - 1 pc. B333 Slotted U-Support
 - 2 pcs. B213 I-Beam Clamp
 - 2 pcs. 1/2"-13 x 2 1/2" HHCS
 - 2 pcs. 1/2"-13 Hex Nuts
- Material: Malleable iron
- Standard finishes: ZN, GRN



| Part No. | A | | For Flange Width B | | Design Load | | Wt./C | |
|-------------|---------|---------|--------------------|---------------|-------------|--------|-------|---------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kN | Lbs. | kg |
| B318 | 7 1/4" | (184.1) | 2 3/8"-4 1/2" | (60.3-114.3) | 1200 | (5.34) | 325 | (147.4) |
| B319 | 8 1/2" | (215.9) | 3 3/4"-5 3/4" | (95.2-146.0) | 800 | (3.56) | 340 | (154.2) |
| B320 | 10 3/8" | (263.5) | 5 5/8"-7 5/8" | (142.9-193.7) | 560 | (2.49) | 357 | (161.9) |

B602A THRU B602C BEAM CLAMP WITH GUSSET ASSEMBLY

- Safety Factor of 5
- 7/8" (22.2) Max. Flange Thickness
- Includes:
 - 1 pc. B451 Slotted Three Hole U Support with Gusset
 - 2 pcs. B213 I-Beam Clamp
 - 2 pcs. 1/2"-13 x 2 1/2" HHCS
 - 2 pcs. 1/2"-13 Hex Nuts
- Material: Malleable iron
- Standard finishes: ZN, GRN



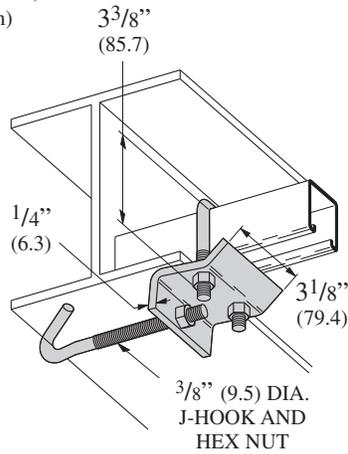
| Part No. | A | | For Flange Width B | | Design Load | | Wt./C | |
|--------------|---------|---------|--------------------|---------------|-------------|--------|-------|---------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kN | Lbs. | kg |
| B602A | 7 1/4" | (184.1) | 2 3/8"-4 1/2" | (60.3-114.3) | 1200 | (5.34) | 365 | (165.1) |
| B602B | 8 1/2" | (215.9) | 3 3/4"-5 3/4" | (95.2-146.0) | 1200 | (5.34) | 383 | (173.7) |
| B602C | 10 3/8" | (263.5) | 5 5/8"-7 5/8" | (142.9-193.7) | 1200 | (5.34) | 408 | (185.0) |

Reference page 98 for general fitting and standard finish specifications.

Beam Clamps

B760-22 SERIES BEAM CLAMP

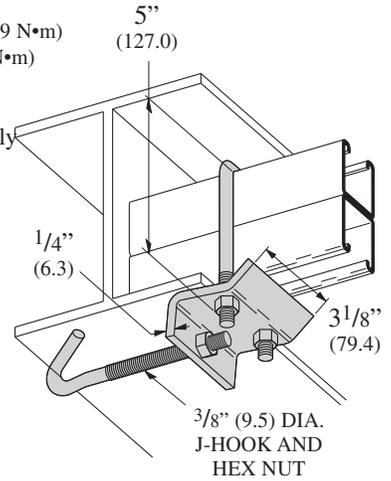
- 1" (25.4) Max. Flange Thickness
- For use with 1³/₁₆" (20.6) to 1⁵/₈" (41.3) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
J-Hook Nut 60 in-lbs. (6.8 N•m)
- Includes:
1 pc. B760 Plate
1 pc. B701 Type J-Hook only
1 pc. B500-3³/₈" U-Bolt only
3 pcs. 3/8"-16 Hex Nuts
- Standard finish: ZN



| Part No. | For Flange Width | | Wt./C | |
|--------------------|--------------------------------------|---------------|-------|--------|
| | | | Lbs. | kg |
| B760-22-J4 | 4"-5 ⁷ / ₈ " | (101.6-149.2) | 122 | (55.3) |
| B760-22-J6 | 6"-8 ⁷ / ₈ " | (152.4-225.4) | 129 | (58.5) |
| B760-22-J9 | 9"-11 ⁷ / ₈ " | (228.6-301.6) | 135 | (61.2) |
| B760-22-J12 | 12"-14 ⁷ / ₈ " | (304.8-377.8) | 141 | (63.9) |

B760-22A SERIES BEAM CLAMP

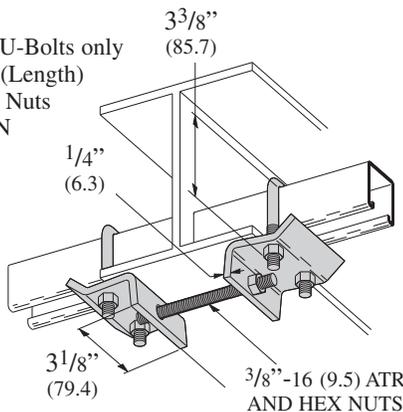
- 1" (25.4) Max. Flange Thickness
- For use with 1⁵/₈" (41.3) to 3¹/₄" (82.5) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
J-Hook Nut 60 in-lbs. (6.8 N•m)
- Includes:
1 pc. B760 Plate
1 pc. B701 Type J-Hook only
1 pc. B500-5" U-Bolt only
3 pcs. 3/8"-16 Hex Nuts
- Standard finish: ZN



| Part No. | For Flange Width | | Wt./C | |
|---------------------|--------------------------------------|---------------|-------|--------|
| | | | Lbs. | kg |
| B760-22A-J4 | 4"-5 ⁷ / ₈ " | (101.6-149.2) | 129 | (58.5) |
| B760-22A-J6 | 6"-8 ⁷ / ₈ " | (152.4-225.4) | 136 | (61.7) |
| B760-22A-J9 | 9"-11 ⁷ / ₈ " | (228.6-301.6) | 142 | (64.4) |
| B760-22A-J12 | 12"-14 ⁷ / ₈ " | (304.8-377.8) | 148 | (67.1) |

B761-22 SERIES BEAM CLAMP

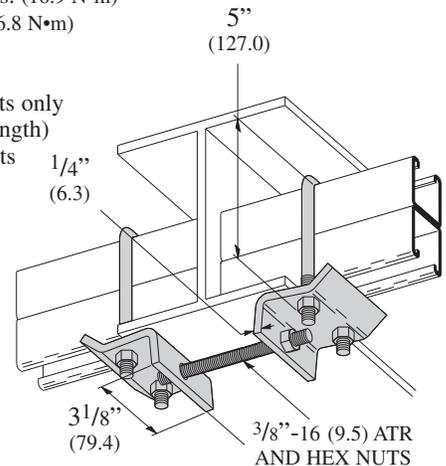
- 1" (25.4) Max. Flange Thickness
- For use with 1³/₁₆" (20.6) to 1⁵/₈" (41.3) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
ATR Nuts 60 in-lbs. (6.8 N•m)
- Includes:
2 pcs. B700 Plates
2 pcs. B500-3³/₈" U-Bolts only
1 pc. 3/8"-16 ATR (Length)
6 pcs. 3/8"-16 Hex Nuts
- Standard finish: ZN



| Part No. | For Flange Width | ATR Length | Wt./C | |
|-------------------|--------------------------------------|------------|---------|-------------|
| | | | Lbs. | kg |
| B761-22-4 | 4"-5 ⁷ / ₈ " | 4" | (101.6) | 202 (91.6) |
| B761-22-6 | 6"-8 ⁷ / ₈ " | 6" | (152.4) | 206 (93.4) |
| B761-22-9 | 9"-11 ⁷ / ₈ " | 9" | (228.6) | 214 (97.0) |
| B761-22-12 | 12"-14 ⁷ / ₈ " | 12" | (304.8) | 221 (100.2) |

B761-22A SERIES BEAM CLAMP

- 1" (25.4) Max. Flange Thickness
- For use with 1⁵/₈" (41.3) to 3¹/₄" (82.5) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
ATR Nuts 60 in-lbs. (6.8 N•m)
- Includes:
2 pcs. B700 Plates
2 pcs. B500-5" U-Bolts only
1 pc. 3/8"-16 ATR (Length)
6 pcs. 3/8"-16 Hex Nuts
- Standard finish: ZN

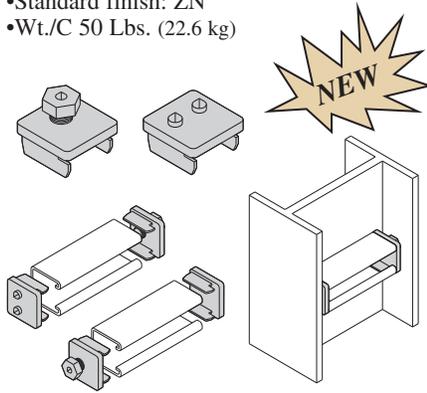


| Part No. | For Flange Width | ATR Length | Wt./C | |
|--------------------|--------------------------------------|------------|---------|-------------|
| | | | Lbs. | kg |
| B761-22A-4 | 4"-5 ⁷ / ₈ " | 4" | (101.6) | 216 (98.0) |
| B761-22A-6 | 6"-8 ⁷ / ₈ " | 6" | (152.4) | 220 (99.8) |
| B761-22A-9 | 9"-11 ⁷ / ₈ " | 9" | (228.6) | 228 (103.4) |
| B761-22A-12 | 12"-14 ⁷ / ₈ " | 12" | (304.8) | 235 (106.6) |

Reference page 98 for general fitting and standard finish specifications.

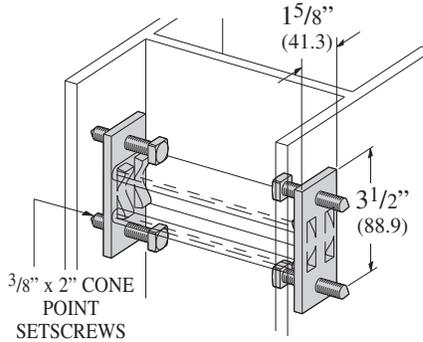
B614 COLUMN SUPPORT FOR B22

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



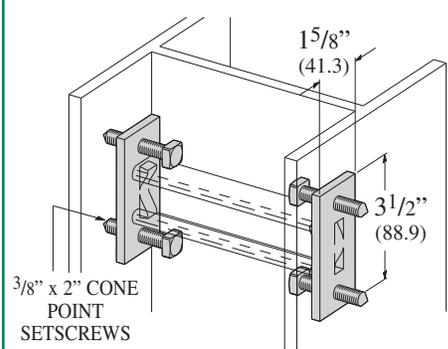
B613 COLUMN SUPPORT FOR B22

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



B613A COLUMN SUPPORT FOR B52

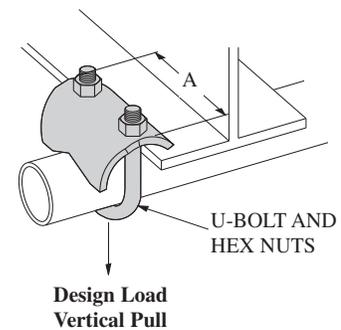
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B52 and B54 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



B422 SERIES RIGHT ANGLE CLAMP

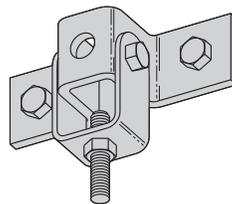
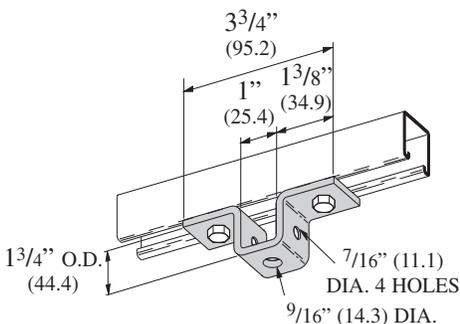
- Safety Factor of 5
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, SS4

| Part No. | Conduit Size | | A | | Design Load Vertical Pull | | Wt./C | |
|------------------------------------|---------------------------------|-------|-----------------------------------|---------|---------------------------|--------|-------|--------|
| | in | (mm) | in | (mm) | Lbs. | kg | Lbs. | kg |
| B422-1/2 | 1/2" | (15) | 2 ³ / ₈ " | (60.3) | 250 | (1.11) | 38 | (17.2) |
| B422-3/4 | 3/4" | (20) | 2 ³ / ₈ " | (60.3) | 300 | (1.33) | 39 | (17.7) |
| B422-1 | 1" | (25) | 2 ⁷ / ₈ " | (73.0) | 400 | (1.78) | 48 | (21.8) |
| B422-1 ¹ / ₄ | 1 ¹ / ₄ " | (32) | 2 ⁷ / ₈ " | (73.0) | 400 | (1.78) | 50 | (22.7) |
| B422-1 ¹ / ₂ | 1 ¹ / ₂ " | (40) | 3 ¹ / ₄ " | (82.5) | 500 | (2.22) | 59 | (26.7) |
| B422-2 | 2" | (50) | 3 ¹¹ / ₁₆ " | (93.7) | 600 | (2.67) | 75 | (34.0) |
| B422-2 ¹ / ₂ | 2 ¹ / ₂ " | (65) | 4 ¹ / ₄ " | (107.9) | 700 | (3.11) | 98 | (44.4) |
| B422-3 | 3" | (80) | 4 ⁷ / ₈ " | (123.8) | 800 | (3.56) | 111 | (50.3) |
| B422-3 ¹ / ₂ | 3 ¹ / ₂ " | (90) | 5 ⁷ / ₁₆ " | (138.1) | 900 | (4.00) | 123 | (55.8) |
| B422-4 | 4" | (100) | 6" | (152.4) | 1000 | (4.45) | 135 | (61.2) |



B107S U-SUPPORT

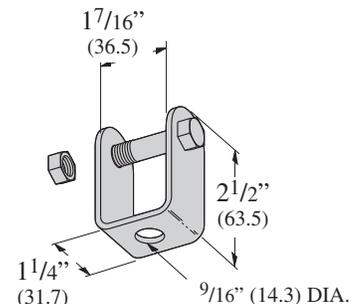
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, GRN
- Wt./C 51 Lbs. (23.1 kg)



- Illustration shows B107S and B593 used together
- Design Load 900 Lbs., strength of assembly only
- Verify anchorage

B593 CLEVIS SWIVEL

- Includes:
 - 1 pc. 3/8"-16 x 2" HHCS
 - 1 pc. 3/8"-16 Hex Nut
- Material: 11 Gauge (3.0)
- Standard finishes: ZN, GRN
- Wt./C 31 Lbs. (14.0 kg)



Reference page 98 for general fitting and standard finish specifications.

Pipe/Conduit Clamps & Hangers

B-Line's beam attachments and pipe supports offered in this section are designed to provide supports without drilling or welding. A complete selection of beam clamps, pipe clamps, rollers, supports and accessories are designed for use with B-Line channels and offer many installation advantages.

Materials & Finishes*

Pipe clamps, pipe hangers, beam clamps, brackets, and rollers are made from low carbon steel strips, plates or rod unless noted.

| Finish Code | Finish | Specification |
|-------------|--------------------------|-------------------------------------|
| PLN | Plain | ASTM A1011 33,000 PSI min. yield |
| ZN | Electro-Plated Zinc | ASTM B633 SC3 Type III |
| GRN | Dura-Green | |
| DCU | Dura-Copper | |
| HDG | Hot-Dipped Galvanized | ASTM A123 |
| YZN | Yellow Zinc Chromate | ASTM B633 SC3 Type II |
| SS4 | Stainless Steel Type 304 | ASTM A240 |
| SS6 | Stainless Steel Type 316 | ASTM A240 |
| AL | Aluminum | ASTM B209 |

*Unless otherwise noted.

Load Data

The load data published includes a safety factor of 5.0 unless noted (safety factor = ratio of ultimate load to the design load).

Recommended Torque For Setscrews (unless noted)

| Setscrew Size | 1/4"-20 | 3/8"-16 | 1/2"-13 |
|---------------|---------|---------|---------|
| Foot/Lbs. | 4 | 5 | 11 |
| Nm | 5 | 7 | 15 |

| Setscrew Size | 5/8"-11 | 3/4"-10 |
|---------------|---------|---------|
| Foot/Lbs. | 21 | 34 |
| Nm | 28 | 46 |

*See chart on page 58 for bolt torque.

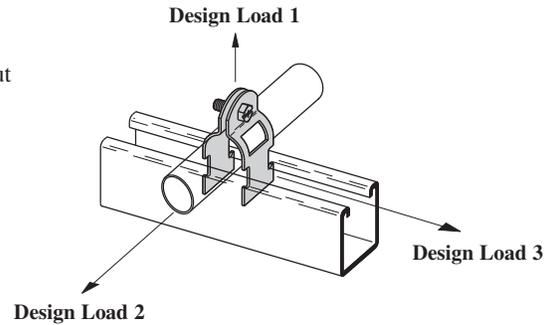
Metric

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



B2207 THRU B2213 MULTI-GRIP PIPE CLAMPS FOR THINWALL (EMT), I.M.C., RIGID CONDUIT OR PIPE

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finish: ZN



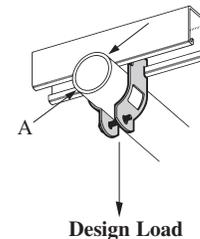
| Part No. | Nominal Size | | Material Thickness | | O.D. Size Range | | Alternate For Clamp No.'s | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|--------------|------|--------------------|-------|-----------------|-------------|-----------------------------------|---------------|--------|---------------|-------|---------------|-------|-------|--------|
| | | | | | | | | Lbs. | kN | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B2207 | 3/8" | (10) | 16 Ga. | (1.5) | .557-.706 | (14.2-17.9) | B2000, B2007, B2026 | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 9 | (4.1) |
| B2208 | 1/2" | (15) | 16 Ga. | (1.5) | .701-.875 | (17.8-22.2) | B2001, B2008, B2027, B2028 | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 11 | (5.0) |
| B2209 | 3/4" | (20) | 14 Ga. | (1.9) | .917-1.081 | (23.2-27.4) | B2002, B2009, B2029 | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 12 | (5.4) |
| B2210 | 1" | (25) | 14 Ga. | (1.9) | 1.125-1.375 | (28.6-34.9) | B2003, B2010, B2030, B2031, B2032 | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 13 | (5.9) |
| B2211 | 1 1/4" | (32) | 14 Ga. | (1.9) | 1.500-1.691 | (38.1-42.9) | B2004, B2011, B2033, B2034 | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 15 | (6.8) |
| B2212 | 1 1/2" | (40) | 12 Ga. | (2.6) | 1.735-1.931 | (44.0-49.0) | B2005, B2012, B2035, B2036 | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 23 | (10.4) |
| B2213 | 2" | (50) | 12 Ga. | (2.6) | 2.192-2.400 | (55.7-60.9) | B2006, B2013 B2039 | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 26 | (11.8) |

Pipe/Conduit Clamps & Hangers

BPC-8 THRU BPC-64 BREAK-APART CONDUIT CLAMP

- Design Load 200 Lbs. (.896 kN)
- Includes Combination Recess Hex Head Machine Screw
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finish: ZN

| Part No. | A | | Wt./C | |
|----------|---------------------------|---------|-------|--------|
| | Rigid or EMT Conduit Size | | Lbs. | kg |
| BPC-8 | 1/2" | (21.3) | 11.2 | (5.1) |
| BPC-12 | 3/4" | (26.7) | 12.7 | (5.8) |
| BPC-16 | 1" | (33.4) | 14.5 | (6.6) |
| BPC-20 | 1 1/4" | (42.2) | 16.5 | (7.5) |
| BPC-24 | 1 1/2" | (48.3) | 18.5 | (8.4) |
| BPC-32 | 2" | (60.3) | 21.5 | (9.8) |
| BPC-40 | 2 1/2" | (73.0) | 21.5 | (9.8) |
| BPC-48 | 3" | (88.9) | 22.0 | (10.0) |
| BPC-56 | 3 1/2" | (101.6) | 23.0 | (10.4) |
| BPC-64 | 4" | (114.3) | 27.5 | (12.5) |



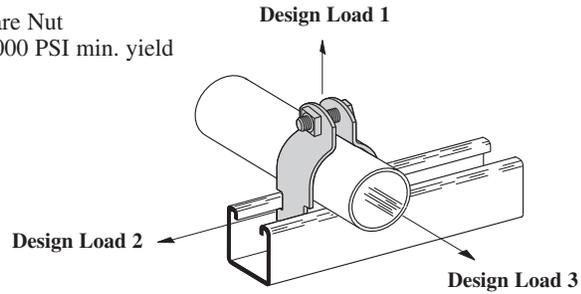
Reference page 110 for general fitting and standard finish specifications.

Pipe Clamps

B2000 SERIES PIPE AND CONDUIT CLAMPS

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0) ASTM A1011HSLA Gr. 50
- Standard finishes: ZN, HDG, SS4, SS6, AL

Note: For EMT sizes 2 1/2" and larger use rigid conduit sizes.



THINWALL CONDUIT (EMT) CLAMPS

| Part No. | Conduit Size | | Material Thickness | | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|--------------|------|--------------------|-------|---------------|--------|---------------|-------|---------------|-------|-------|--------|
| | | | | | Lbs. | kN | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B2000 | 3/8" | (10) | 16 Ga. | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2001 | 1/2" | (15) | 16 Ga. | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2002 | 3/4" | (20) | 16 Ga. | (1.9) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 11 | (5.0) |
| B2003 | 1" | (25) | 14 Ga. | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 16 | (7.2) |
| B2004 | 1 1/4" | (32) | 14 Ga. | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 19 | (8.6) |
| B2005 | 1 1/2" | (40) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 28 | (12.7) |
| B2006 | 2" | (50) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 33 | (14.9) |

RIGID CONDUIT OR PIPE CLAMPS

| Part No. | Conduit Size | | Material Thickness | | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|--------------|-------|--------------------|-------|---------------|--------|---------------|--------|---------------|-------|-------|--------|
| | | | | | Lbs. | kN | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B2001 | 3/8" | (10) | 16 Ga. | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2008 | 1/2" | (15) | 16 Ga. | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 11 | (5.0) |
| B2009 | 3/4" | (20) | 14 Ga. | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 15 | (6.8) |
| B2010 | 1" | (25) | 14 Ga. | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 16 | (7.2) |
| B2011 | 1 1/4" | (32) | 14 Ga. | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 20 | (9.1) |
| B2012 | 1 1/2" | (40) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 30 | (13.6) |
| B2013 | 2" | (50) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 34 | (15.4) |
| B2014 | 2 1/2" | (65) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 38 | (17.2) |
| B2015 | 3" | (80) | 12 Ga. | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 44 | (19.9) |
| B2016 | 3 1/2" | (90) | 11 Ga. | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 61 | (27.6) |
| B2017 | 4" | (100) | 11 Ga. | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 66 | (29.9) |
| B2018 | 4 1/2" | (115) | 11 Ga. | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 70 | (31.7) |
| B2019 | 5" | (125) | 11 Ga. | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 77 | (34.9) |
| B2020 | 6" | (150) | 11 Ga. | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 100 | (45.3) |
| B2021 | 7" | (175) | 11 Ga. | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 115 | (52.1) |
| B2022 | 8" | (200) | 11 Ga. | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 128 | (58.0) |
| B2130 | 10" | (254) | 11 Ga. | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 160 | (72.6) |
| B2132 | 12" | (305) | 11 Ga. | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 185 | (83.9) |

Reference page 110 for general fitting and standard finish specifications.

B2000 SERIES

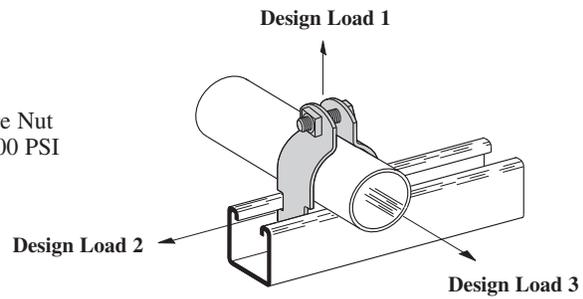
PVC CLAMPS

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0) ASTM A1011HSLA Gr. 50
- Standard finishes: PVC

CLAMP SIZING CHART FOR PVC COATED RIGID CONDUIT AND CLAMPS

| Nominal Conduit Size | | Conduit Coating | | | |
|----------------------|-------|-----------------|--------------|---------------|--------------|
| | | .020 (.51mm) | | .040 (1.01mm) | |
| | | Clamp Coating | | Clamp Coating | |
| | | 0 | .020 (.51mm) | 0 | .020 (.51mm) |
| 1/2" | (15) | B2008 | B2002 | B2002 | B2029 |
| 3/4" | (20) | B2030 | B2030 | B2030 | B2004 |
| 1" | (25) | B2032 | B2032 | B2032 | B2004 |
| 1 1/4" | (32) | B2005 | B2005 | B2005 | B2005 |
| 1 1/2" | (40) | B2012 | B2037 | B2037 | B2037 |
| 2" | (50) | B2013 | B2041 | B2041 | B2041 |
| 2 1/2" | (65) | B2014 | B2045 | B2045 | B2045 |
| 3" | (80) | B2015 | B2050 | B2050 | B2050 |
| 3 1/2" | (90) | B2016 | B2054 | B2054 | B2054 |
| 4" | (100) | B2017 | B2058 | B2058 | B2058 |
| 5" | (125) | B2019 | B2066 | B2066 | B2066 |
| 6" | (150) | B2020 | B2115 | B2115 | B2115 |

*See B2000 O.D. pipe and conduit clamp chart on pgs. 112-113 for corresponding clamp load data.



CLAMP SIZING CHART FOR PVC COATED THINWALL (EMT) CONDUIT AND CLAMPS

| Nominal Conduit Size | | Conduit Coating | | | |
|----------------------|------|-----------------|--------------|---------------|--------------|
| | | .020 (.51mm) | | .040 (1.01mm) | |
| | | Clamp Coating | | Clamp Coating | |
| | | 0 | .020 (.51mm) | 0 | .020 (.51mm) |
| 3/8" | (10) | B2026 | B2026 | B2026 | B2001 |
| 1/2" | (15) | B2027 | B2027 | B2027 | B2008 |
| 3/4" | (20) | B2029 | B2029 | B2029 | B2009 |
| 1" | (25) | B2003 | B2031 | B2031 | B2031 |
| 1 1/4" | (32) | B2004 | B2011 | B2011 | B2011 |
| 1 1/2" | (40) | B2005 | B2005 | B2005 | B2036 |
| 2" | (50) | B2039 | B2039 | B2039 | B2013 |

*See B2000 O.D. pipe and conduit clamp chart on pgs. 112-113 for corresponding clamp load data.

Pipe/Conduit Clamps & Hangers

B2000 SERIES

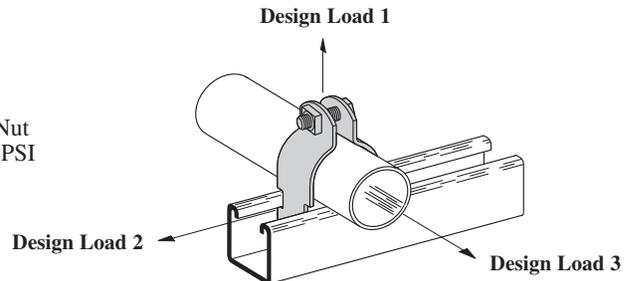
COPPER TUBING CLAMPS

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0) ASTM A1011HSLA Gr. 50
- Standard finish: Exclusive Dura-Copper® Finish (DCU)

COPPER TUBING CLAMPS

| Part No. | Tubing Size | O.D. Size In. (mm) | Material Thickness | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|-------------|--------------------|--------------------|---------------|--------|---------------|--------|---------------|-------|-------|--------|
| | | | | Lbs. | kN | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B2024DCU | 1/4" | .375 (9.5) | 16 Ga. (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 8 | (3.6) |
| B2025DCU | 3/8" | .500 (12.7) | 16 Ga. (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 9 | (4.1) |
| B2026DCU | 1/2" | .625 (15.9) | 16 Ga. (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2027DCU | 5/8" | .750 (19.0) | 16 Ga. (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2008DCU | 3/4" | .875 (22.2) | 16 Ga. (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 11 | (5.0) |
| B2030DCU | 1" | 1.125 (28.6) | 14 Ga. (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 15 | (6.8) |
| B2032DCU | 1 1/4" | 1.375 (34.9) | 14 Ga. (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 17 | (7.7) |
| B2011DCU | 1 1/2" | 1.625 (41.3) | 14 Ga. (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 19 | (8.6) |
| B2038DCU | 2 | 2.125 (54.0) | 12 Ga. (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 32 | (14.5) |
| B2042DCU | 2 1/2" | 2.625 (66.7) | 12 Ga. (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 35 | (15.9) |
| B2046DCU | 3 | 3.125 (79.4) | 12 Ga. (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 39 | (17.7) |
| B2050DCU | 3 1/2" | 3.625 (92.1) | 11 Ga. (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 54 | (24.5) |
| B2054DCU | 4 | 4.125 (104.8) | 11 Ga. (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 61 | (27.6) |
| B2062DCU | 5 | 5.125 (130.2) | 11 Ga. (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 70 | (31.7) |
| B2110DCU | 6 | 6.125 (155.6) | 11 Ga. (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 94 | (42.6) |
| B2126DCU | 8 | 8.125 (206.4) | 11 Ga. (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 123 | (55.8) |

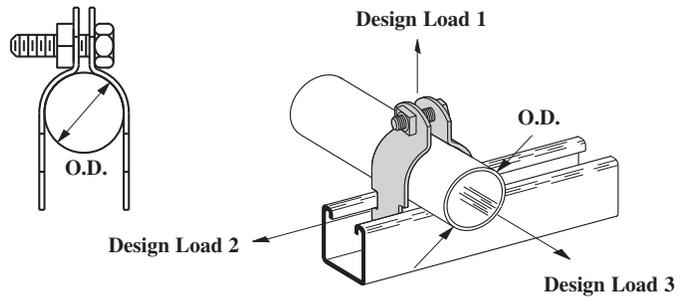
Reference page 110 for general fitting and standard finish specifications.



Pipe Clamps

B2000 SERIES O.D. PIPE AND CONDUIT CLAMPS

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Other sizes available upon request
- Includes Combination Recess Hex Head Machine Screw and Square Nut.
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6)
ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0)
ASTM A1011HSLA Gr. 50
- Standard finishes: ZN, HDG, SS4



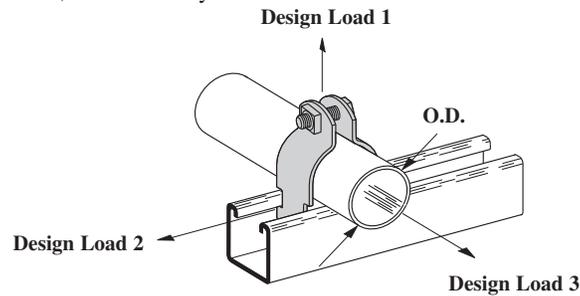
O.D. CLAMPS

| Part No. | O.D. Size (in.) | | Hardware Size | Material Gauge Thickness | | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|-----------------|---------|---------------|--------------------------|-------|---------------|--------|---------------|-------|---------------|-------|-------|--------|
| | | | | | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kg |
| B2023 | 1/4" | (6.3) | 1/4"-20 | 16 | (1.5) | 120 | (.54) | 30 | (.13) | 30 | (.13) | 8 | (3.6) |
| B2024 | 3/8" | (9.5) | 1/4"-20 | 16 | (1.5) | 300 | (1.33) | 40 | (.18) | 40 | (.18) | 8 | (3.6) |
| B2025 | 1/2" | (12.7) | 1/4"-20 | 16 | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 9 | (4.1) |
| B2026 | 5/8" | (15.9) | 1/4"-20 | 16 | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2027 | 3/4" | (19.0) | 1/4"-20 | 16 | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 10 | (4.5) |
| B2028 | 7/8" | (22.2) | 1/4"-20 | 16 | (1.5) | 400 | (1.78) | 50 | (.22) | 50 | (.22) | 11 | (5.0) |
| B2029 | 1" | (25.4) | 1/4"-20 | 14 | (1.9) | 500 | (2.22) | 75 | (.33) | 75 | (.33) | 15 | (6.8) |
| B2030 | 1 1/8" | (28.6) | 1/4"-20 | 14 | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 15 | (6.8) |
| B2031 | 1 1/4" | (31.7) | 1/4"-20 | 14 | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 16 | (7.3) |
| B2032 | 1 3/8" | (34.9) | 1/4"-20 | 14 | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 17 | (7.7) |
| B2004 | 1 1/2" | (38.1) | 1/4"-20 | 14 | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 18 | (8.2) |
| B2011 | 1 5/8" | (41.3) | 1/4"-20 | 14 | (1.9) | 600 | (2.67) | 75 | (.33) | 75 | (.33) | 19 | (8.6) |
| B2005 | 1 3/4" | (44.4) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 29 | (13.1) |
| B2036 | 1 7/8" | (47.6) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 30 | (13.6) |
| B2037 | 2 | (50.8) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 30 | (13.6) |
| B2038 | 2 1/8" | (54.0) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 32 | (14.5) |
| B2039 | 2 1/4" | (57.1) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 32 | (14.5) |
| B2013 | 2 3/8" | (60.3) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 34 | (15.4) |
| B2041 | 2 1/2" | (63.5) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 35 | (15.9) |
| B2042 | 2 5/8" | (66.7) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 35 | (15.9) |
| B2043 | 2 3/4" | (69.8) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 38 | (17.2) |
| B2014 | 2 7/8" | (73.0) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 38 | (17.2) |
| B2045 | 3 | (76.2) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 38 | (17.2) |
| B2046 | 3 1/8" | (79.4) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 39 | (17.7) |
| B2047 | 3 1/4" | (82.5) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 41 | (18.6) |
| B2048 | 3 3/8" | (85.7) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 43 | (19.5) |
| B2015 | 3 1/2" | (88.9) | 5/16"-18 | 12 | (2.6) | 800 | (3.56) | 125 | (.56) | 125 | (.56) | 44 | (20.0) |
| B2050 | 3 5/8" | (92.1) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 54 | (24.5) |
| B2051 | 3 3/4" | (95.2) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 57 | (25.8) |
| B2052 | 3 7/8" | (98.4) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 55 | (25.0) |
| B2016 | 4 | (101.6) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 57 | (25.8) |
| B2054 | 4 1/8" | (104.8) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 61 | (27.7) |
| B2055 | 4 1/4" | (107.9) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 62 | (28.1) |
| B2056 | 4 3/8" | (111.1) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 64 | (29.0) |
| B2017 | 4 1/2" | (114.3) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 66 | (29.9) |
| B2058 | 4 5/8" | (117.5) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 66 | (29.9) |

Reference page 110 for general fitting and standard finish specifications.

B2000 SERIES O.D. PIPE AND CONDUIT CLAMPS

- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Other sizes available upon request
- Includes Combination Recess Hex Head Machine Screw and Square Nut.
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0) ASTM A1011HSLA Gr. 50
- Standard finishes: ZN, HDG, SS4



O.D. CLAMPS

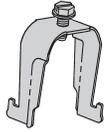
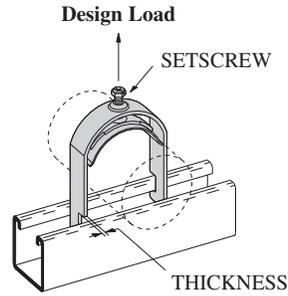
| Part No. | O.D. Size (in.) | | Hardware Size | Material Gauge Thickness | | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|----------|----------------------------------|---------|---------------|--------------------------|-------|---------------|--------|---------------|--------|---------------|-------|-------|--------|
| | | | | | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kg |
| B2059 | 4 ³ / ₄ " | (120.6) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 68 | (30.8) |
| B2060 | 4 ⁷ / ₈ " | (123.8) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 69 | (31.3) |
| B2018 | 5 | (127.0) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 70 | (31.8) |
| B2062 | 5 ¹ / ₈ " | (130.2) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 70 | (31.8) |
| B2063 | 5 ¹ / ₄ " | (133.3) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 70 | (31.8) |
| B2064 | 5 ³ / ₈ " | (136.5) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 77 | (34.9) |
| B2019 | 5 ¹ / ₂ " | (139.7) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 78 | (35.4) |
| B2066 | 5 ⁵ / ₈ " | (142.9) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 83 | (37.6) |
| B2067 | 5 ³ / ₄ " | (146.0) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 84 | (38.1) |
| B2068 | 5 ⁷ / ₈ " | (149.2) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 85 | (38.6) |
| B2069 | 6" | (152.4) | 5/16"-18 | 11 | (3.0) | 1000 | (4.45) | 200 | (.89) | 150 | (.67) | 87 | (39.5) |
| B2110 | 6 ¹ / ₈ " | (155.6) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 94 | (42.6) |
| B2111 | 6 ¹ / ₄ " | (158.7) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 96 | (43.5) |
| B2112 | 6 ³ / ₈ " | (161.9) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 98 | (44.4) |
| B2113 | 6 ¹ / ₂ " | (165.1) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 99 | (44.9) |
| B2020 | 6 ⁵ / ₈ " | (168.3) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 100 | (45.4) |
| B2115 | 6 ³ / ₄ " | (171.4) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 102 | (46.3) |
| B2116 | 6 ⁷ / ₈ " | (174.6) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 104 | (47.2) |
| B2117 | 7" | (177.8) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 106 | (48.1) |
| B2118 | 7 ¹ / ₈ " | (181.0) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 108 | (49.0) |
| B2119 | 7 ¹ / ₄ " | (184.1) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 110 | (49.9) |
| B2120 | 7 ³ / ₈ " | (187.3) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 112 | (50.8) |
| B2121 | 7 ¹ / ₂ " | (190.5) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 114 | (51.7) |
| B2021 | 7 ⁵ / ₈ " | (193.7) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 115 | (52.2) |
| B2123 | 7 ³ / ₄ " | (196.8) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 117 | (53.1) |
| B2124 | 7 ⁷ / ₈ " | (200.0) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 119 | (54.0) |
| B2125 | 8" | (203.2) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 121 | (54.9) |
| B2126 | 8 ¹ / ₈ " | (206.4) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 123 | (55.8) |
| B2127 | 8 ¹ / ₄ " | (209.5) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 125 | (56.7) |
| B2128 | 8 ³ / ₈ " | (212.7) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 126 | (57.2) |
| B2129 | 8 ¹ / ₂ " | (215.9) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 128 | (58.1) |
| B2022 | 8 ⁵ / ₈ " | (219.1) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 128 | (58.1) |
| B2130 | 10 ³ / ₄ " | (273.0) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 160 | (72.6) |
| B2132 | 12 ³ / ₄ " | (323.8) | 3/8"-16 | 11 | (3.0) | 1000 | (4.45) | 250 | (1.11) | 200 | (.89) | 185 | (83.9) |

Reference page 110 for general fitting and standard finish specifications.

Pipe Clamps

B1508 THRU B1564S CONDUIT/STRUT CLAMPS

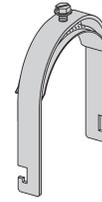
- Safety Factor of 3
- Clamps without saddles are not recommended for flexible conduit or cable
- All Sizes Include:
1/4"-20 Slotted Hex Head Machine Screw
- Standard finish: ZN



B1508 THRU B1520



B1508S THRU B1524S



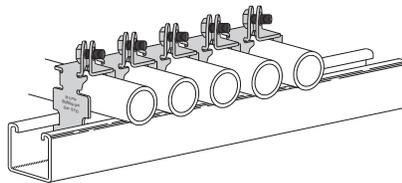
B1532S THRU B1564S

| Part No. | Use With | | | | Thickness | | Design Load | | Wt./C | |
|----------|----------|---------------|--------|-------|-----------|-------|-------------|--------|-------|--------|
| | EMT | Rigid Conduit | | Lbs. | | | kN | Lbs. | kg | |
| B1508 | 1/2" | (15) | – | – | 16 Ga. | (1.5) | 200 | (.89) | 7.4 | (3.4) |
| B1512 | 3/4" | (20) | 1/2" | (15) | 16 Ga. | (1.5) | 200 | (.89) | 8.0 | (3.6) |
| B1516 | 1" | (25) | 3/4" | (20) | 14 Ga. | (1.9) | 300 | (1.33) | 11.0 | (5.0) |
| B1520 | 1 1/4" | (32) | 1" | (25) | 14 Ga. | (1.9) | 300 | (1.33) | 12.5 | (5.7) |
| B1508S | 1/2" | (15) | – | – | 16 Ga. | (1.5) | 200 | (.89) | 8.6 | (3.9) |
| B1512S | 3/4" | (20) | 1/2" | (15) | 16 Ga. | (1.5) | 200 | (.89) | 9.2 | (4.2) |
| B1516S | 1" | (25) | 3/4" | (20) | 14 Ga. | (1.9) | 300 | (1.33) | 12.7 | (5.8) |
| B1520S | 1 1/4" | (32) | 1" | (25) | 14 Ga. | (1.9) | 300 | (1.33) | 14.6 | (6.6) |
| B1524S | 1 1/2" | (40) | 1 1/4" | (32) | 12 Ga. | (2.6) | 400 | (1.78) | 20.5 | (9.3) |
| B1532S | 2" | (50) | 1 1/2" | (40) | 12 Ga. | (2.6) | 400 | (1.78) | 21.5 | (9.8) |
| B1534S | – | – | 2" | (50) | 12 Ga. | (2.6) | 400 | (1.78) | 22.7 | (10.3) |
| B1540S | 2 1/2" | (65) | 2 1/2" | (65) | 12 Ga. | (2.6) | 400 | (1.78) | 26.0 | (11.9) |
| B1548S | 3" | (80) | 3" | (80) | 12 Ga. | (2.6) | 400 | (1.78) | 30.2 | (13.7) |
| B1556S | 3 1/2" | (90) | 3 1/2" | (90) | 12 Ga. | (2.6) | 400 | (1.78) | 33.3 | (15.1) |
| B1564S | 4" | (100) | 4" | (100) | 12 Ga. | (2.6) | 400 | (1.78) | 36.6 | (16.6) |

Reference page 110 for general fitting and standard finish specifications.

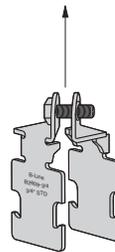
B2601 THRU B2610 TWIST EAR® PIPE CLAMP

- One piece break apart, screw retainer, thread impressions
- Tighter alignment, no need to leave additional space between clamps in order to access nut and bolt
- Easier access bolt can be tightened directly from front
- Available in 1/2", 3/4", 1" rigid and EMT Conduit
- Recommended Torque 30 in. - lbs.
- Safety Factor of 3
- Standard finish: ZN

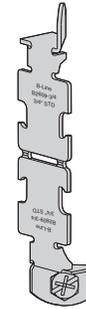


Allows for multiple clamps to be used in succession, with easier access than other pipe clamps.

Design Load



Break-apart - break in the middle, bolt the ends together.

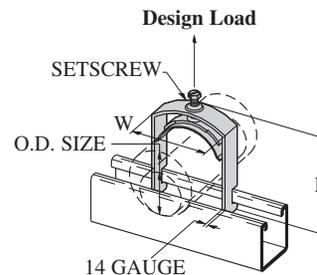


No loose pieces. One piece break apart with screw retainer and thread impressions.

| Part No. | Use With | | | | Thickness | Design Load | | Wt./C | |
|----------|----------|--------|---------------|--------|-----------|-------------|--------|-------|-------|
| | EMT | | Rigid Conduit | | | Lbs. | kN | Lbs. | kg |
| B2601 | 1/2" | (17.9) | - | - | 16 Ga. | 300 | (1.34) | 8.2 | (3.7) |
| B2602 | 3/4" | (23.4) | - | - | 14 Ga. | 500 | (2.24) | 13.5 | (6.1) |
| B2603 | 1" | (29.5) | - | - | 14 Ga. | 500 | (2.24) | 15.6 | (7.1) |
| B2608 | - | - | 1/2" | (21.3) | 16 Ga. | 300 | (1.34) | 8.2 | (3.7) |
| B2609 | - | - | 3/4" | (26.7) | 14 Ga. | 500 | (2.24) | 13.5 | (6.1) |
| B2610 | - | - | 1" | (33.4) | 14 Ga. | 500 | (2.24) | 15.6 | (7.1) |

BP081SS THRU BP475SS P CLAMPS

- Minimizes induction heating
- Material: Stainless Steel Type 304



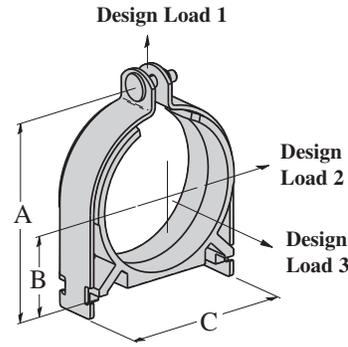
| Part No. | O.D. Size | | Height H | | Width W | | Design Load | | Wt./C. | |
|----------|-------------|---------------|----------|---------|---------|---------|-------------|--------|--------|--------|
| | In. | mm | In. | mm | In. | mm | Lbs. | kN | Lbs. | kg |
| BP081SS | .250-.840 | (6.4-21.3) | 1.86 | (47.2) | 0.87 | (22.1) | 300 | (1.33) | 9.0 | (4.1) |
| BP110SS | .810-1.100 | (20.6-28.0) | 2.18 | (55.4) | 1.19 | (30.2) | 300 | (1.33) | 12.0 | (5.4) |
| BP135SS | .850-1.350 | (21.6-34.8) | 2.25 | (57.2) | 1.38 | (35.1) | 300 | (1.33) | 14.0 | (6.3) |
| BP175SS | 1.250-1.750 | (31.8-44.4) | 2.78 | (70.6) | 1.78 | (45.2) | 300 | (1.33) | 21.0 | (9.5) |
| BP205SS | 1.550-2.050 | (39.4-52.1) | 3.00 | (76.2) | 2.28 | (57.9) | 300 | (1.33) | 30.0 | (13.6) |
| BP250SS | 2.00-2.50 | (50.8-63.5) | 3.43 | (87.1) | 2.83 | (71.9) | 300 | (1.33) | 35.0 | (15.9) |
| BP300SS | 2.55-3.00 | (64.7-76.2) | 3.87 | (97.8) | 3.15 | (80.0) | 300 | (1.33) | 39.0 | (17.7) |
| BP325SS | 2.75-3.25 | (69.9-82.8) | 4.06 | (103.1) | 3.28 | (83.3) | 300 | (1.33) | 41.0 | (18.6) |
| BP375SS | 3.25-3.75 | (82.6-95.3) | 4.60 | (116.8) | 3.83 | (97.3) | 300 | (1.33) | 47.0 | (21.3) |
| BP425SS | 3.75-4.25 | (95.3-108.0) | 5.13 | (130.3) | 4.50 | (114.3) | 300 | (1.33) | 54.0 | (24.4) |
| BP475SS | 4.25-4.75 | (108.0-120.7) | 5.70 | (144.8) | 4.85 | (123.2) | 300 | (1.33) | 58.0 | (26.3) |

Reference page 110 for general fitting and standard finish specifications.

VibraClamp® Pipe Clamps

BVT SERIES VIBRACLAMPS-COPPER & O.D.

- Safety Factor of 3
- Accesses tubing sizes 1/8" (3) to 6" (150)
- Allows easy one tool installation
- Endures both high (+300°F) and low (-40°F) temperatures
- Dampens vibration and noise
- Eliminates galvanic metal to metal contact
- Resists most industrial oils and solvents
- Reduces thermal loss and gain
- Secures tubing firmly to channel (strut)
- Dielectric strength of 400 volts/mil
- Includes cushion, clamp, screw and nut
- Standard finishes: YZN, SS4



Pipe/Conduit Clamps & Hangers

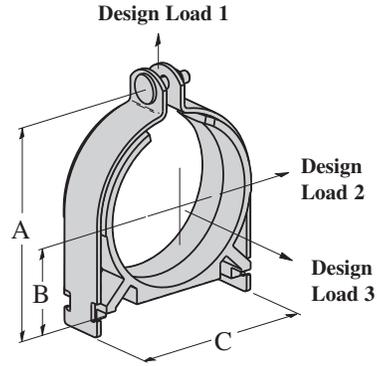
| Catalog Number | Tubing O.D. Size | | Copper Tubing Size | | Dimensions | | | | | | Wt./C | |
|----------------|------------------|---------|--------------------|-------|------------|---------|------|--------|------|---------|-------|--------|
| | | | | | A | | B | | C | | Lbs. | kg |
| BVT025 | 1/4" | (6.3) | 1/8" | (3) | 1.22 | (30.9) | 0.19 | (4.8) | 0.49 | (12.4) | 11 | (5.0) |
| BVT037 | 3/8" | (9.5) | 1/4" | (6) | 1.36 | (34.5) | 0.25 | (6.3) | 0.61 | (15.5) | 12 | (5.4) |
| BVT050 | 1/2" | (12.7) | 3/8" | (10) | 1.49 | (37.8) | 0.31 | (7.8) | 0.74 | (18.8) | 14 | (6.3) |
| BVT062 | 5/8" | (15.9) | 1/2" | (15) | 1.62 | (41.1) | 0.38 | (9.6) | 0.86 | (21.8) | 15 | (6.8) |
| BVT075 | 3/4" | (19.0) | 5/8" | (17) | 1.87 | (47.4) | 0.50 | (12.7) | 1.15 | (29.2) | 19 | (8.6) |
| BVT087 | 7/8" | (22.2) | 3/4" | (20) | 2.00 | (50.8) | 0.56 | (14.2) | 1.27 | (32.2) | 21 | (9.5) |
| BVT100 | 1" | (25.4) | - | - | 2.25 | (57.1) | 0.69 | (17.5) | 1.52 | (38.6) | 22 | (10.0) |
| BVT112 | 1 1/8" | (28.6) | 1" | (25) | 2.25 | (57.1) | 0.69 | (17.5) | 1.52 | (38.6) | 26 | (11.8) |
| BVT125 | 1 1/4" | (31.7) | - | - | 2.51 | (63.7) | 0.81 | (20.6) | 1.78 | (45.2) | 36 | (16.3) |
| BVT137 | 1 3/8" | (34.9) | 1 1/4" | (32) | 2.51 | (63.7) | 0.81 | (20.6) | 1.78 | (45.2) | 38 | (17.2) |
| BVT150 | 1 1/2" | (38.1) | - | - | 2.74 | (69.6) | 0.88 | (22.4) | 1.96 | (49.8) | 35 | (15.9) |
| BVT162 | 1 5/8" | (41.3) | 1 1/2" | (40) | 3.00 | (76.2) | 1.00 | (25.4) | 2.20 | (55.9) | 40 | (18.1) |
| BVT175 | 1 3/4" | (44.4) | - | - | 3.13 | (79.5) | 1.06 | (26.9) | 2.33 | (59.1) | 44 | (19.9) |
| BVT187 | 1 7/8" | (47.6) | - | - | 3.28 | (83.3) | 1.13 | (28.7) | 2.46 | (62.5) | 40 | (18.1) |
| BVT200 | 2" | (50.8) | - | - | 3.52 | (89.4) | 1.25 | (31.7) | 2.70 | (68.6) | 55 | (25.0) |
| BVT212 | 2 1/8" | (54.0) | 2" | (50) | 3.52 | (89.4) | 1.25 | (31.7) | 2.70 | (68.6) | 55 | (25.0) |
| BVT225 | 2 1/4" | (57.1) | - | - | 3.64 | (92.4) | 1.31 | (33.2) | 2.83 | (71.8) | 54 | (24.5) |
| BVT250 | 2 1/2" | (63.5) | - | - | 3.91 | (99.3) | 1.43 | (36.3) | 3.11 | (79.0) | 56 | (25.4) |
| BVT262 | 2 5/8" | (66.6) | 2 1/2" | (65) | 4.02 | (102.1) | 1.50 | (38.1) | 3.20 | (81.3) | 55 | (25.0) |
| BVT300 | 3" | (76.2) | - | - | 4.42 | (112.2) | 1.68 | (42.6) | 3.61 | (91.6) | 67 | (30.4) |
| BVT312 | 3 1/8" | (79.4) | 3" | (80) | 4.53 | (115.0) | 1.75 | (44.4) | 3.70 | (93.9) | 64 | (29.0) |
| BVT362 | 3 5/8" | (92.1) | 3 1/2" | (90) | 5.05 | (128.2) | 2.00 | (50.8) | 4.23 | (107.4) | 76 | (34.5) |
| BVT412 | 4 1/8" | (104.8) | 4" | (100) | 5.55 | (140.9) | 2.25 | (57.1) | 4.73 | (120.1) | 93 | (42.2) |
| BVT612 | 6 1/8" | (155.5) | 6" | (150) | 7.62 | (193.5) | 3.25 | (82.5) | 6.74 | (171.1) | 136 | (61.6) |

| Catalog Number | Design Load 1 | | Design Load 2 | | Design Load 3 | |
|----------------|---------------|--------|---------------|--------|---------------|--------|
| | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| BVT025 | 400 | (1.78) | 50 | (0.22) | 50 | (0.22) |
| BVT037 | 400 | (1.78) | 50 | (0.22) | 50 | (0.22) |
| BVT050 | 400 | (1.78) | 50 | (0.22) | 50 | (0.22) |
| BVT062 | 400 | (1.78) | 50 | (0.22) | 50 | (0.22) |
| BVT075 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT087 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT100 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT112 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT125 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT137 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT150 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVT162 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT175 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT187 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT200 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT212 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT225 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT250 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT262 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT300 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT312 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVT362 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVT412 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVT612 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |

Reference page 110 for general fitting and standard finish specifications.

BVP SERIES VIBRACLAMPS-IRON PIPE & RIGID CONDUIT

- Safety Factor of 3
- Accesses pipe sizes 1/4" (6) to 6" (150)
- Allows easy one tool installation
- Endures both high (+300°F) and low (-40°F) temperatures
- Dampens vibration and noise
- Eliminates galvanic metal to metal contact
- Resists most industrial oils and solvents
- Reduces thermal loss and gain
- Secures pipe firmly to channel (strut)
- Dielectric strength of 400 volts/mil
- Includes cushion, clamp, screw and nut
- Standard finishes: YZN, SS4



| Catalog Number | Nominal Pipe Size | | Steel O.D. Size | | Dimensions | | | | | | Wt./C | |
|----------------|-------------------|---------|-----------------|---------|------------|---------|------|--------|------|---------|-------|--------|
| | A | B | A | B | C | Lbs. | kg | | | | | |
| BVP025 | 1/4" | (6.3) | 0.540 | (13.7) | 1.61 | (39.9) | 0.37 | (9.4) | 0.87 | (22.1) | 15 | (6.8) |
| BVP037 | 3/8" | (9.5) | 0.675 | (17.1) | 1.86 | (47.2) | 0.50 | (12.7) | 1.15 | (29.2) | 18 | (8.2) |
| BVP050 | 1/2" | (12.7) | 0.875 | (22.2) | 1.99 | (50.5) | 0.56 | (14.2) | 1.27 | (32.3) | 20 | (9.1) |
| BVP075 | 3/4" | (19.0) | 1.050 | (26.7) | 2.25 | (57.1) | 0.69 | (17.5) | 1.52 | (38.6) | 21 | (9.5) |
| BVP100 | 1" | (25.4) | 1.312 | (33.3) | 2.51 | (63.8) | 0.81 | (20.6) | 1.77 | (45.0) | 20 | (9.1) |
| BVP125 | 1 1/4" | (31.7) | 1.660 | (42.2) | 3.00 | (76.2) | 1.00 | (25.4) | 2.21 | (56.1) | 36 | (16.3) |
| BVP150 | 1 1/2" | (38.1) | 1.900 | (48.3) | 3.21 | (83.1) | 1.12 | (28.4) | 2.41 | (62.3) | 40 | (18.1) |
| BVP200 | 2" | (50.8) | 2.375 | (60.3) | 3.77 | (95.8) | 1.37 | (34.8) | 2.96 | (75.2) | 45 | (20.4) |
| BVP250 | 2 1/2" | (63.5) | 2.875 | (73.0) | 4.28 | (108.7) | 1.62 | (41.1) | 3.46 | (87.9) | 54 | (24.5) |
| BVP300 | 3" | (76.2) | 3.500 | (88.9) | 5.05 | (128.3) | 2.00 | (50.8) | 4.24 | (107.7) | 81 | (36.7) |
| BVP350 | 3 1/2" | (88.9) | 4.000 | (101.6) | 5.55 | (140.9) | 2.25 | (57.1) | 4.74 | (120.3) | 87 | (39.4) |
| BVP400 | 4" | (101.6) | 4.500 | (114.3) | 6.05 | (153.7) | 2.50 | (63.5) | 5.24 | (133.1) | 109 | (49.4) |
| BVP500 | 5" | (127.0) | 5.563 | (141.3) | 6.84 | (173.7) | 3.00 | (76.2) | 6.24 | (158.4) | 136 | (61.6) |
| BVP600 | 6" | (152.4) | 6.625 | (168.3) | 8.24 | (209.3) | 3.56 | (90.4) | 7.36 | (186.9) | 163 | (73.8) |

| Catalog Number | Design Load 1 | | Design Load 2 | | Design Load 3 | |
|----------------|---------------|--------|---------------|--------|---------------|--------|
| | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| BVP025 | 400 | (1.78) | 50 | (0.22) | 50 | (0.22) |
| BVP037 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVP050 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVP075 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVP100 | 600 | (2.67) | 75 | (0.33) | 75 | (0.33) |
| BVP125 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVP150 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVP200 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVP250 | 800 | (3.56) | 125 | (0.56) | 125 | (0.56) |
| BVP300 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVP350 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVP400 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVP500 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |
| BVP600 | 1000 | (4.45) | 200 | (0.89) | 150 | (0.67) |

Reference page 110 for general fitting and standard finish specifications.

Armifix Clamps & Accessories

IPH SERIES

INSERTS - INSERTS WITH CLAMPS

- Engineered load-bearing inserts prevents insulation compression
- Innovative insulated pipe support
- Desirable “Foam-to-Foam” Bond
- Slip Data: 45 lbs. (0.20 kN) max
- Recommended Clamp Torque: 12-15 in-lbs. (1.3-1.7 Nm)
- Service Temperature Range
-58°F (-50°C) to +220°F (+105°C)



Insert Only



Assembly
Insert & Clamp



Pipe/Conduit Clamps & Hangers

3/4" Wall Insulation Thickness

| Assembly Part No. | Insert Only Part No. | Pipe/Copper/OD Size | Hanger Size* |
|-------------------|----------------------|--------------------------|--------------|
| IPH03834 | IPH03834WO | 3/8" O.D. | 2" |
| IPH01234 | IPH01234WO | 1/2" O.D. | 2" |
| IPH05834 | IPH05834WO | 5/8" O.D. | 2" |
| IPH03434 | IPH03434WO | 3/4" O.D. | 2" |
| IPH07834 | IPH07834WO | 7/8" O.D. | 2 1/2" |
| IPH11834 | IPH11834WO | 3/4" IPS & 1 1/8" O.D. | 2 1/2" |
| IPH13834 | IPH13834WO | 1 3/8" O.D. | 3" |
| IPH15834 | IPH15834WO | 1 5/8" O.D. | 3 1/2" |
| IPH11034 | IPH11034WO | 1 1/2" IPS & 1 7/8" O.D. | 3 1/2" |
| IPH21834 | IPH21834WO | 2 1/8" O.D. | 4" |
| IPH25834 | IPH25834WO | 2 5/8" O.D. | 5" |
| IPH31834 | IPH31834WO | 3 1/8" O.D. | 5" |
| IPH35834 | IPH35834WO | 3 5/8" O.D. | 6" |
| IPH41834 | IPH41834WO | 4 1/8" O.D. | 6" |
| IPH40034 | IPH40034WO | 4" IPS | 6" |
| IPH50034 | IPH50034WO | 5" IPS | 8" |
| IPH60034 | IPH60034WO | 6" IPS | 10" |
| IPH80034 | IPH80034WO | 8" IPS | 12" |

* Recommended pipe hanger size for insulation thickness shown.
(Order hanger separately)

IPH18230

ARMACELL® INSULATION TAPE

- 30 ft. (9.14 M) roll



1/2" Wall Insulation Thickness

| Assembly Part No. | Insert Only Part No. | Pipe/Copper/OD Size | Hanger Size* |
|-------------------|----------------------|--------------------------|--------------|
| IPH03812 | IPH03812WO | 3/8" O.D. | 1 1/4" |
| IPH01212 | IPH01212WO | 1/2" O.D. | 1 1/4" |
| IPH05812 | IPH05812WO | 5/8" O.D. | 1 1/2" |
| IPH03412 | IPH03412WO | 3/4" O.D. | 1 1/2" |
| IPH07812 | IPH07812WO | 7/8" O.D. | 2" |
| IPH11812 | IPH11812WO | 3/4" IPS & 1 1/8" O.D. | 2" |
| IPH13812 | IPH13812WO | 1 3/8" O.D. | 2 1/2" |
| IPH15812 | IPH15812WO | 1 5/8" O.D. | 2 1/2" |
| IPH11012 | IPH11012WO | 1 1/2" IPS & 1 7/8" O.D. | 3" |
| IPH21812 | IPH21812WO | 2 1/8" O.D. | 3" |
| IPH25812 | IPH25812WO | 2 5/8" O.D. | 3 1/2" |
| IPH31812 | IPH31812WO | 3 1/8" O.D. | 4" |
| IPH35812 | IPH35812WO | 3 5/8" O.D. | 5" |
| IPH41812 | IPH41812WO | 4 1/8" O.D. | 6" |
| IPH40012 | IPH40012WO | 4" IPS | 6" |
| IPH50012 | IPH50012WO | 5" IPS | 8" |
| IPH60012 | IPH60012WO | 6" IPS | 8" |

* Recommended pipe hanger size for insulation thickness shown.
(Order hanger separately)

1" Wall Insulation Thickness

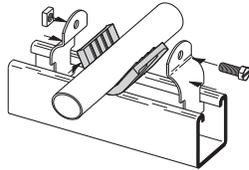
| Assembly Part No. | Insert Only Part No. | Pipe/Copper/OD Size | Hanger Size* |
|-------------------|----------------------|--------------------------|--------------|
| IPH05810 | IPH05810WO | 5/8" O.D. | 2 1/2" |
| IPH03410 | IPH03410WO | 3/4" O.D. | 2 1/2" |
| IPH07810 | IPH07810WO | 7/8" O.D. | 3" |
| IPH11810 | IPH11810WO | 3/4" IPS & 1 1/8" O.D. | 3" |
| IPH13810 | IPH13810WO | 1 3/8" O.D. | 3 1/2" |
| IPH15810 | IPH15810WO | 1 5/8" O.D. | 3 1/2" |
| IPH11010 | IPH11010WO | 1 1/2" IPS & 1 7/8" O.D. | 4" |
| IPH21810 | IPH21810WO | 2 1/8" O.D. | 4" |
| IPH25810 | IPH25810WO | 2 5/8" O.D. | 5" |
| IPH31810 | IPH31810WO | 3 1/8" O.D. | 5" |
| IPH35810 | IPH35810WO | 3 5/8" O.D. | 6" |
| IPH41810 | IPH41810WO | 4 1/8" O.D. | 6" |
| IPH40010 | IPH40010WO | 4" IPS | 8" |
| IPH50010 | IPH50010WO | 5" IPS | 8" |
| IPH60010 | IPH60010WO | 6" IPS | 10" |
| IPH80010 | IPH80010WO | 8" IPS | 12" |

* Recommended pipe hanger size for insulation thickness shown.
(Order hanger separately)

Reference page 110 for general fitting and standard finish specifications.

B1999 VIBRA CUSHION®

- Packaged 20 Ft. (6.09 m) per carton
- Ideal Isolation Material
- Inhibits Galvanic Corrosion
- Dampens Sound and Vibrations
- Service Temperature Range
-75°F (-60°C) to +375°F (+199°C)
- Wt./Carton 3.8 Lbs. (1.7 kg)



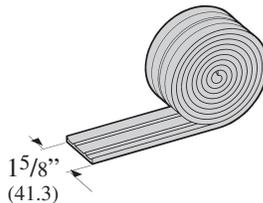
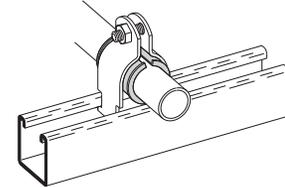
FOR RIGID CONDUIT OR IRON PIPE

| Nominal Size | Length of Vibra-Cushion | Use Clamp No. |
|--------------|-------------------------|---------------|
| 3/8" | (10) 2 1/8" (54.0) | B2002 |
| 1/2" | (15) 2 5/8" (66.7) | B2009 |
| 3/4" | (20) 3 1/4" (82.5) | B2031 |
| 1" | (25) 4 1/8" (104.8) | B2004 |
| 1 1/4" | (32) 5 3/16" (131.8) | B2012 |
| 1 1/2" | (40) 5 15/16" (150.8) | B2038 |
| 2" | (50) 7 1/2" (190.5) | B2042 |
| 2 1/2" | (65) 9" (228.6) | B2046 |
| 3" | (80) 11" (279.4) | B2051 |
| 3 1/2" | (90) 12 1/2" (317.5) | B2055 |
| 4" | (100) 14 1/2" (368.3) | B2059 |
| 5" | (125) 17 7/16" (442.9) | B2067 |
| 6" | (150) 20 3/4" (527.0) | B2116 |

FEATURES

Vibra Cushion® is designed for use with refrigeration lines, HVAC, copper tubing, glass pipe and hydraulic lines. It provides an energy-absorption barrier between the lines and the mounting material and remains flexible thru its entire service range of -75°F (-60°C) to +375°F (+199°C).

This elastomer allows for expansion and contraction within the mounting system and prevents galvanic reaction between dissimilar metals.



FOR THINWALL (EMT) CONDUIT

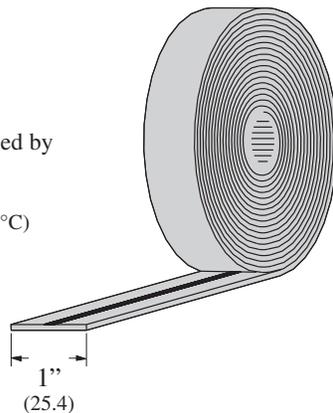
| Nominal Size | Length of Vibra-Cushion | Use Clamp No. |
|--------------|-------------------------|---------------|
| 3/8" | (10) 1 13/16" (46.0) | B2027 |
| 1/2" | (15) 2 13/16" (58.7) | B2002 |
| 3/4" | (20) 2 7/8" (73.0) | B2003 |
| 1" | (25) 3 5/8" (92.1) | B2032 |
| 1 1/4" | (32) 4 3/8" (120.6) | B2036 |
| 1 1/2" | (40) 5 7/16" (138.1) | B2012 |
| 2" | (50) 6 7/8" (174.6) | B2013 |

FOR COPPER TUBING TYPE L & K

| Nominal Size | Length of Vibra-Cushion | Use Clamp No. |
|--------------|-------------------------|---------------|
| 1/4" | (6) 1 3/16" (30.2) | B2026 |
| 3/8" | (10) 1 9/16" (39.7) | B2027 |
| 1/2" | (15) 1 7/8" (47.6) | B2028 |
| 5/8" | (17) 2 5/16" (58.7) | B2029 |
| 3/4" | (20) 2 3/4" (69.8) | B2030 |
| 1" | (25) 3 1/2" (88.9) | B2032 |
| 1 1/4" | (32) 4 5/16" (109.5) | B2011 |
| 1 1/2" | (40) 5 1/8" (130.2) | B2036 |
| 2" | (50) 6 11/16" (169.9) | B2013 |
| 2 1/2" | (65) 8 1/4" (209.5) | B2014 |
| 3" | (80) 9 13/16" (249.2) | B2048 |
| 3 1/2" | (90) 11 3/8" (288.9) | B2052 |
| 4" | (100) 12 15/16" (328.6) | B2056 |
| 5" | (125) 16 1/8" (409.6) | B2064 |
| 6" | (150) 19 1/4" (488.9) | B2112 |
| 8" | (200) 25 1/2" (647.7) | B2128 |

ISO PIPE

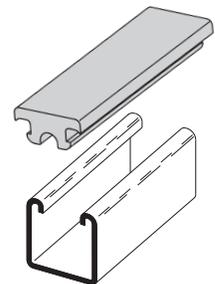
- Non-adhesive rubber tape
- Fuses to itself
- Water resistant
- Ideal Isolation Material
- Prevents galvanic reaction caused by dissimilar metal contact
- Temperature Range
-140°F (-60°C) to +395°F (+200°C)



| Part No. | Thickness In. | Thickness mm | Ft./Roll Ft. | Ft./Roll m |
|------------|---------------|--------------|--------------|------------|
| ISO | .020 | (0.5) | 36 | (11) |

BVS Type - Vibra Strip™ for 1 5/8" (41.3) wide B-Line channel

- Fits securely in 1 5/8" wide channel
- Temperature range: -20°F to 212°F
- Ideal Isolation & Vibration Dampening Qualities
- 45 durometer hardness
- Material: Neoprene



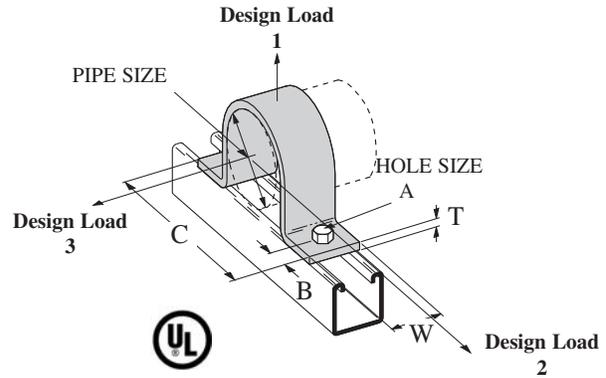
| Part No. | Max. Load Lbs. per Lineal In. | Max. Load kg/25.4 mm | Length | Std. Pkg. | Wt. Each Lbs. | Wt. Each kg |
|----------------|-------------------------------|----------------------|---------------|-----------|---------------|-------------|
| BVS-12 | 40 | (18.1) | 12" (304.8) | 25 | .46 | (.21) |
| BVS-120 | 40 | (18.1) | 120" (3048.0) | 25 | .46 | (.21) |

Reference page 110 for general fitting and standard finish specifications.

Pipe Clamps

B2400 SERIES STANDARD PIPE STRAP

- Safety Factor of 5
- B2400-3/4 thru B2400-8 are UL listed
- Order hardware separately
- Other sizes available upon request
- Material: Sizes - 1/2" - 1 1/2", ASTM A1011 33,000 PSI min. yield;
2" - 10", ASTM A1018 33,000 PSI min. yield;
12" ASTM A1011 CS Type B;
14"-Larger, ASTM A36
- Standard finish: ZN
- Ductile Iron Sizes Available
- Meets requirements of MSS SP-58 & SP-69 Type 26



| Part No. | Pipe Size | | A | | B | | C | | T | | W | |
|-------------|-----------|-------|---------|--------|---------|--------|-----------|---------|--------|--------|--------|--------|
| B2400-1/2 | 1/2" | (15) | 5/16" | (7.9) | 7/16" | (11.1) | 2 13/16" | (71.4) | 10 Ga. | (3.4) | 1 5/8" | (41.3) |
| B2400-3/4 | 3/4" | (20) | 5/16" | (7.9) | 7/16" | (11.1) | 3" | (76.2) | 10 Ga. | (3.4) | 1 5/8" | (41.3) |
| B2400-1 | 1" | (25) | 5/16" | (7.9) | 7/16" | (11.1) | 3 17/32" | (89.7) | 10 Ga. | (3.4) | 1 5/8" | (41.3) |
| B2400-1 1/4 | 1 1/4" | (32) | 5/16" | (7.9) | 7/16" | (11.1) | 3 3/4" | (95.2) | 10 Ga. | (3.4) | 1 5/8" | (41.3) |
| B2400-1 1/2 | 1 1/2" | (40) | 5/16" | (7.9) | 7/16" | (11.1) | 4 1/16" | (103.2) | 10 Ga. | (3.4) | 1 5/8" | (41.3) |
| B2400-2 | 2" | (50) | 7/16" | (11.1) | 1 1/16" | (17.4) | 5 21/32" | (143.6) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-2 1/2 | 2 1/2" | (65) | 7/16" | (11.1) | 1 1/16" | (17.4) | 6 5/32" | (156.3) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-3 | 3" | (80) | 7/16" | (11.1) | 1 1/16" | (17.4) | 6 25/32" | (172.2) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-3 1/2 | 3 1/2" | (90) | 7/16" | (11.1) | 1 1/16" | (17.4) | 7 9/32" | (184.9) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-4 | 4" | (100) | 9/16" | (14.3) | 1 1/16" | (17.4) | 7 25/32" | (197.6) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-5 | 5" | (125) | 9/16" | (14.3) | 1 1/16" | (17.4) | 8 7/8" | (225.4) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-6 | 6" | (150) | 9/16" | (14.3) | 1 1/16" | (17.4) | 9 15/16" | (252.4) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-8 | 8" | (200) | 9/16" | (14.3) | 1 1/16" | (17.4) | 11 31/32" | (304.0) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-10 | 10" | (250) | 9/16" | (14.3) | 1 5/16" | (33.3) | 14" | (355.6) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-12 | 12" | (300) | 9/16" | (14.3) | 1 5/16" | (33.3) | 16" | (406.4) | 1/4" | (6.3) | 1 5/8" | (41.3) |
| B2400-14 | 14" | (350) | 1 5/16" | (23.8) | 1 1/2" | (38.1) | 20 3/4" | (527.0) | 3/8" | (9.5) | 1 3/4" | (44.4) |
| B2400-16 | 16" | (400) | 1 5/16" | (23.8) | 1 1/2" | (38.1) | 22 3/4" | (577.8) | 3/8" | (9.5) | 1 3/4" | (44.4) |
| B2400-18 | 18" | (460) | 1 5/16" | (23.8) | 1 3/4" | (44.4) | 27" | (685.8) | 1/2" | (12.7) | 1 3/4" | (44.4) |
| B2400-20 | 20" | (510) | 1 5/16" | (23.8) | 1 3/4" | (44.4) | 29" | (736.6) | 1/2" | (12.7) | 1 3/4" | (44.4) |
| B2400-24 | 24" | (610) | 1 5/16" | (23.8) | 1 3/4" | (44.4) | 33" | (838.2) | 1/2" | (12.7) | 1 3/4" | (44.4) |

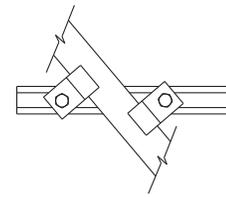
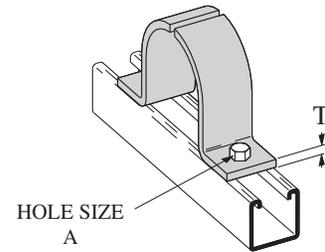
| Part No. | Design Load 1 | | Design Load 2 | | Design Load 3 | | Wt./C | |
|-------------|---------------|--------|---------------|--------|---------------|--------|-------|---------|
| | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kg |
| B2400-1/2 | 600 | (2.67) | 150 | (.67) | 105 | (.47) | 23 | (10.4) |
| B2400-3/4 | 600 | (2.67) | 150 | (.67) | 105 | (.47) | 26 | (11.8) |
| B2400-1 | 600 | (2.67) | 150 | (.67) | 120 | (.53) | 31 | (14.0) |
| B2400-1 1/4 | 600 | (2.67) | 150 | (.67) | 120 | (.53) | 36 | (16.3) |
| B2400-1 1/2 | 600 | (2.67) | 150 | (.67) | 120 | (.53) | 39 | (17.7) |
| B2400-2 | 1200 | (5.34) | 480 | (2.14) | 180 | (.80) | 93 | (42.2) |
| B2400-2 1/2 | 1200 | (5.34) | 480 | (2.14) | 180 | (.80) | 106 | (48.1) |
| B2400-3 | 1200 | (5.34) | 480 | (2.14) | 300 | (1.33) | 132 | (59.9) |
| B2400-3 1/2 | 1200 | (5.34) | 480 | (2.14) | 300 | (1.33) | 151 | (68.5) |
| B2400-4 | 1500 | (6.67) | 600 | (2.67) | 450 | (2.00) | 160 | (72.6) |
| B2400-5 | 1500 | (6.67) | 600 | (2.67) | 450 | (2.00) | 192 | (87.1) |
| B2400-6 | 1500 | (6.67) | 600 | (2.67) | 450 | (2.00) | 219 | (99.3) |
| B2400-8 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 297 | (134.7) |
| B2400-10 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 465 | (210.9) |
| B2400-12 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 560 | (254.0) |
| B2400-14 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 761 | (345.2) |
| B2400-16 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 861 | (390.5) |
| B2400-18 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 1297 | (588.3) |
| B2400-20 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 1426 | (646.8) |
| B2400-24 | 2000 | (8.90) | 800 | (3.56) | 600 | (2.67) | 1682 | (762.9) |

Reference page 110 for general fitting and standard finish specifications.

B437 SERIES TWO PIECE PIPE STRAP

- Clamp halves can turn allowing pipe to be fastened to channel at any direction
- Order hardware separately
- Standard finish: ZN

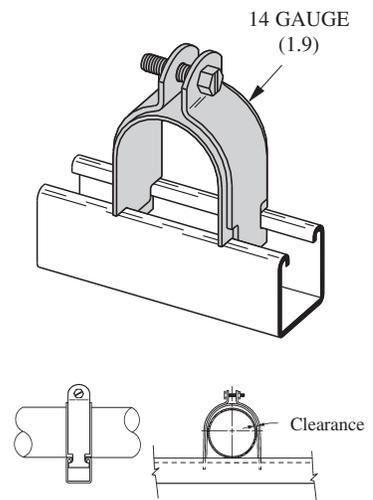
| Part No. | Pipe Size | | A | | T | | Wt./C | |
|------------|-----------|-------|-------|--------|--------|-------|-------|---------|
| | | | | | | | Lbs. | kg |
| B437-1/2 | 1/2" | (15) | 5/16" | (7.9) | 10 Ga. | (3.4) | 22 | (10.0) |
| B437-3/4 | 3/4" | (20) | 5/16" | (7.9) | 10 Ga. | (3.4) | 26 | (11.8) |
| B437-1 | 1" | (25) | 5/16" | (7.9) | 10 Ga. | (3.4) | 30 | (13.6) |
| B437-1 1/4 | 1 1/4" | (32) | 5/16" | (7.9) | 10 Ga. | (3.4) | 35 | (15.9) |
| B437-1 1/2 | 1 1/2" | (40) | 5/16" | (7.9) | 10 Ga. | (3.4) | 38 | (17.2) |
| B437-2 | 2" | (50) | 7/16" | (11.1) | 1/4" | (6.3) | 91 | (41.3) |
| B437-2 1/2 | 2 1/2" | (65) | 7/16" | (11.1) | 1/4" | (6.3) | 104 | (47.2) |
| B437-3 | 3" | (80) | 7/16" | (11.1) | 1/4" | (6.3) | 130 | (58.9) |
| B437-3 1/2 | 3 1/2" | (90) | 7/16" | (11.1) | 1/4" | (6.3) | 149 | (67.6) |
| B437-4 | 4" | (100) | 9/16" | (11.1) | 1/4" | (6.3) | 158 | (71.6) |
| B437-5 | 5" | (125) | 9/16" | (11.1) | 1/4" | (6.3) | 190 | (86.2) |
| B437-6 | 6" | (150) | 9/16" | (11.1) | 1/4" | (6.3) | 217 | (98.4) |
| B437-8 | 8" | (200) | 9/16" | (11.1) | 1/4" | (6.3) | 295 | (133.8) |



B2417 STRUT MOUNTED PIPE GUIDE

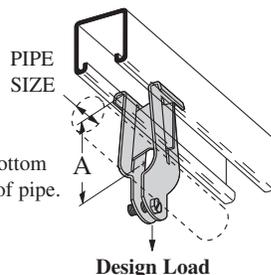
- Copper tubing sizes available - B2417CT Series
- Standard finish: ZN

| Part No. | Pipe Size | | Minimum Radial Clearance | | Includes Clamp No. | Wt./C | |
|-------------|-----------|-------|--------------------------|-------|--------------------|-------|--------|
| | | | | | | Lbs. | kg |
| B2417-1/2 | 1/2" | (15) | 1/16" | (1.6) | B2009 | 22 | (10.0) |
| B2417-3/4 | 3/4" | (20) | 1/16" | (1.6) | B2010 | 25 | (11.3) |
| B2417-1 | 1" | (25) | 3/32" | (2.3) | B2034 | 30 | (13.6) |
| B2417-1 1/4 | 1 1/4" | (32) | 3/32" | (2.3) | B2037 | 47 | (21.8) |
| B2417-1 1/2 | 1 1/2" | (40) | 3/32" | (2.3) | B2039 | 51 | (23.1) |
| B2417-2 | 2" | (50) | 1/8" | (3.2) | B2043 | 62 | (28.1) |
| B2417-2 1/2 | 2 1/2" | (65) | 1/8" | (3.2) | B2047 | 69 | (31.3) |
| B2417-3 | 3" | (80) | 5/32" | (3.9) | B2016 | 108 | (49.0) |
| B2417-3 1/2 | 3 1/2" | (90) | 5/32" | (3.9) | B2017 | 118 | (53.5) |
| B2417-4 | 4" | (100) | 5/32" | (3.9) | B2018 | 128 | (58.0) |



B2070 THRU B2080 PARALLEL PIPE CLAMP

- Safety Factor of 2
- Designed to support pipe or rigid conduit
- Includes:
 - 1 pr. Pipe Clamps
 - 1 pc. Stand Off Plate
 - 1 pc. Slotted Hex Head Machine Screws
 - 1 pc. Square Nut
- Standard finish: ZN



A dimension, from bottom of channel to center of pipe.

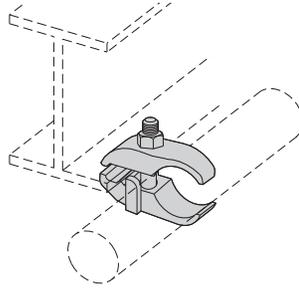
| Part No. | Pipe Size | | A | | Material Thickness | | Design Load | | Wt./C | |
|----------|-----------|-------|----------|--------|--------------------|-------|-------------|--------|-------|--------|
| | | | | | | | Lbs. | kN | Lbs. | kg |
| B2070 | 3/8" | (10) | 1 11/16" | (42.9) | 16 Ga. | (1.5) | 300 | (1.33) | 24 | (10.9) |
| B2071 | 1/2" | (15) | 1 3/4" | (44.4) | 16 Ga. | (1.5) | 300 | (1.33) | 26 | (11.8) |
| B2072 | 3/4" | (20) | 1 7/8" | (47.6) | 14 Ga. | (1.9) | 300 | (1.33) | 30 | (13.6) |
| B2073 | 1" | (25) | 2" | (50.8) | 14 Ga. | (1.9) | 400 | (1.78) | 33 | (14.9) |
| B2074 | 1 1/4" | (32) | 2 3/16" | (55.6) | 14 Ga. | (1.9) | 400 | (1.78) | 36 | (16.3) |
| B2075 | 1 1/2" | (40) | 2 5/16" | (58.7) | 12 Ga. | (2.6) | 500 | (2.22) | 50 | (22.7) |
| B2076 | 2" | (50) | 2 9/16" | (65.1) | 12 Ga. | (2.6) | 500 | (2.22) | 55 | (24.9) |
| B2077 | 2 1/2" | (65) | 2 7/8" | (73.0) | 12 Ga. | (2.6) | 500 | (2.22) | 60 | (27.2) |
| B2078 | 3" | (80) | 3 3/16" | (80.9) | 12 Ga. | (2.6) | 500 | (2.22) | 66 | (29.9) |
| B2079 | 3 1/2" | (90) | 3 7/16" | (87.3) | 11 Ga. | (3.0) | 500 | (2.22) | 85 | (38.5) |
| B2080 | 4" | (100) | 3 5/8" | (92.1) | 11 Ga. | (3.0) | 500 | (2.22) | 95 | (43.1) |

Reference page 110 for general fitting and standard finish specifications.

Pipe Clamps

B670 SERIES PARALLEL PIPE CLAMP

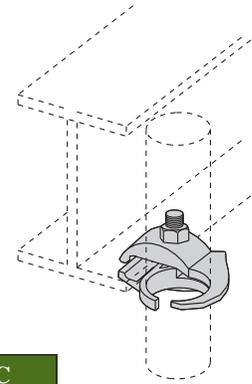
- Designed to support pipe or rigid conduit parallel to the edge of a beam or angle iron
- Hardware included
- Material: Malleable Iron
- Standard finish: HDG



| Part Number | Pipe or Conduit Size | | Wt./C | |
|-------------|----------------------|-------|-------|--------|
| | Lbs. | kg | Lbs. | kg |
| B670-3/8 | 3/8" | (10) | 32 | (14.5) |
| B670-1/2 | 1/2" | (15) | 58 | (26.3) |
| B670-3/4 | 3/4" | (20) | 64 | (29.0) |
| B670-1 | 1" | (25) | 70 | (31.7) |
| B670-1 1/4 | 1 1/4" | (32) | 77 | (34.9) |
| B670-1 1/2 | 1 1/2" | (40) | 93 | (42.2) |
| B670-2 | 2" | (50) | 105 | (47.6) |
| B670-2 1/2 | 2 1/2" | (65) | 143 | (64.8) |
| B670-3 | 3" | (80) | 164 | (74.4) |
| B670-3 1/2 | 3 1/2" | (90) | 190 | (86.2) |
| B670-4 | 4" | (100) | 205 | (93.0) |

B671 SERIES EDGE PIPE CLAMP

- Designed to support pipe or rigid conduit perpendicular to the edge of a beam or angle iron
- Hardware included
- Material: Malleable Iron
- Standard finish: HDG

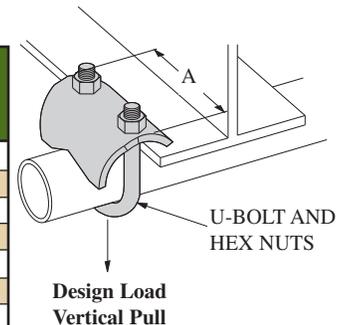


| Part Number | Pipe or Conduit Size | | Wt./C | |
|-------------|----------------------|------|-------|---------|
| | Lbs. | kg | Lbs. | kg |
| B671-1/2 | 1/2" | (15) | 67 | (30.4) |
| B671-3/4 | 3/4" | (20) | 71 | (32.2) |
| B671-1 | 1" | (25) | 85 | (38.5) |
| B671-1 1/4 | 1 1/4" | (32) | 91 | (41.3) |
| B671-1 1/2 | 1 1/2" | (40) | 115 | (52.1) |
| B671-2 | 2" | (50) | 135 | (61.2) |
| B671-2 1/2 | 2 1/2" | (65) | 183 | (83.0) |
| B671-3 | 3" | (80) | 230 | (104.3) |

B422 SERIES RIGHT ANGLE CLAMP

- Safety Factor of 5
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, SS4

| Part No. | Conduit Size | | A | Design Load Vertical Pull | | Wt./C | | |
|------------|--------------|-------|----------|---------------------------|------|--------|-----|--------|
| | Lbs. | kg | | Lbs. | kg | Lbs. | kg | |
| B422-1/2 | 1/2" | (15) | 2 3/8" | (60.3) | 250 | (1.11) | 38 | (17.2) |
| B422-3/4 | 3/4" | (20) | 2 3/8" | (60.3) | 300 | (1.33) | 39 | (17.7) |
| B422-1 | 1" | (25) | 2 7/8" | (73.0) | 400 | (1.78) | 48 | (21.8) |
| B422-1 1/4 | 1 1/4" | (32) | 2 7/8" | (73.0) | 400 | (1.78) | 50 | (22.7) |
| B422-1 1/2 | 1 1/2" | (40) | 3 1/4" | (82.5) | 500 | (2.22) | 59 | (26.7) |
| B422-2 | 2" | (50) | 3 11/16" | (93.7) | 600 | (2.67) | 75 | (34.0) |
| B422-2 1/2 | 2 1/2" | (65) | 4 1/4" | (107.9) | 700 | (3.11) | 98 | (44.4) |
| B422-3 | 3" | (80) | 4 7/8" | (123.8) | 800 | (3.56) | 111 | (50.3) |
| B422-3 1/2 | 3 1/2" | (90) | 5 7/16" | (138.1) | 900 | (4.00) | 123 | (55.8) |
| B422-4 | 4" | (100) | 6" | (152.4) | 1000 | (4.45) | 135 | (61.2) |



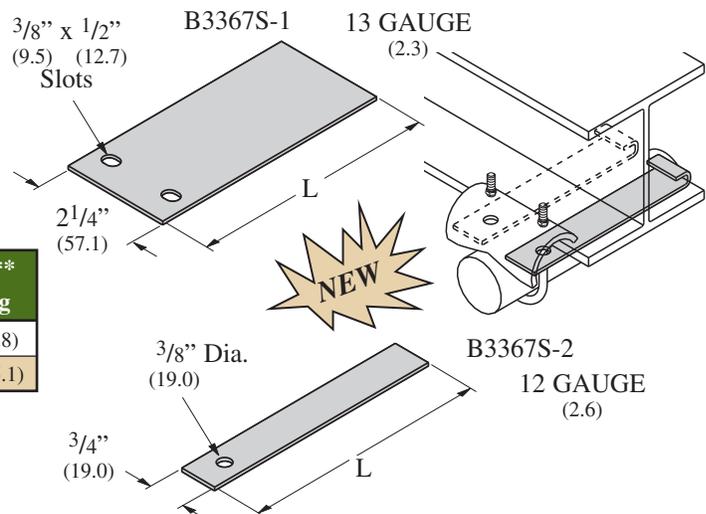
B3367S RETAINING STRAP

- Available in 'L' lengths of 6" (152.4), 8" (203.2), 9" (228.6), 10" (254.0), 12" (304.8), 14" (355.6), 16" (406.4), 18" (457.2)
- Material: Steel
- Standard finishes: ZN, PLN

| Part No. | Hole Dia. D | For Use With | Wt./C** | |
|------------|-------------|--------------|-----------------------|-------------|
| | | | Lbs. | kg |
| B3367S-1-L | 7/16" | (30.1) | B422-1/2 & 3/4 | 33.4 (5.8) |
| B3367S-2-L | 9/16" | (30.1) | B422-1, 1 1/4 & 1 1/2 | 12.8 (15.1) |

** Wt./C based on 6" (152.4) length. For each additional inch in strap length add the following to the Wt./C.
 For B3367S-1 add 5.7 Lbs (2.6 kg)
 For B3367S-2 add 2.2 Lbs (1.0 kg)

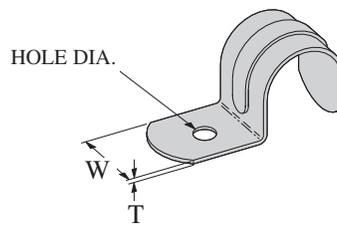
Note: Use B3367-3/8 retaining strap (page 100) for B422-2 thru 4



Reference page 110 for general fitting and standard finish specifications.

B2301 SERIES ONE HOLE EMT STRAP

•Standard finish: ZN

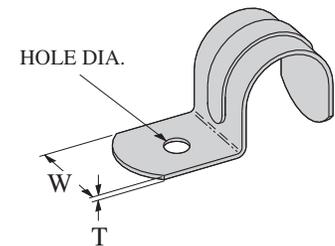


| Part No. | Conduit Size | | T | | W | | Hole Dia. | | Wt./C | |
|-------------|--------------|------|------|-------|--------|--------|-----------|--------|-------|-------|
| | | | | | | | | | Lbs. | kg |
| B2301-1/2 | 1/2" | (15) | .050 | (1.3) | 3/4" | (19.0) | 9/32" | (7.1) | 2.4 | (1.1) |
| B2301-3/4 | 3/4" | (20) | .050 | (1.3) | 7/8" | (22.2) | 9/32" | (7.1) | 4.2 | (1.9) |
| B2301-1 | 1" | (25) | .050 | (1.3) | 1" | (25.4) | 9/32" | (7.1) | 8.3 | (3.7) |
| B2301-1 1/4 | 1 1/4" | (32) | .065 | (1.6) | 1 1/4" | (31.7) | 9/32" | (7.1) | 11.0 | (5.0) |
| B2301-1 1/2 | 1 1/2" | (40) | .090 | (2.3) | 1" | (25.4) | 11/32" | (8.7) | 14.8 | (6.7) |
| B2301-2 | 2" | (50) | .090 | (2.3) | 1 1/4" | (31.7) | 13/32" | (10.3) | 21.6 | (9.8) |

B2302 SERIES ONE HOLE RIGID CONDUIT/PIPE STRAP

•Standard finish: ZN

| Part No. | Conduit/Pipe Size | | T | | W | | Hole Dia. | | Wt./C | |
|-------------|-------------------|-------|--------|-------|--------|--------|-----------|--------|-------|--------|
| | | | | | | | | | Lbs. | kg |
| B2302-1/4 | 1/4" | (6) | .045 | (1.1) | 5/8" | (15.9) | 13/64" | (5.1) | 1.4 | (.6) |
| B2302-3/8 | 3/8" | (10) | .050 | (1.3) | 3/4" | (19.0) | 9/32" | (7.1) | 2.4 | (1.1) |
| B2302-1/2 | 1/2" | (15) | .050 | (1.3) | 7/8" | (22.2) | 9/32" | (7.1) | 3.3 | (1.5) |
| B2302-3/4 | 3/4" | (20) | .050 | (1.3) | 7/8" | (22.2) | 9/32" | (7.1) | 3.8 | (1.7) |
| B2302-1 | 1" | (25) | .065 | (1.6) | 1" | (25.4) | 9/32" | (7.1) | 7.2 | (3.2) |
| B2302-1 1/4 | 1 1/4" | (32) | .065 | (1.6) | 1 1/4" | (31.7) | 21/64" | (8.3) | 11.0 | (5.0) |
| B2302-1 1/2 | 1 1/2" | (40) | 11 Ga. | (3.0) | 1" | (25.4) | .380 | (9.6) | 19.2 | (8.7) |
| B2302-2 | 2" | (50) | 11 Ga. | (3.0) | 1 1/4" | (31.7) | .389 | (9.9) | 28.8 | (13.0) |
| B2302-2 1/2 | 2 1/2" | (65) | 7 Ga. | (4.5) | 1 1/4" | (31.7) | .665 | (16.9) | 55.2 | (25.0) |
| B2302-3 | 3" | (80) | 7 Ga. | (4.5) | 1 1/4" | (31.7) | .650 | (16.5) | 68.0 | (30.8) |
| B2302-3 1/2 | 3 1/2" | (90) | 1/4" | (6.3) | 1 1/4" | (31.7) | .622 | (15.8) | 96.0 | (43.5) |
| B2302-4 | 4" | (100) | 1/4" | (6.3) | 1 1/4" | (31.7) | .630 | (16.0) | 108.0 | (49.0) |

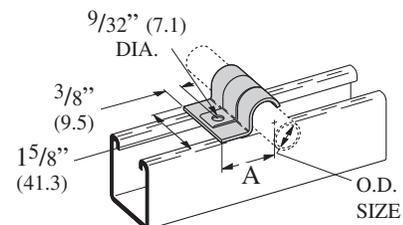


B2084 THRU B2091 ONE HOLE O.D. TUBING CLAMP

•Material: 14 Gauge (1.9) ASTM A1011 33,000 PSI min. yield

•Standard finish: ZN

| Part No. | O.D. Size | | A | | Wt./C | |
|----------|-----------|--------|---------|--------|-------|-------|
| | | | | | Lbs. | kg |
| B2084 | 1/4" | (6.3) | 7/8" | (22.2) | 4.0 | (1.8) |
| B2085 | 5/16" | (7.9) | 29/32" | (23.0) | 4.2 | (1.9) |
| B2086 | 3/8" | (9.5) | 31/32" | (24.6) | 5.2 | (2.3) |
| B2087 | 1/2" | (12.7) | 1 1/16" | (25.9) | 5.8 | (2.6) |
| B2088 | 5/8" | (15.9) | 1 3/32" | (27.8) | 7.1 | (3.2) |
| B2089 | 3/4" | (19.0) | 1 5/32" | (29.1) | 7.7 | (3.5) |
| B2090 | 7/8" | (22.2) | 1 7/32" | (30.7) | 8.7 | (3.9) |
| B2091 | 1" | (25.4) | 1 9/32" | (32.2) | 10.0 | (4.5) |

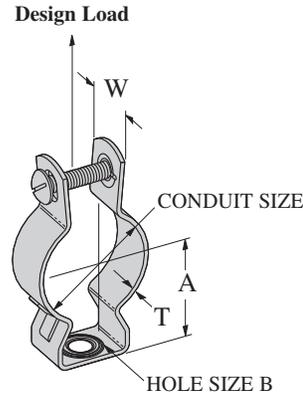


Reference page 110 for general fitting and standard finish specifications.

Pipe Clamps

BL1400 SERIES CONDUIT HANGER

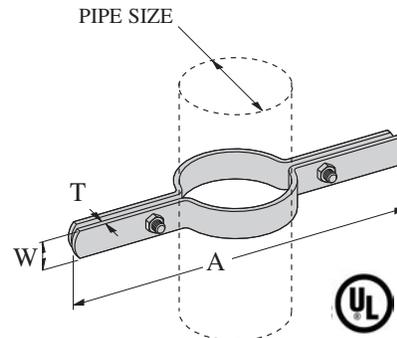
- Safety Factor of 3
- Unless noted all sizes fit both rigid (R) and thinwall (EMT) conduit
- Hardware included
- Standard finishes: ZN, SS4



| Part No | Conduit Size | | A | | B | | T | | W | | Design Load | | Wt./C | |
|---------|----------------------|-------|----------|--------|--------|-------|--------|-------|--------|--------|-------------|--------|-------|--------|
| | | | | | | | | | | | Lbs. | kN | Lbs. | kg |
| BL1400 | 1/2" | (15) | 29/32" | (23.0) | 9/32" | (7.1) | 16 Ga. | (1.5) | 3/4" | (19.0) | 590 | (2.62) | 6 | (2.7) |
| BL1410 | 3/4" | (20) | 31/32" | (24.6) | 9/32" | (7.1) | 16 Ga. | (1.5) | 3/4" | (19.0) | 590 | (2.62) | 7 | (3.2) |
| BL1420 | 1" | (25) | 1 1/4" | (31.7) | 9/32" | (7.1) | 16 Ga. | (1.5) | 3/4" | (19.0) | 590 | (2.62) | 8 | (3.6) |
| BL1425 | 1 1/4" EMT | (32) | 1 1/4" | (31.7) | 9/32" | (7.1) | 18 Ga. | (1.2) | 7/8" | (22.2) | 590 | (2.62) | 10 | (4.5) |
| BL1430 | 1 1/4" R, 1 1/2" EMT | (32) | 1 13/32" | (35.7) | 9/32" | (8.7) | 18 Ga. | (1.2) | 7/8" | (22.2) | 590 | (2.62) | 10 | (4.5) |
| BL1440 | 1 1/2" R | (40) | 1 5/8" | (41.3) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1" | (25.4) | 755 | (3.36) | 17 | (7.7) |
| BL1450 | 2" | (50) | 2 1/16" | (47.6) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1 1/4" | (31.7) | 755 | (3.36) | 25 | (11.3) |
| BL1460 | 2 1/2" | (65) | 2 1/16" | (52.4) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1 1/4" | (31.7) | 755 | (3.36) | 26 | (11.8) |
| BL1470 | 3" | (80) | 2 1/2" | (63.5) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1 1/4" | (31.7) | 820 | (3.65) | 33 | (14.9) |
| BL1480 | 3 1/2" | (90) | 2 3/4" | (69.8) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1 1/4" | (31.7) | 850 | (3.78) | 36 | (16.3) |
| BL1490 | 4" | (100) | 3 1/2" | (88.9) | 11/32" | (8.7) | 16 Ga. | (1.5) | 1 1/4" | (31.7) | 1410 | (6.27) | 40 | (18.1) |

B3373 SERIES RISER CLAMP

- Safety Factor of 4
- B3373-3/4 thru B3373-8 are UL listed
- Includes Hex Head Cap Screws and Hex Nuts
- Standard finishes: ZN, PLN

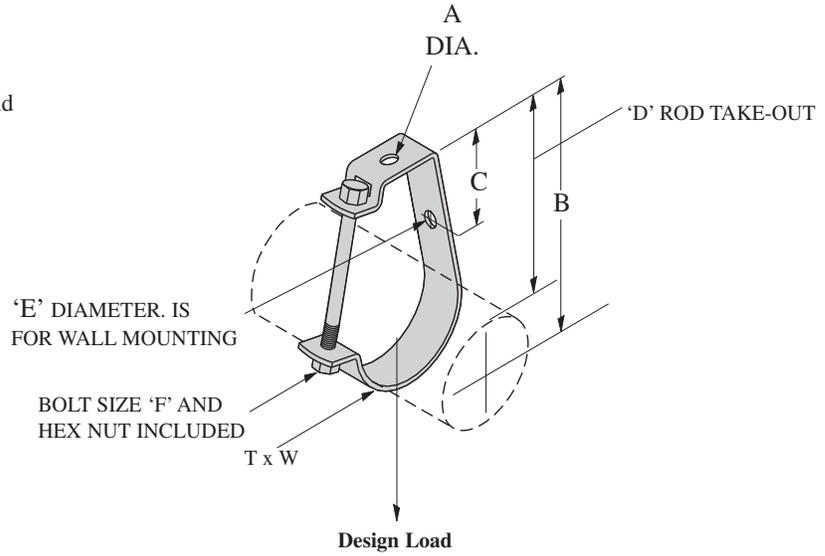
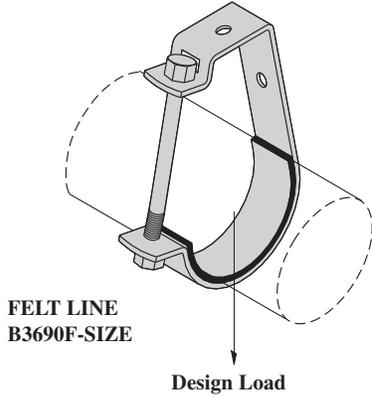


| Part No. | Pipe Size | | A | | T | | W | | Design Load | | Wt./C | |
|-------------|-----------|-------|-----------|---------|-------|-------|--------|--------|-------------|---------|-------|---------|
| | | | | | | | | | Lbs. | kN | Lbs. | kg |
| B3373-1/2 | 1/2" | (15) | 9" | (228.6) | 3/16" | (4.7) | 1" | (25.4) | 255 | (1.13) | 103 | (46.3) |
| B3373-3/4 | 3/4" | (20) | 9 1/4" | (234.9) | 3/16" | (4.7) | 1" | (25.4) | 255 | (1.13) | 106 | (47.7) |
| B3373-1 | 1" | (25) | 9 9/16" | (242.9) | 3/16" | (4.7) | 1" | (25.4) | 255 | (1.13) | 111 | (49.9) |
| B3373-1 1/4 | 1 1/4" | (32) | 10" | (254.0) | 3/16" | (4.7) | 1" | (25.4) | 255 | (1.13) | 114 | (51.3) |
| B3373-1 1/2 | 1 1/2" | (32) | 10 1/4" | (260.3) | 3/16" | (4.7) | 1" | (25.4) | 255 | (1.13) | 120 | (54.0) |
| B3373-2 | 2" | (40) | 10 3/4" | (273.0) | 1/4" | (6.3) | 1" | (25.4) | 255 | (1.13) | 167 | (75.1) |
| B3373-2 1/2 | 2 1/2" | (50) | 11 1/4" | (285.7) | 1/4" | (6.3) | 1" | (25.4) | 390 | (1.73) | 177 | (79.6) |
| B3373-3 | 3" | (65) | 11 15/16" | (303.2) | 1/4" | (6.3) | 1" | (25.4) | 530 | (2.36) | 191 | (85.9) |
| B3373-3 1/2 | 3 1/2" | (80) | 12 3/8" | (314.3) | 1/4" | (6.3) | 1" | (25.4) | 670 | (2.98) | 216 | (97.2) |
| B3373-4 | 4" | (90) | 12 7/8" | (327.0) | 1/4" | (6.3) | 1" | (25.4) | 810 | (3.60) | 227 | (102.1) |
| B3373-5 | 5" | (100) | 14" | (355.6) | 1/4" | (6.3) | 1 1/2" | (38.1) | 1160 | (5.16) | 471 | (213.6) |
| B3373-6 | 6" | (100) | 15 3/16" | (385.8) | 1/4" | (6.3) | 1 1/2" | (38.1) | 1570 | (6.98) | 518 | (234.9) |
| B3373-8 | 8" | (100) | 17 3/4" | (450.8) | 3/8" | (9.5) | 1 1/2" | (38.1) | 2500 | (11.12) | 950 | (430.9) |

Reference page 110 for general fitting and standard finish specifications.

B3690 SERIES ADJUSTABLE J HANGER

- Safety Factor of 5
- Material:
 - 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield
 - 11 Ga. (3.0) ASTM A1011 HSLA Gr. 50 Class 1
 - 7 Ga. (4.5) ASTM A1011 33,000 PSI min. yield and 1/4" (6.3) ASTM A1018 33,000 PSI min. yield
- Standard finish: ZN



| Part No. | Pipe or Conduit Size | | A | | B | | C | | D | | E | | F |
|-------------|----------------------|-------|--------|--------|----------|---------|---------|--------|----------|---------|--------|--------|-------------------|
| | IN | (mm) | IN | (mm) | IN | (mm) | IN | (mm) | IN | (mm) | IN | (mm) | IN |
| B3690-1/2 | 1/2" | (15) | 13/32" | (10.3) | 23/32" | (53.2) | 1" | (25.4) | 1 11/16" | (42.5) | 13/32" | (10.3) | 1/4"-20 x 2 1/4" |
| B3690-3/4 | 3/4" | (20) | 13/32" | (10.3) | 2 11/32" | (59.5) | 1" | (25.4) | 1 13/16" | (46.2) | 13/32" | (10.3) | 1/4"-20 x 2 1/2" |
| B3690-1 | 1" | (25) | 13/32" | (10.3) | 2 19/32" | (65.9) | 1" | (25.4) | 1 15/16" | (49.2) | 13/32" | (10.3) | 1/4"-20 x 2 3/4" |
| B3690-1 1/4 | 1 1/4" | (32) | 13/32" | (10.3) | 2 13/16" | (71.4) | 1" | (25.4) | 2" | (50.4) | 13/32" | (10.3) | 1/4"-20 x 3" |
| B3690-1 1/2 | 1 1/2" | (40) | 13/32" | (10.3) | 3 1/16" | (77.8) | 1" | (25.4) | 2 1/8" | (53.7) | 13/32" | (10.3) | 1/4"-20 x 3 1/4" |
| B3690-2 | 2" | (50) | 13/32" | (10.3) | 3 1/2" | (88.9) | 1" | (25.4) | 2 5/16" | (58.7) | 13/32" | (10.3) | 1/4"-20 x 3 1/2" |
| B3690-2 1/2 | 2 1/2" | (65) | 9/16" | (14.3) | 4 7/16" | (112.7) | 1" | (25.4) | 3" | (76.2) | 9/16" | (14.3) | 3/8"-16 x 4 1/2" |
| B3690-3 | 3" | (80) | 9/16" | (14.3) | 4 7/8" | (123.8) | 1" | (25.4) | 3 1/8" | (79.4) | 9/16" | (14.3) | 3/8"-16 x 5" |
| B3690-3 1/2 | 3 1/2" | (90) | 9/16" | (14.3) | 5 3/16" | (131.8) | 1" | (25.4) | 3 3/16" | (81.0) | 9/16" | (14.3) | 3/8"-16 x 5 1/2" |
| B3690-4 | 4" | (100) | 11/16" | (17.5) | 6 1/8" | (155.6) | 1 1/4" | (31.8) | 3 7/8" | (98.4) | 9/16" | (14.3) | 3/8"-16 x 6 1/2" |
| B3690-5 | 5" | (125) | 11/16" | (17.5) | 6 3/4" | (171.4) | 1 1/2" | (38.1) | 4" | (100.8) | 9/16" | (14.3) | 3/8"-16 x 7 1/2" |
| B3690-6 | 6" | (150) | 13/16" | (20.6) | 7 3/4" | (196.8) | 1 3/16" | (30.2) | 4 7/16" | (112.7) | 9/16" | (14.3) | 3/8"-16 x 8 1/2" |
| B3690-8 | 8" | (200) | 13/16" | (20.6) | 9 1/4" | (235.0) | 1" | (25.4) | 4 15/16" | (125.4) | 9/16" | (14.3) | 3/8"-16 x 10 1/2" |

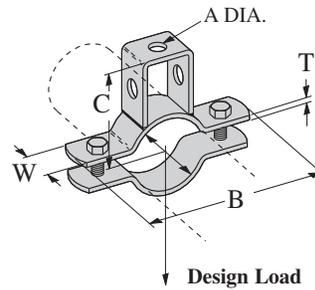
| Part No. | T | W | Design Load | | Wt./C | |
|-------------|--------------|---------------|-------------|--------|-------|---------|
| | | | Lbs. | kN | Lbs. | kg |
| B3690-1/2 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 20 | (9.1) |
| B3690-3/4 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 23 | (10.4) |
| B3690-1 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 24 | (10.9) |
| B3690-1 1/4 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 27 | (12.2) |
| B3690-1 1/2 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 29 | (13.1) |
| B3690-2 | 12 Ga. (2.6) | 3/4" (19.0) | 400 | (1.78) | 32 | (14.5) |
| B3690-2 1/2 | 11 Ga. (3.0) | 1 1/4" (31.7) | 800 | (3.56) | 71 | (32.2) |
| B3690-3 | 11 Ga. (3.0) | 1 1/4" (31.7) | 800 | (3.56) | 77 | (34.9) |
| B3690-3 1/2 | 11 Ga. (3.0) | 1 1/4" (31.7) | 800 | (3.56) | 84 | (38.1) |
| B3690-4 | 7 Ga. (4.5) | 1 1/4" (31.7) | 800 | (3.56) | 139 | (63.0) |
| B3690-5 | 7 Ga. (4.5) | 1 1/4" (31.7) | 800 | (3.56) | 166 | (75.3) |
| B3690-6 | 1/4" (6.3) | 1 1/4" (31.7) | 1000 | (4.45) | 226 | (102.5) |
| B3690-8 | 1/4" (6.3) | 1 1/2" (38.1) | 1200 | (5.34) | 332 | (150.6) |

Reference page 110 for general fitting and standard finish specifications.

Pipe Hangers

B386 SERIES SUSPENSION ROD PIPE STRAP

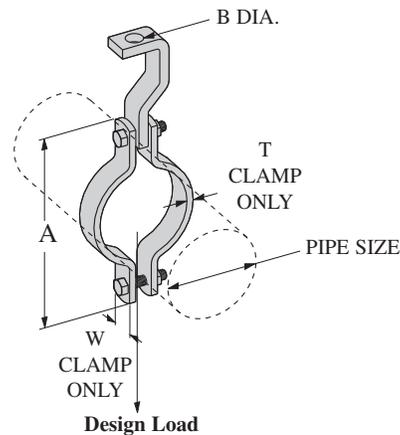
- Safety Factor of 3
- Includes Hex Head Cap Screws and Hex Nuts
- Standard finishes: ZN, GRN



| Part No. | Pipe Size | A | B | C | T | W | Design Load Lbs. kN | Wt./C Lbs. kg |
|------------------------------------|--------------------------------------|---|--|--|------------|--|------------------------|------------------|
| B386-3/4 | 3/4" (20) | 7/16" (11.1) | 3 ⁵ / ₁₆ " (84.1) | 2 ³ / ₁₆ " (55.6) | 1/8" (3.2) | 1" (25.4) | 730 (3.25) | 46 (20.8) |
| B386-1 | 1" (25) | 7/16" (11.1) | 3 ³ / ₄ " (95.2) | 2 ⁵ / ₁₆ " (58.7) | 1/8" (3.2) | 1" (25.4) | 730 (3.25) | 51 (23.1) |
| B386-1 ¹ / ₄ | 1 ¹ / ₄ " (32) | 7/16" (11.1) | 4" (101.6) | 2 ¹⁷ / ₃₂ " (64.3) | 1/8" (3.2) | 1" (25.4) | 730 (3.25) | 52 (23.6) |
| B386-1 ¹ / ₂ | 1 ¹ / ₂ " (40) | 7/16" (11.1) | 4 ⁵ / ₁₆ " (109.5) | 2 ¹¹ / ₁₆ " (68.3) | 1/8" (3.2) | 1" (25.4) | 730 (3.25) | 54 (24.5) |
| B386-2 | 2" (50) | 7/16" (11.1) | 5 ¹ / ₂ " (139.7) | 3 ⁵ / ₁₆ " (84.1) | 1/4" (6.3) | 1" (25.4) | 730 (3.25) | 134 (60.8) |
| B386-2 ¹ / ₂ | 2 ¹ / ₂ " (65) | 9/16" (14.3) | 6 ³ / ₈ " (161.9) | 3 ¹ / ₂ " (88.9) | 1/4" (6.3) | 1" (25.4) | 1350 (6.00) | 157 (71.2) |
| B386-3 | 3" (80) | 9/16" (14.3) | 7" (177.8) | 3 ⁷ / ₈ " (98.4) | 1/4" (6.3) | 1" (25.4) | 1350 (6.00) | 168 (76.2) |
| B386-3 ¹ / ₂ | 3 ¹ / ₂ " (90) | 9/16" (14.3) | 7 ⁹ / ₁₆ " (192.1) | 4 ¹ / ₈ " (104.8) | 1/4" (6.3) | 1" (25.4) | 1350 (6.00) | 197 (89.3) |
| B386-4 | 4" (100) | 9/16" (14.3) | 8 ⁵ / ₈ " (219.1) | 4 ³ / ₈ " (111.1) | 1/4" (6.3) | 1 ¹ / ₄ " (31.7) | 1350 (6.00) | 270 (122.4) |
| B386-5 | 5" (125) | 1 ¹ / ₁₆ " (17.4) | 9 ³ / ₄ " (247.6) | 5 ³ / ₁₆ " (131.8) | 1/4" (6.3) | 1 ¹ / ₄ " (31.7) | 2160 (9.61) | 308 (139.7) |
| B386-6 | 6" (150) | 1 ¹ / ₁₆ " (17.4) | 11 ⁵ / ₈ " (295.3) | 6 ¹ / ₁₆ " (154.0) | 3/8" (9.5) | 1 ¹ / ₂ " (38.1) | 2160 (9.61) | 609 (276.4) |
| B386-8 | 8" (200) | 1 ³ / ₁₆ " (20.6) | 13 ⁷ / ₈ " (352.4) | 7 ¹ / ₈ " (181.0) | 3/8" (9.5) | 1 ¹ / ₂ " (38.1) | 3230 (14.37) | 713 (323.4) |

B394 SERIES PIPE STRAP

- Safety Factor of 3
- Includes:
 - 1 Pair Pipe Clamps with Hex Head Cap Screws and Hex Nuts
 - 1 Hanger Strap
- Standard finishes: ZN

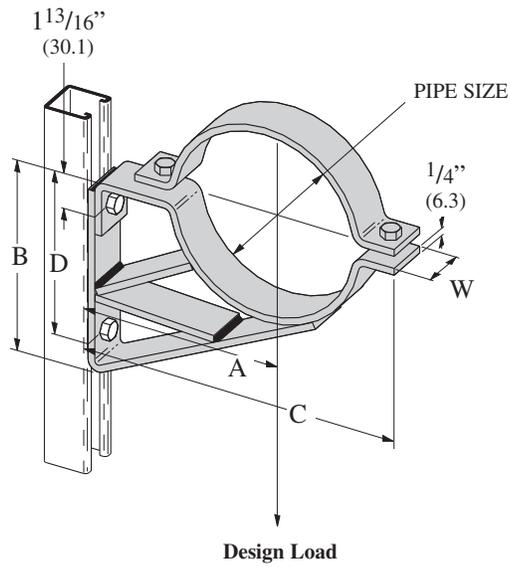


| Part No. | Pipe Size | A | B | T | W | Design Load Lbs. kN | Wt./C Lbs. kg |
|------------------------------------|--------------------------------------|--|---|------------|--|------------------------|------------------|
| B394-3/4 | 3/4" (20) | 3 ⁵ / ₁₆ " (84.1) | 7/16" (11.1) | 1/8" (3.2) | 1" (25.4) | 500 (2.22) | 71 (32.2) |
| B394-1 | 1" (25) | 3 ³ / ₄ " (95.2) | 7/16" (11.1) | 1/8" (3.2) | 1" (25.4) | 500 (2.22) | 76 (34.5) |
| B394-1 ¹ / ₄ | 1 ¹ / ₄ " (32) | 4" (101.6) | 7/16" (11.1) | 1/8" (3.2) | 1" (25.4) | 500 (2.22) | 77 (34.9) |
| B394-1 ¹ / ₂ | 1 ¹ / ₂ " (40) | 4 ⁵ / ₁₆ " (109.5) | 7/16" (11.1) | 1/8" (3.2) | 1" (25.4) | 800 (3.56) | 79 (35.8) |
| B394-2 | 2" (50) | 5 ¹ / ₂ " (139.7) | 7/16" (11.1) | 1/4" (6.3) | 1" (25.4) | 1040 (4.62) | 166 (75.3) |
| B394-2 ¹ / ₂ | 2 ¹ / ₂ " (65) | 6 ³ / ₈ " (161.9) | 9/16" (14.3) | 1/4" (6.3) | 1" (25.4) | 1040 (4.62) | 179 (81.2) |
| B394-3 | 3" (80) | 7" (177.8) | 9/16" (14.3) | 1/4" (6.3) | 1" (25.4) | 1040 (4.62) | 190 (86.2) |
| B394-3 ¹ / ₂ | 3 ¹ / ₂ " (90) | 7 ⁹ / ₁₆ " (192.1) | 9/16" (14.3) | 1/4" (6.3) | 1" (25.4) | 1040 (4.62) | 203 (92.1) |
| B394-4 | 4" (100) | 8 ⁵ / ₈ " (219.1) | 1 ¹ / ₁₆ " (17.4) | 1/4" (6.3) | 1 ¹ / ₄ " (31.7) | 1040 (4.62) | 320 (145.1) |
| B394-5 | 5" (125) | 9 ³ / ₄ " (247.6) | 1 ¹ / ₁₆ " (17.4) | 1/4" (6.3) | 1 ¹ / ₄ " (31.7) | 1040 (4.62) | 353 (160.1) |
| B394-6 | 6" (150) | 11 ⁵ / ₈ " (295.3) | 1 ³ / ₁₆ " (20.6) | 3/8" (9.5) | 1 ¹ / ₂ " (38.1) | 1615 (7.18) | 637 (288.9) |
| B394-8 | 8" (200) | 13 ⁷ / ₈ " (352.4) | 1 ³ / ₁₆ " (20.6) | 3/8" (9.5) | 1 ¹ / ₂ " (38.1) | 1615 (7.18) | 837 (379.6) |

Reference page 110 for general fitting and standard finish specifications.

B591 SERIES PIPE BRACKET SADDLE AND CLAMP

- Safety Factor of 3
- Inside brace not required on B591-2 and B591-2½
- Includes:
 - 1 pc. Saddle bottom
 - 1 pc. Saddle top (clamp)
 - 2 pcs. Hex Head Cap Screws
 - 2 pcs. Hex Nuts
- Standard finish: ZN



| Part No. | Pipe Size | | A | | B | | C | | D | | W | | Design Load | | Wt./C | |
|----------------|-----------|-------|-----|---------|------|---------|------|---------|-----|---------|-----|--------|-------------|--------|-------|---------|
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | Lbs. | kN | Lbs. | kg |
| B591-2 | 2" | (50) | 4½" | (114.3) | 4½" | (114.3) | 7¾" | (182.6) | 3¼" | (77.8) | 1⅝" | (41.3) | 1235 | (5.53) | 290 | (131.5) |
| B591-2½ | 2½" | (65) | 5" | (127.0) | 5" | (127.0) | 7⅝" | (201.6) | 3⅞" | (90.5) | 1⅝" | (41.3) | 1180 | (5.29) | 330 | (149.7) |
| B591-3 | 3" | (80) | 5½" | (139.7) | 5¾" | (146.0) | 8¾" | (222.2) | 3⅓" | (96.8) | 1⅝" | (41.3) | 1125 | (5.04) | 439 | (199.1) |
| B591-3½ | 3½" | (90) | 6" | (152.4) | 6¾" | (171.4) | 9½" | (241.3) | 4⅞" | (115.9) | 1⅝" | (41.3) | 1070 | (4.79) | 490 | (222.2) |
| B591-4 | 4" | (100) | 6½" | (165.1) | 6¾" | (171.4) | 10¼" | (260.3) | 6¼" | (128.6) | 1⅝" | (41.3) | 1015 | (4.55) | 545 | (247.2) |
| B591-5 | 5" | (125) | 7½" | (190.5) | 8" | (203.2) | 12⅛" | (308.0) | 6¼" | (154.0) | 1⅝" | (41.3) | 960 | (4.30) | 666 | (302.1) |
| B591-6 | 6" | (150) | 8" | (203.2) | 8¾" | (222.2) | 13¾" | (335.0) | 6⅓" | (173.0) | 1⅝" | (41.3) | 905 | (4.05) | 724 | (328.4) |
| B591-8 | 8" | (200) | 9" | (228.6) | 10½" | (266.7) | 15⅞" | (395.3) | 8⅞" | (217.5) | 2" | (50.8) | 850 | (3.81) | 1087 | (493.0) |

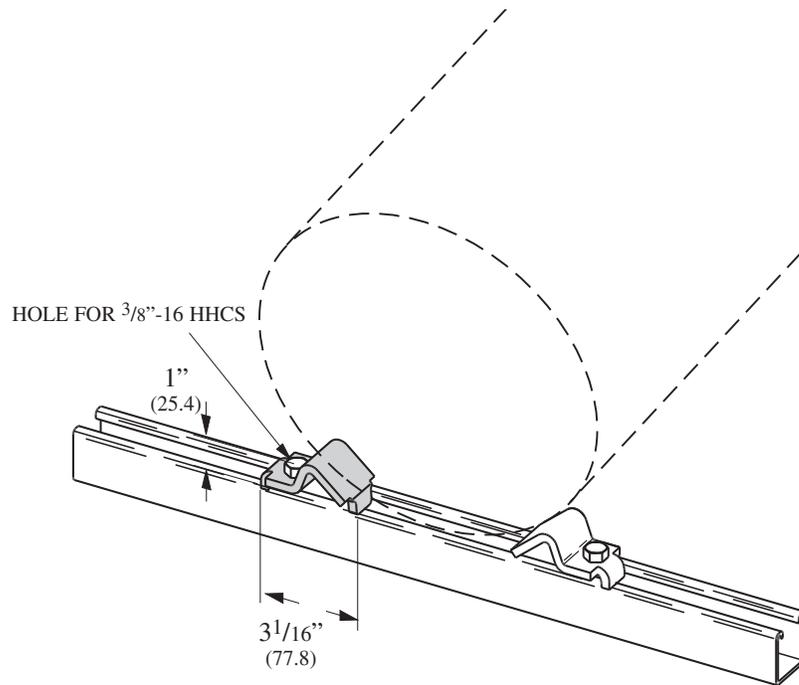
Reference page 110 for general fitting and standard finish specifications.

Pipe Block

B356

PIPE BLOCK-2" (50) TO 8" (200) PIPE

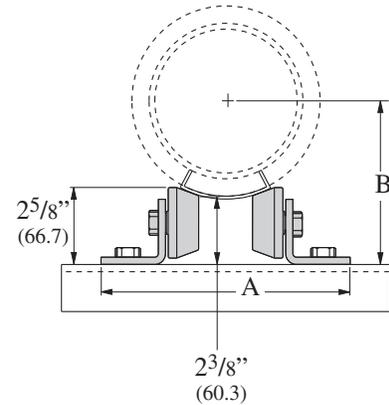
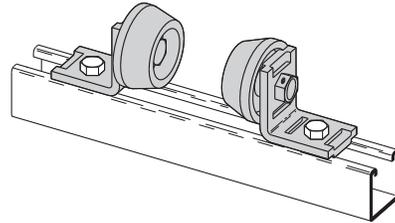
- Required hardware not included:
 - 1 pc. $\frac{3}{8}$ "-16 x 1" Hex Head Cap Screw
 - 1 pc. $\frac{3}{8}$ "-16 Channel Nut
- Material: $\frac{1}{4}$ " (6.3) thick $1\frac{5}{8}$ " (41.3) wide
- ASTM A1018 33,000 PSI min. yield
- Standard finish: ZN
- Wt./C 42 Lbs. (19.0 kg) Per Pair



B218

PIPE ROLLERS-1/2" (15) TO 8" (200) PIPE

- Design Load 500 Lbs. (2.22 kN)
- Safety Factor of 5
- When used with B3160 thru B3165 Saddles
(See Pipe Hanger Catalog)
- Malleable Iron Rollers
- Sold in pairs
- Required hardware not included:
2 pcs. 1/2"-13 x 1 1/4" Hex Head Cap Screws
2 pcs. 1/2"-13 Channel Nuts
- Standard finish: ZN
- Wt./C 256 Lbs. (116.1 kg) Per Pair



REFERENCE CHART - A DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-------------|----------------------|----------------|----------------|----------------|---------------|-------------|-------------|-------------|---------------|-------------|-------------|---|------------|---|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 1/2" (15) | 7 1/4" (184.1) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3/4" (20) | 7 1/4" (184.1) | 7 1/4" (184.1) | 7 5/8" (193.7) | 8" (203.2) | - | - | - | - | - | - | - | - | - | - |
| 1" (25) | 7 1/4" (184.1) | 7 1/4" (184.1) | 7 5/8" (193.7) | 8 1/4" (209.5) | - | - | - | - | - | - | - | - | - | - |
| 1 1/4" (32) | 7 1/4" (184.1) | 7 1/4" (184.1) | 8" (203.2) | 8 1/4" (209.5) | - | - | - | - | - | - | - | - | - | - |
| 1 1/2" (40) | 7 1/4" (184.1) | 7 5/8" (193.7) | 8" (203.2) | 8 1/2" (215.9) | 9" (228.6) | - | - | - | - | - | - | - | - | - |
| 2" (50) | 7 1/4" (184.1) | 7 5/8" (193.7) | 8 1/2" (215.9) | 8 1/2" (215.9) | 9" (228.6) | - | - | - | - | - | - | - | - | - |
| 2 1/2" (65) | 7 1/4" (184.1) | 8" (203.2) | 8 1/2" (215.9) | 9" (228.6) | 10" (254.0) | - | - | - | - | - | - | - | - | - |
| 3" (80) | 7 1/4" (184.1) | 8 1/2" (215.9) | 9" (228.6) | 9" (228.6) | 10" (254.0) | 10" (254.0) | - | - | - | - | - | - | - | - |
| 3 1/2" (90) | 7 1/4" (184.1) | 8 1/2" (215.9) | 9" (228.6) | 10" (254.0) | 10" (254.0) | 10" (254.0) | 10" (254.0) | - | - | - | - | - | - | - |
| 4" (100) | 7 5/8" (193.7) | 9" (228.6) | 9" (228.6) | 10" (254.0) | 10" (254.0) | 10" (254.0) | 10" (254.0) | 11" (279.4) | - | - | - | - | - | - |
| 5" (125) | 8 1/2" (215.9) | 9" (228.6) | 10" (254.0) | 10" (254.0) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 12" (304.8) | - | - | - |
| 6" (150) | 9" (228.6) | 10" (254.0) | 10" (254.0) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 12" (304.8) | - | - | - |
| 8" (200) | 10" (254.0) | 11" (279.4) | 11" (279.4) | 11" (279.4) | 12" (304.8) | - | - | - | - | - | - | - | - | - |

REFERENCE CHART - B DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-------------|----------------------|------------------|------------------|-----------------|------------------|----------------|------------------|---|---------------|---|-----------|---|------------|---|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 1/2" (15) | 2 1/16" (68.3) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3/4" (20) | 2 13/16" (71.4) | 3 7/8" (98.4) | 4 3/8" (111.1) | 4 7/8" (123.8) | - | - | - | - | - | - | - | - | - | - |
| 1" (25) | 2 15/16" (74.6) | 4 3/16" (106.4) | 4 11/16" (119.1) | 5 1/16" (128.6) | - | - | - | - | - | - | - | - | - | - |
| 1 1/4" (32) | 3 1/8" (79.4) | 4 3/16" (106.4) | 4 5/8" (117.5) | 5 1/8" (130.2) | - | - | - | - | - | - | - | - | - | - |
| 1 1/2" (40) | 3 1/4" (82.5) | 4 3/8" (111.1) | 4 7/8" (123.8) | 5 5/16" (134.9) | 5 3/4" (146.0) | - | - | - | - | - | - | - | - | - |
| 2" (50) | 3 9/16" (90.5) | 4 11/16" (119.1) | 5 1/16" (128.6) | 5 5/8" (142.9) | 6 1/16" (154.0) | - | - | - | - | - | - | - | - | - |
| 2 1/2" (65) | 3 13/16" (96.8) | 4 7/8" (123.8) | 5 5/16" (134.9) | 6" (152.4) | 6 3/8" (161.9) | - | - | - | - | - | - | - | - | - |
| 3" (80) | 4 1/8" (104.8) | 5 1/16" (128.6) | 5 9/16" (141.3) | 6 1/8" (155.6) | 6 7/16" (163.5) | 7" (177.8) | - | - | - | - | - | - | - | - |
| 3 1/2" (90) | 4 3/8" (111.1) | 5 5/16" (134.9) | 5 13/16" (147.6) | 6 1/4" (158.7) | 6 11/16" (169.9) | 7 1/4" (184.1) | - | - | - | - | - | - | - | - |
| 4" (100) | 4 5/8" (117.5) | 5 9/16" (141.3) | 6 1/16" (154.0) | 6 7/16" (163.5) | 6 15/16" (176.2) | 7 3/8" (187.3) | - | - | - | - | - | - | - | - |
| 5" (125) | 5" (127.0) | 6 1/16" (154.0) | 6 7/16" (163.5) | 7" (177.8) | 7 3/8" (187.3) | 7 7/8" (200.0) | 8 13/16" (223.8) | - | - | - | - | - | - | - |
| 6" (150) | 5 1/2" (139.7) | 6 7/16" (163.5) | 6 15/16" (176.2) | 7 3/8" (187.3) | 7 15/16" (201.6) | 8 1/2" (215.9) | 9 1/2" (241.3) | - | - | - | - | - | - | - |
| 8" (200) | 6 15/16" (160.3) | 7 3/8" (187.3) | 7 15/16" (201.6) | 8 7/16" (214.3) | 8 15/16" (227.0) | - | - | - | - | - | - | - | - | - |

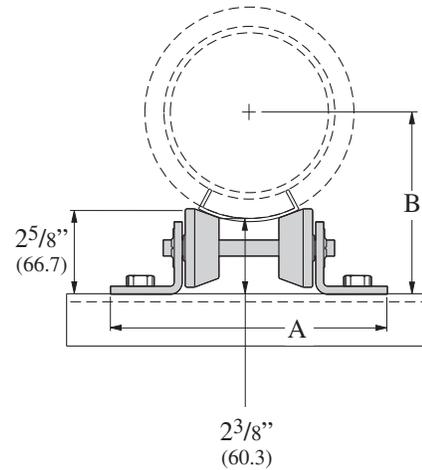
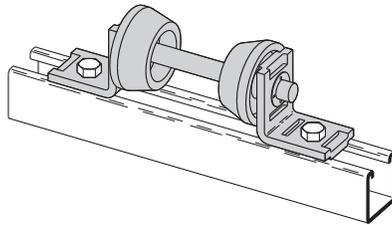
Reference page 110 for general fitting and standard finish specifications.

Pipe Rollers

B219

PIPE ROLLER SERIES - 3/4" (20) TO 12" (300) PIPE

- Design Load 750 Lbs. (3.33 kN)
- Safety Factor of 5
- Requires field assembly
- When used with B3160 thru B3165 Saddles
(See Pipe Hanger Catalog)
- Malleable Iron Rollers
- Sold in pairs
- Required hardware not included:
2 pcs. 1/2"-13 x 1 1/4" Hex Head Cap Screws
2 pcs. 1/2"-13 Channel Nuts
- Reference sizing chart on page 133
- Standard finish: ZN



REFERENCE CHART - A DIMENSION

| Part No. | A | | Wt./C PR | |
|----------|---------|---------|----------|---------|
| | Lbs. | kg | Lbs. | kg |
| B219 | 7 1/4" | (184.1) | 253 | (114.7) |
| B219-1 | 8" | (203.2) | 258 | (117.0) |
| B219-2 | 9" | (228.6) | 263 | (119.3) |
| B219-3 | 10" | (254.0) | 269 | (122.0) |
| B219-4 | 10 7/8" | (276.2) | 274 | (124.8) |
| B219-5 | 11 5/8" | (295.3) | 279 | (126.5) |

REFERENCE CHART - B DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-------------|----------------------|---------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|-----------|---------|------------|---------|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 1/2" (15) | 2 11/16" | (68.3) | - | - | - | - | - | - | - | - | - | - | - | - |
| 3/4" (20) | 2 13/16" | (71.4) | 3 7/8" | (98.4) | 4 1/2" | (114.3) | 4 7/8" | (123.8) | - | - | - | - | - | - |
| 1" (25) | 2 15/16" | (74.6) | 4 3/16" | (106.4) | 4 5/8" | (117.5) | 5 1/16" | (128.6) | - | - | - | - | - | - |
| 1 1/4" (32) | 3 1/8" | (79.4) | 4 3/16" | (106.4) | 4 5/8" | (117.5) | 5 1/8" | (130.2) | - | - | - | - | - | - |
| 1 1/2" (40) | 3 1/4" | (82.5) | 4 7/16" | (112.7) | 4 7/8" | (123.8) | 5 1/4" | (133.3) | 5 3/4" | (146.0) | - | - | - | - |
| 2" (50) | 3 9/16" | (90.5) | 4 5/8" | (117.5) | 5 3/16" | (131.8) | 5 1/2" | (139.7) | 6 1/16" | (154.0) | - | - | - | - |
| 2 1/2" (65) | 3 3/4" | (95.2) | 4 7/8" | (123.8) | 5 1/4" | (133.3) | 6" | (152.4) | 6 3/8" | (161.9) | - | - | - | - |
| 3" (80) | 4 1/8" | (104.8) | 5 1/8" | (130.2) | 5 9/16" | (141.3) | 6 1/16" | (154.0) | 6 7/16" | (163.5) | 6 15/16" | (176.2) | - | - |
| 3 1/2" (90) | 4 1/4" | (107.9) | 5 1/4" | (133.3) | 5 13/16" | (147.6) | 6 1/4" | (158.7) | 6 11/16" | (169.9) | 7 1/16" | (179.4) | - | - |
| 4" (100) | 4 9/16" | (115.9) | 5 1/2" | (139.7) | 6 1/16" | (154.0) | 6 7/16" | (163.5) | 6 15/16" | (176.2) | 7 3/8" | (187.3) | - | - |
| 5" (125) | 5 1/16" | (128.6) | 6 1/16" | (154.0) | 6 7/16" | (163.5) | 7" | (177.8) | 7 3/8" | (187.3) | 7 7/8" | (200.0) | 8 15/16" | (227.0) |
| 6" (150) | 5 7/16" | (138.1) | 6 7/16" | (163.5) | 6 15/16" | (176.2) | 7 3/8" | (187.3) | 7 7/8" | (200.0) | 8 15/16" | (211.1) | 9 9/16" | (242.9) |
| 8" (200) | 6 3/8" | (161.9) | 7 7/16" | (188.9) | 7 15/16" | (201.6) | 8 3/8" | (212.7) | 9" | (228.6) | - | - | - | - |
| 10" (250) | 7 5/16" | (185.7) | 8 3/16" | (208.0) | - | - | - | - | - | - | - | - | - | - |
| 12" (300) | 8 1/4" | (209.5) | - | - | - | - | - | - | - | - | - | - | - | - |

Reference B219 sizing chart on page 133

Reference page 110 for general fitting and standard finish specifications.

B219 SIZING CHART

| Pipe Size | | Insulation Thickness | | | | | | |
|-----------|-------|----------------------|-----------|------------|-----------|------------|-----------|------------|
| | | 0" (0.0) | 1" (25.4) | 1½" (38.1) | 2" (50.8) | 2½" (63.5) | 3" (76.2) | 4" (101.6) |
| ½" | (15) | B219 | – | – | – | – | – | – |
| ¾" | (20) | B219 | B219 | B219 | B219-1 | – | – | – |
| 1" | (25) | B219 | B219 | B219-1 | B219-1 | – | – | – |
| 1¼" | (32) | B219 | B219 | B219-1 | B219-1 | – | – | – |
| 1½" | (40) | B219 | B219 | B219-1 | B219-2 | B219-2 | – | – |
| 2" | (50) | B219 | B219-1 | B219-1 | B219-2 | B219-2 | – | – |
| 2½" | (65) | B219 | B219-1 | B219-2 | B219-2 | B219-3 | – | – |
| 3" | (80) | B219 | B219-1 | B219-2 | B219-2 | B219-3 | B219-3 | – |
| 3½" | (90) | B219-1 | B219-2 | B219-2 | B219-3 | B219-3 | B219-4 | – |
| 4" | (100) | B219-1 | B219-2 | B219-2 | B219-3 | B219-3 | B219-4 | – |
| 5" | (125) | B219-1 | B219-2 | B219-3 | B219-3 | B219-4 | B219-4 | B219-5 |
| 6" | (150) | B219-2 | B219-3 | B219-3 | B219-4 | B219-4 | B219-5 | B219-5 |
| 8" | (200) | B219-3 | B219-4 | B219-4 | B219-5 | B219-5 | – | – |
| 10" | (250) | B219-4 | B219-5 | – | – | – | – | – |
| 12" | (300) | B219-5 | – | – | – | – | – | – |

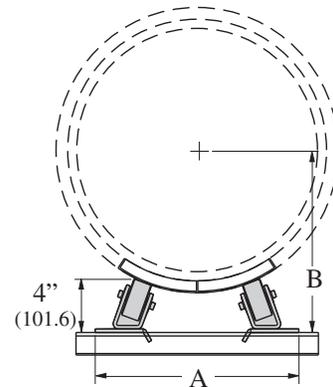
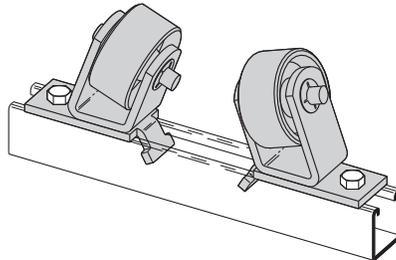
Reference page 110 for general fitting and standard finish specifications.

Pipe Rollers

B379

PIPE ROLLERS-6" (150) TO 18" (450) PIPE

- Design Load 1500 Lbs. (6.67 kN)
- Safety Factor of 5
- Requires field assembly
- When used with B3160 thru B3165 Saddles
(See Pipe Hanger Catalog)
- Malleable Iron Rollers
- Sold in pairs
- Required hardware not included:
2 pcs. 1/2"-13 x 1 1/4" Hex Head Cap Screws
2 pcs. 1/2"-13 Channel Nuts
- Standard finish: ZN
- Wt./C 889 Lbs. (403.2 kg)



REFERENCE CHART - A DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-----------|----------------------|---------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|-----------|---------|------------|---------|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 6" (150) | 9 9/16" | (242.9) | 10 3/16" | (258.8) | 10 5/8" | (269.9) | 11" | (279.4) | 11 3/8" | (288.9) | 11 3/4" | (298.4) | 12 1/2" | (317.5) |
| 8" (200) | 10 1/4" | (260.3) | 11 1/16" | (281.0) | 11 3/8" | (288.9) | 11 3/4" | (298.4) | 12 3/16" | (309.6) | 12 1/2" | (317.5) | 13 1/4" | (336.5) |
| 10" (250) | 11" | (279.4) | 11 3/4" | (298.4) | 12 1/8" | (308.0) | 12 1/2" | (317.5) | 12 13/16" | (325.4) | 13 1/8" | (333.4) | 13 7/8" | (352.4) |
| 12" (300) | 11 11/16" | (296.9) | 12 9/16" | (319.1) | 12 7/8" | (327.0) | 13 1/4" | (336.5) | 13 9/16" | (344.5) | 13 7/8" | (352.4) | 14 5/8" | (371.5) |
| 14" (350) | 12 1/16" | (306.4) | 12 7/8" | (327.0) | 13 3/16" | (335.0) | 13 9/16" | (344.5) | 13 7/8" | (352.4) | 14 1/4" | (361.9) | 14 7/8" | (377.8) |
| 16" (400) | 12 3/4" | (323.8) | 13 1/2" | (342.9) | 13 7/8" | (352.4) | 14 13/16" | (360.4) | 14 1/2" | (368.3) | 14 7/8" | (377.8) | 15 1/2" | (393.7) |
| 18" (450) | 13 1/2" | (342.9) | 14 1/4" | (361.9) | 14 5/8" | (371.5) | 15" | (381.0) | 15 5/16" | (388.9) | 15 5/8" | (396.9) | 16 5/16" | (414.3) |

REFERENCE CHART - B DIMENSION

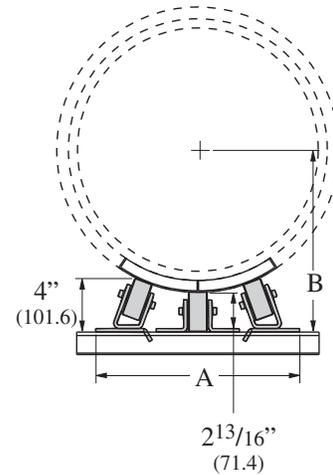
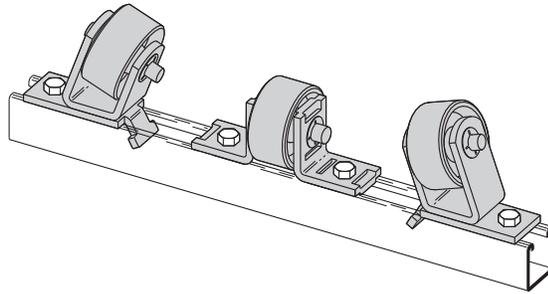
| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-----------|----------------------|---------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|-----------|---------|------------|---------|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 6" (150) | 6 7/8" | (174.6) | 7 7/8" | (200.0) | 8 3/8" | (212.7) | 8 7/8" | (225.4) | 9 3/8" | (238.1) | 9 7/8" | (250.8) | 10 15/16" | (277.8) |
| 8" (200) | 7 13/16" | (198.4) | 8 7/8" | (225.4) | 9 3/8" | (238.1) | 9 7/8" | (250.8) | 10 7/16" | (265.1) | 10 15/16" | (277.8) | 11 7/8" | (301.6) |
| 10" (250) | 8 13/16" | (223.8) | 9 7/8" | (250.8) | 10 7/16" | (265.1) | 10 15/16" | (277.8) | 11 3/8" | (288.9) | 11 7/8" | (301.6) | 12 13/16" | (325.4) |
| 12" (300) | 9 3/4" | (247.6) | 10 15/16" | (277.8) | 11 3/8" | (288.9) | 11 7/8" | (301.6) | 12 5/16" | (312.7) | 12 13/16" | (325.4) | 13 3/4" | (349.2) |
| 14" (350) | 10 5/16" | (261.9) | 11 3/8" | (288.9) | 11 7/8" | (301.6) | 12 5/16" | (312.7) | 12 13/16" | (325.4) | 13 1/4" | (336.5) | 14 1/4" | (361.9) |
| 16" (400) | 11 5/16" | (287.3) | 12 5/16" | (312.7) | 12 13/16" | (325.4) | 13 1/4" | (336.5) | 13 3/4" | (349.2) | 14 1/4" | (361.9) | 15 1/8" | (384.2) |
| 18" (450) | 12 1/4" | (311.1) | 13 1/4" | (336.5) | 13 3/4" | (349.2) | 14 3/16" | (360.4) | 14 11/16" | (373.1) | 15 1/8" | (384.2) | 16 1/16" | (408.0) |

Reference page 110 for general fitting and standard finish specifications.

B479

PIPE ROLLERS-16" (400) TO 30" (750) PIPE

- Design Load 2000 Lbs. (8.89 kN)
- Safety Factor of 5
- Requires field assembly
- When used with B3160 thru B3165 Saddles
(See Pipe Hanger Catalog)
- Malleable Iron Rollers
- Sold in pieces
- Required hardware not included:
4 pcs. 1/2"-13 x 1 1/4" Hex Head Cap Screws
4 pcs. 1/2"-13 Channel Nuts
- Standard finish: ZN
- Wt./C 889 Lbs. (403.2 kg)



Pipe/Conduit Clamps & Hangers

REFERENCE CHART - A DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-----------|----------------------|---------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|-----------|---------|------------|---------|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 16" (400) | 15 3/16" | (385.8) | 15 5/8" | (396.9) | 15 7/8" | (403.2) | 16" | (406.4) | 16 1/4" | (412.7) | 16 1/2" | (419.1) | 17" | (431.8) |
| 18" (450) | 15 1/2" | (393.7) | 16" | (406.4) | 16 3/16" | (411.2) | 16 3/8" | (415.9) | 16 9/16" | (420.7) | 16 3/4" | (425.4) | 17 3/16" | (436.6) |
| 20" (500) | 16" | (406.4) | 16 3/8" | (415.9) | 16 9/16" | (420.7) | 16 7/8" | (428.6) | 16 15/16" | (430.2) | 17 3/16" | (436.6) | 17 1/2" | (444.5) |
| 24" (600) | 16 13/16" | (427.0) | 17 5/16" | (439.7) | 17 1/2" | (444.5) | 17 1/2" | (444.5) | 17 11/16" | (449.3) | 17 7/8" | (454.0) | 18 1/8" | (460.4) |
| 30" (750) | 17 13/16" | (452.4) | 18 1/4" | (463.5) | 18 3/8" | (466.7) | 18 9/16" | (471.5) | 18 7/8" | (476.2) | 18 7/8" | (479.4) | 19 1/4" | (488.9) |

REFERENCE CHART - B DIMENSION

| Pipe Size | Insulation Thickness | | | | | | | | | | | | | |
|-----------|----------------------|---------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|-----------|---------|------------|---------|
| | 0" (0.0) | | 1" (25.4) | | 1 1/2" (38.1) | | 2" (50.8) | | 2 1/2" (63.5) | | 3" (76.2) | | 4" (101.6) | |
| 16" (400) | 10 13/16" | (274.6) | 11 15/16" | (303.2) | 12 3/8" | (314.3) | 12 15/16" | (328.6) | 13 3/8" | (339.7) | 13 15/16" | (354.0) | 14 15/16" | (379.4) |
| 18" (450) | 11 7/8" | (301.6) | 12 15/16" | (328.6) | 13 7/16" | (341.3) | 13 15/16" | (354.0) | 14 7/16" | (366.7) | 14 15/16" | (379.4) | 15 15/16" | (404.8) |
| 20" (500) | 12 3/16" | (325.4) | 13 15/16" | (354.0) | 14 7/16" | (366.7) | 14 7/8" | (377.8) | 15 7/16" | (392.1) | 15 7/8" | (403.2) | 16 15/16" | (430.2) |
| 24" (600) | 14 13/16" | (376.2) | 15 7/8" | (403.2) | 16 3/8" | (415.9) | 16 7/8" | (428.6) | 17 3/8" | (441.3) | 17 7/8" | (454.0) | 18 7/8" | (479.4) |
| 30" (750) | 17 13/16" | (452.4) | 18 7/8" | (479.4) | 19 3/8" | (492.1) | 19 7/8" | (504.8) | 20 3/8" | (517.5) | 20 5/16" | (531.8) | 21 15/16" | (557.2) |

Reference page 110 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports

Cooper B-Line's new line of Dura-Blok™ products gives you a versatile and long-term solution for all your roof top support needs. Designed with flexibility in mind, Dura-Bloks are ideal for such roof top support applications as pipe, HVAC, duct, conduit, cable tray, and roof walkways.

Manufactured to provide years of service in harsh, roof top environments, Dura-Bloks are made from 100% recycled rubber, require no supplemental rubber pads, and will not float or blow away. 1" gaps between blocks allow water to flow freely around longer assemblies. For added strength, the Dura-Blok support channel is through bolted on all sizes. For added visibility, a reflective strip is incorporated on both sides of each Dura-Blok.

Beyond product durability, Dura-Bloks help to dampen vibration, are not sharp or abrasive and require no roof penetration to maximize existing roof life - and roof structural and environmental integrity.

Recommended Torque (In channels)

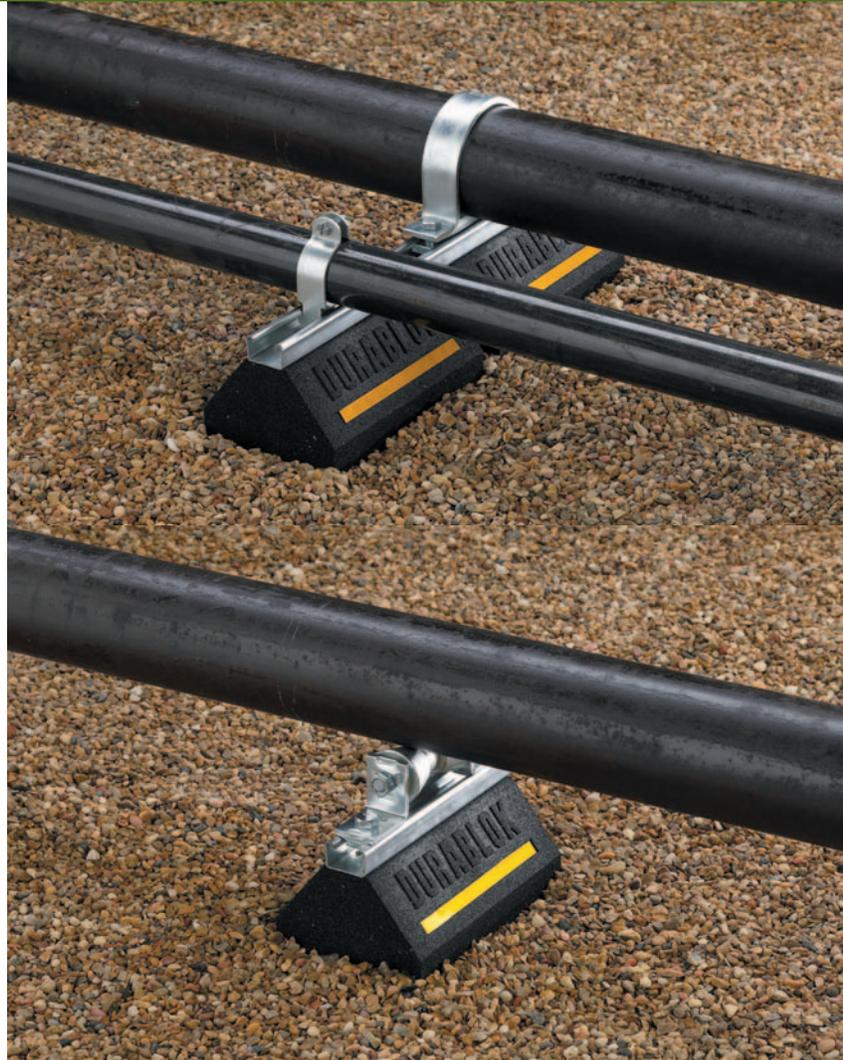
See page 44 Channel Nuts & Hardware section

Materials & Finishes

See appropriate fitting's pages

Metric

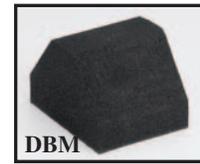
Metric dimensions are shown in parentheses.
Unless noted, all metric dimensions are in millimeters.





SUPPORT BASES ONLY

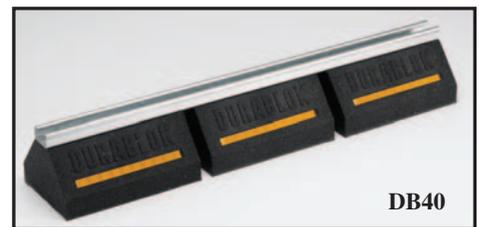
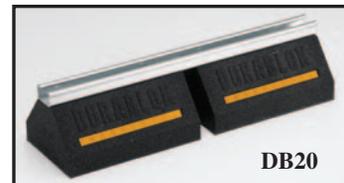
- Base only - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating** 500 lbs. (2.22KN) (Uniform Load)*
- Dura-Blok™ channel support is designed as an economical support for piping systems, cable tray, HVAC equipment and many other applications. The Dura-Blok is UV resistant and suitable for any type of roofing material or other flat surfaces. Material effectively accepts screw fasteners for securing accessories.



| Part No. | Height x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | |
|----------|-------------------------------------|-------------------------|-----------------------|--------|
| DBM | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 2.35 | (1.07) |
| DBP | 4" x 6" x 9.6" | (101.6 x 152.4 x 243.8) | 4.48 | (2.03) |

DB SERIES SUPPORT BASE WITH B44 CHANNEL

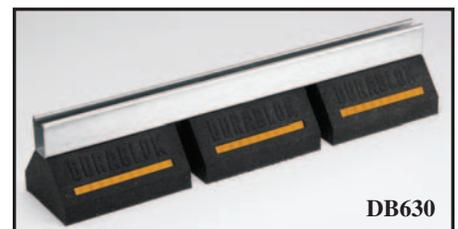
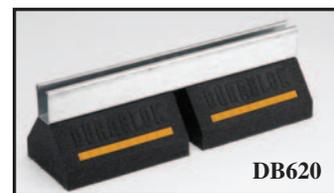
- Base with 14 ga. (1.9mm) galvanized channel 1" high (25.4mm) - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating - Ultimate Uniform Load (See Chart Below)*
- Dura-Blok™ DB-Series channel support is designed for superior support of piping systems, cable tray, HVAC equipment, walkway systems and many other applications. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces. (For pipe straps/clamps, rollers and roller supports that can be used with these Dura-Blok supports, see page 142)
- For sloped roofs use B634 adjustable hinge fittings (see Strut Systems catalog).



| Part No. | Height x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | | Load Rating Lbs. (kN) | |
|----------|-------------------------------------|--------------------------|-----------------------|---------|--------------------------|---------|
| DB5 | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 2.75 | (125) | 500 | (2.22) |
| DB10 | 5" x 6" x 9.6" | (127.0 x 152.4 x 243.8) | 5.28 | (2.39) | 500 | (2.22) |
| DB20 | 5" x 6" x 20.2" | (127.0 x 152.4 x 513.1) | 10.63 | (4.82) | 1000 | (4.45) |
| DB30 | 5" x 6" x 30.8" | (127.0 x 152.4 x 782.3) | 15.99 | (7.25) | 1500 | (6.67) |
| DB40 | 5" x 6" x 41.4" | (127.0 x 152.4 x 1051.5) | 21.34 | (9.68) | 2000 | (8.89) |
| DB48 | 5" x 6" x 52.0" | (127.0 x 152.4 x 1320.8) | 26.70 | (12.40) | 2500 | (11.12) |

DB6 SERIES SUPPORT BASE WITH B12 CHANNEL

- Base with 12 ga. (2.6mm) galvanized channel 2⁷/₁₆" high (61.9mm) - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating - Ultimate Uniform Load (See Chart Below)*
- Dura-Blok™ DB-Series channel support is designed for superior support of piping systems, cable tray, HVAC equipment, walkway systems and many other applications. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces. (For pipe straps/clamps, rollers and roller supports that can be used with these Dura-Blok supports, see page 142)
- For sloped roofs use B634 adjustable hinge fittings (see Strut Systems catalog).



| Part No. | Height x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | | Load Rating Lbs. (kN) | |
|----------|---|--------------------------|-----------------------|---------|--------------------------|---------|
| DB610 | 6 ⁷ / ₁₆ " x 6" x 9.6" | (163.5 x 152.4 x 243.8) | 6.36 | (2.88) | 500 | (2.22) |
| DB620 | 6 ⁷ / ₁₆ " x 6" x 20.2" | (163.5 x 152.4 x 513.1) | 12.90 | (5.85) | 1000 | (4.45) |
| DB630 | 6 ⁷ / ₁₆ " x 6" x 30.8" | (163.5 x 152.4 x 782.3) | 19.45 | (8.82) | 1500 | (6.67) |
| DB640 | 6 ⁷ / ₁₆ " x 6" x 41.4" | (163.5 x 152.4 x 1051.5) | 26.00 | (11.79) | 2000 | (8.89) |
| DB648 | 6 ⁷ / ₁₆ " x 6" x 52.0" | (163.5 x 152.4 x 1320.8) | 32.55 | (14.76) | 2500 | (11.12) |

* **General Note:** Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

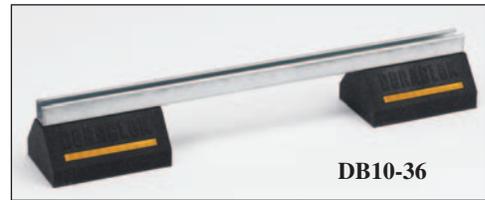
Reference page 136 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports



DB10 SERIES SUPPORT BASES WITH B22 CHANNEL

- Two (2) bases bridged with 12 ga. (2.6mm) galvanized channel 1⁵/₈" high (41.3mm) - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating: 1000 lbs. (4.45kN) (Uniform Load)*
- Dura-Blok™ DB10-Series channel support is designed for superior support of piping systems, cable tray, HVAC equipment, walkway systems and many other applications. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces. (For pipe straps/clamps, rollers and roller supports that can be used with these Dura-Blok supports, see page 142)



| Part No. | Height x Width x Length In. | (mm) | Wt./Each Lbs. (kg) | |
|----------------|--|--------------------------|-----------------------|--------|
| DB10-28 | 5 ⁵ / ₈ " x 6" x 28" | (142.9 x 152.4 x 711.2) | 13.16 | (5.97) |
| DB10-36 | 5 ⁵ / ₈ " x 6" x 36" | (142.9 x 152.4 x 914.4) | 14.36 | (6.51) |
| DB10-42 | 5 ⁵ / ₈ " x 6" x 42" | (142.9 x 152.4 x 1066.8) | 15.52 | (7.04) |
| DB10-50 | 5 ⁵ / ₈ " x 6" x 50" | (142.9 x 152.4 x 1270.0) | 16.45 | (7.46) |
| DB10-60 | 5 ⁵ / ₈ " x 6" x 60" | (142.9 x 152.4 x 1524.0) | 17.94 | (8.14) |

DBM SERIES SUPPORT BASE WITH RISER ROD & CLAMP

- Base with 3/8"-16 threaded rod and B3198H clamp - see chart for height, width and length
- 100% recycled rubber, UV resistant.
- Load Rating* 50 lbs. (0.22kN) (Ultimate Load)*
- Dura-Blok™ DBM-Series pipe/tubing support is designed for support of single piping systems where elevation adjustment is needed. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces.



| Part No. | Clamp Part No.† | Block -Height x Width x Length In. | (mm) | Height** Min.-Max. In. | (mm) | Wt./Each Lbs. (kg) | |
|-------------------|--------------------|---------------------------------------|-------------------------|---------------------------|----------------|-----------------------|--------|
| DBM-1/2CT | B3198HCT-1/2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 9.69"-11.19" | (246.1-284.2) | 2.75 | (1.25) |
| DBM-3/4CT | B3198HCT-3/4 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 9.84"-11.34" | (249.9-2288.0) | 2.76 | (1.25) |
| DBM-1CT | B3198HCT-1 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 9.95"-11.45" | (252.7-290.8) | 2.84 | (1.29) |
| DBM-11/4CT | B3198HCT-11/4 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.13"-11.63" | (257.3-295.4) | 2.95 | (1.34) |
| DBM-11/2CT | B3198HCT-11/2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.28"-11.78" | (261.1-299.2) | 2.96 | (1.34) |
| DBM-2CT | B3198HCT-2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.53"-12.03" | (267.4-305.5) | 3.03 | (1.37) |
| DBM-1/2 | B3198H-1/2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 9.86"-11.36" | (250.4-288.5) | 2.78 | (1.26) |
| DBM-3/4 | B3198H-3/4 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.06"-11.56" | (255.5-293.6) | 2.84 | (1.29) |
| DBM-1 | B3198H-1 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.14"-11.64" | (257.5-295.6) | 2.86 | (1.30) |
| DBM-11/4 | B3198H-11/4 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.25"-11.75" | (260.3-298.4) | 2.93 | (1.33) |
| DBM-11/2 | B3198H-11/2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.42"-11.92" | (264.6-302.7) | 2.99 | (1.36) |
| DBM-2 | B3198H-2 | 4" x 6" x 4.8" | (101.6 x 152.4 x 121.9) | 10.66"-12.16" | (270.7-308.8) | 3.10 | (1.41) |

† See Pipe Hanger Catalog for dimensions and specifications. ** From bottom of rubber block to center of pipe/tubing.

* **General Note:** Consult roofing manufacturer or engineer for roof load capacity.
The weakest point may be the insulation board beneath the rubber membrane.

Reference page 136 for general fitting and standard finish specifications.



DBE SERIES SUPPORT BASE WITH ROD RISERS & CHANNEL

- Base with (2) 1/2" electro zinc all threaded rod risers - Top channel is 1" (25.4mm) tall. see chart for adjustable height x wide x length.
- 100% recycled rubber, UV resistant.
- Load Rating** 200 lbs. (0.89kN) (To increase load capacity use load distribution plate CLDP10)
- Dura-Blok™ DBE-Series channel support is designed as a superior support of piping systems, cable tray, HVAC equipment and many other applications where elevation adjustment is critical. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces. (For pipe straps/clamps, rollers and roller supports that can be used with these Dura-Blok supports, see page 142)



| Part No. | Adjustable Height x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | |
|----------|--|-------------------------------|-----------------------|--------|
| DBE10-8 | 5 1/2-8" x 6" x 9.6" | (139.7-152.4 x 152.4 x 243.8) | 5.68 | (2.58) |
| DBE10-12 | 5 1/2-12" x 6" x 9.6" | (139.7-304.8 x 152.4 x 243.8) | 5.72 | (2.59) |
| DBE10-16 | 5 1/2-16" x 6" x 9.6" | (139.7-406.4 x 152.4 x 243.8) | 5.76 | (2.61) |

DBR SERIES SUPPORT BASE WITH ROD RISERS & PIPE ROLL

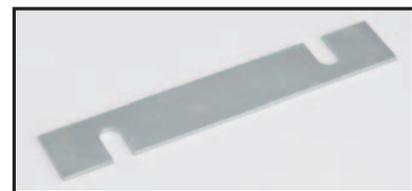
- Base with (2) 1/2" electro zinc all threaded rod risers and a B3114-3 1/2 pipe roll with sockets - base is 4" (101.6mm) high x 6" (152.4mm) wide x 9.6" (243.8mm) long. Overall height is 12" (304.8mm) from bottom of base to contact point on roller.
- Pipe roll & sockets for up to 3 1/2" (90) pipe sizes.
- 100% recycled rubber, UV resistant.
- Load Rating** 200 lbs. (0.89kN) (To increase load capacity use load distribution plate CLDP10)
- Dura-Blok™ DBR-Series support is designed to support pipe up to 3 1/2" (90) nominal size where difference in elevation is required and longitudinal movement is expected. The Dura-Blok is UV resistant and approved for installation on any type of roofing material or other flat surfaces.



| Part No. | Adjustable Height x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | |
|----------|--|-------------------------------|-----------------------|--------|
| DBR10-12 | up to 12" x 6" x 9.6" | (up to 304.8 x 152.4 x 243.8) | 8.20 | (3.72) |

CLDP10 LOAD DISTRIBUTION PLATE

- 11 ga. (3.0mm) steel plate with slots.
- Dimensions: 1 5/8" (41.3mm) wide x 9 1/2" (241.3mm) long.
- Dura-Blok™ CLDP10 load bearing stabilizer plate increases load ratings for DBE Series and DBR Series by allowing the load from the threaded rods to be distributed over the length of the base instead of the point load where the rods attach to the base.



| Part No. | Thickness x Width x Length In. (mm) | | Wt./Each Lbs. (kg) | |
|----------|--|----------------------|-----------------------|--------|
| CLDP10 | 11 Ga. x 1 5/8" x 9 1/2" | (3.0 x 41.3 x 241.3) | 0.53 | (0.24) |



Loosen hex nuts and slide plate under the flat washers

Retighten the hex nuts with plate in place



* **General Note:** Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

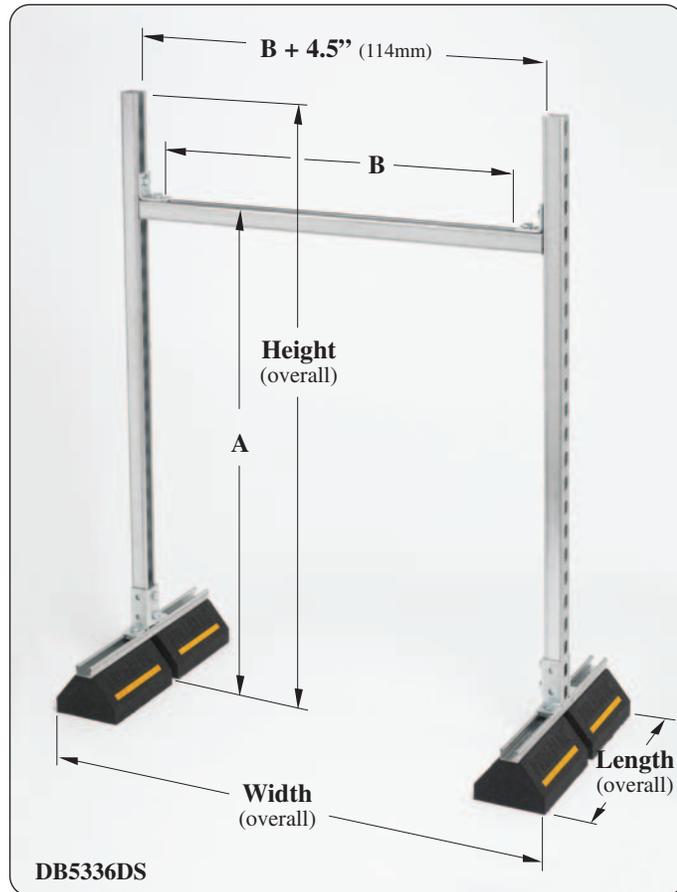
Reference page 136 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports



DB_DS SERIES SUPPORT BASES WITH B22SH VERTICAL & HORIZONTAL CHANNEL MEMBERS

- Product is shipped unassembled.



Features

- Two (2) DB20 bases with 14 ga. (1.9mm) galvanized channel 1" high (25.4mm) - Bases are 5" (127.0mm) high x 6" (152.4mm) wide x 20.2" (513.1mm) long.
- Vertical & Horizontal Riser Channels (SH Style) - 1⁵/₈" (41.3mm) x 1⁵/₈" (41.3mm) x 12 ga. (2.6mm) Fittings & Hardware - Electro-Plated Steel
- 100% recycled rubber, UV resistant.
- Ultimate Load Rating: 1000 lbs. (4.45kN) (Uniform Load)*
- Dura-Blok™ DB_DS-Series channel support with risers is designed for superior support of piping systems, cable tray, HVAC equipment, walkway systems and many other applications. The Dura-Blok is UV resistant and suitable for installation on any type of roofing material or other flat surfaces. (For pipe straps/clamps, rollers and roller supports that can be used with these Dura-Blok supports, see page 142)

* **General Note:** Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

Reference page 136 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports

DB_DS SERIES cont.

| Part No. | A Min. to Max. | | B | |
|----------|------------------|---------------|----------------------------------|--------|
| | In. | (mm) | In. | (mm) |
| DB2318DS | 10.56" to 20.75" | (268 to 527) | 13 ¹ / ₂ " | (343) |
| DB2918DS | 10.56" to 26.75" | (268 to 679) | 13 ¹ / ₂ " | (343) |
| DB4118DS | 10.56" to 38.75" | (268 to 984) | 13 ¹ / ₂ " | (343) |
| DB5318DS | 10.56" to 50.75" | (268 to 1289) | 13 ¹ / ₂ " | (343) |
| DB2324DS | 10.56" to 20.75" | (268 to 527) | 19 ¹ / ₂ " | (495) |
| DB2924DS | 10.56" to 26.75" | (268 to 679) | 19 ¹ / ₂ " | (495) |
| DB4124DS | 10.56" to 38.75" | (268 to 984) | 19 ¹ / ₂ " | (495) |
| DB5324DS | 10.56" to 50.75" | (268 to 1289) | 19 ¹ / ₂ " | (495) |
| DB2336DS | 10.56" to 20.75" | (268 to 527) | 31 ¹ / ₂ " | (800) |
| DB2936DS | 10.56" to 26.75" | (268 to 679) | 31 ¹ / ₂ " | (800) |
| DB4136DS | 10.56" to 38.75" | (268 to 984) | 31 ¹ / ₂ " | (800) |
| DB5336DS | 10.56" to 50.75" | (268 to 1289) | 31 ¹ / ₂ " | (800) |
| DB2348DS | 10.56" to 20.75" | (268 to 527) | 43 ¹ / ₂ " | (1105) |
| DB2948DS | 10.56" to 26.75" | (268 to 679) | 43 ¹ / ₂ " | (1105) |
| DB4148DS | 10.56" to 38.75" | (268 to 984) | 43 ¹ / ₂ " | (1105) |
| DB5348DS | 10.56" to 50.75" | (268 to 1289) | 43 ¹ / ₂ " | (1105) |

| Part No. | Height (overall) | | Width (overall) | | Length (overall) | | Wt./Each | |
|----------|------------------|--------|----------------------------------|--------|------------------|-------|----------|---------|
| | In. | (mm) | In. | (mm) | In. | (mm) | lbs. | (kg) |
| DB2318DS | 23" | (584) | 25 ⁵ / ₈ " | (651) | 20.2" | (513) | 33.31 | (15.11) |
| DB2918DS | 29" | (736) | 25 ⁵ / ₈ " | (651) | 20.2" | (513) | 35.00 | (15.88) |
| DB4118DS | 41" | (1041) | 25 ⁵ / ₈ " | (651) | 20.2" | (513) | 38.40 | (17.42) |
| DB5318DS | 53" | (1346) | 25 ⁵ / ₈ " | (651) | 20.2" | (513) | 41.80 | (18.96) |
| DB2324DS | 23" | (584) | 31 ⁵ / ₈ " | (803) | 20.2" | (513) | 34.15 | (15.49) |
| DB2924DS | 29" | (736) | 31 ⁵ / ₈ " | (803) | 20.2" | (513) | 35.84 | (16.26) |
| DB4124DS | 41" | (1041) | 31 ⁵ / ₈ " | (803) | 20.2" | (513) | 39.25 | (17.80) |
| DB5324DS | 53" | (1346) | 31 ⁵ / ₈ " | (803) | 20.2" | (513) | 42.65 | (19.34) |
| DB2336DS | 23" | (584) | 43 ⁵ / ₈ " | (1108) | 20.2" | (513) | 35.84 | (16.26) |
| DB2936DS | 29" | (736) | 43 ⁵ / ₈ " | (1108) | 20.2" | (513) | 37.56 | (17.03) |
| DB4136DS | 41" | (1041) | 43 ⁵ / ₈ " | (1108) | 20.2" | (513) | 40.95 | (18.57) |
| DB5336DS | 53" | (1346) | 43 ⁵ / ₈ " | (1108) | 20.2" | (513) | 44.34 | (20.11) |
| DB2348DS | 23" | (584) | 55 ⁵ / ₈ " | (1415) | 20.2" | (513) | 37.55 | (17.03) |
| DB2948DS | 29" | (736) | 55 ⁵ / ₈ " | (1415) | 20.2" | (513) | 39.25 | (17.80) |
| DB4148DS | 41" | (1041) | 55 ⁵ / ₈ " | (1415) | 20.2" | (513) | 42.65 | (19.34) |
| DB5348DS | 53" | (1346) | 55 ⁵ / ₈ " | (1415) | 20.2" | (513) | 46.03 | (20.88) |

A = Adjustable height from bottom of Dura-Blok to top of horizontal channel.

B = Space between fittings that support horizontal channel.

Height (overall) = Distance from bottom of Dura-Blok to top of upright channel.

Width (overall) = Distance from outside-to-outside of Dura-Blok supports.

Length (overall) = Distance from end-to-end of Dura-Blok supports.

Reference page 136 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports



DBR SERIES SUPPORT BASES WITH B42 CHANNEL & PIPE ROLLER

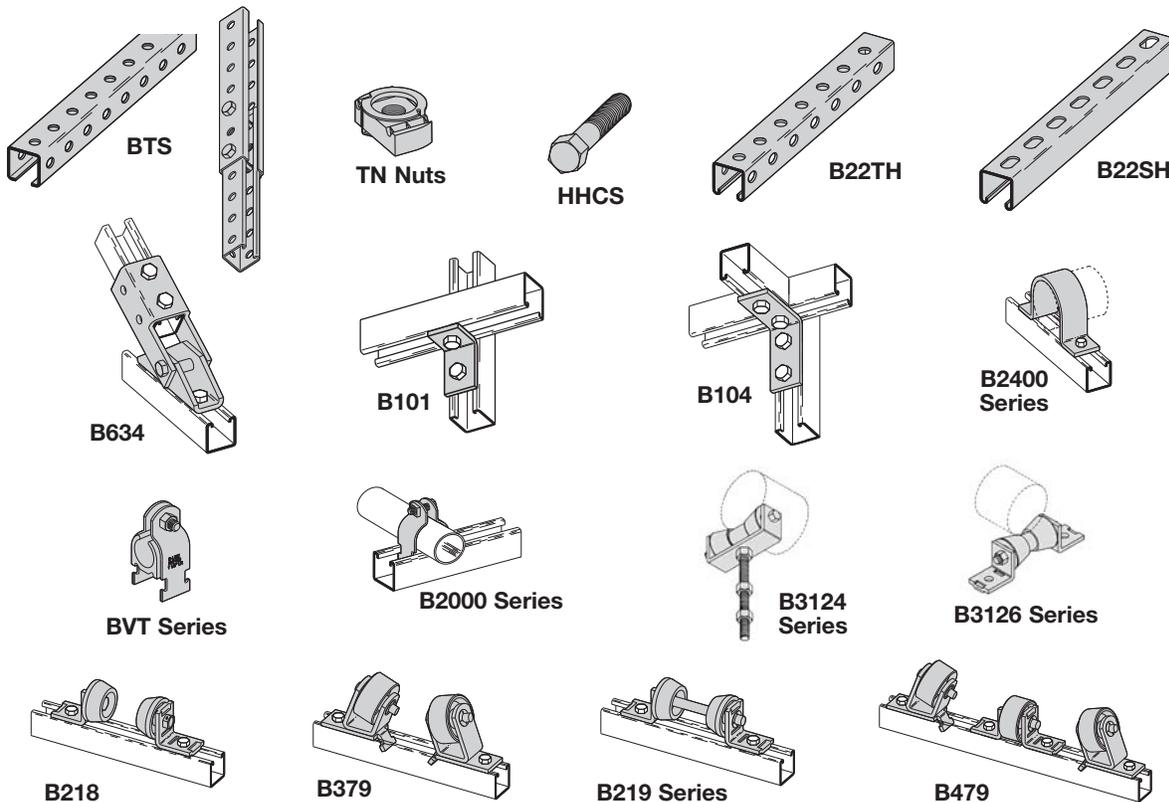
- Base with 14 ga. (1.9mm) galvanized channel 1" high (25.4mm) tall - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating: (See Chart Below)*
- Dura-Blok™ DBR-Series support is designed to support pipe where longitudinal movement is expected. The Dura-Blok is UV resistant and approved for installation on any type of roofing material or other flat surfaces.



| Part No. | Roller Part No.† | Block & Channel -Height x Width x Length In. | (mm) | Height** In. | (mm) | Wt./Each Lbs. | (kg) | Load Rating Lbs. | (kN) |
|--|--|--|-------------------------|--------------|-------|---------------|---------|------------------|--------|
| DBR2-3¹/₂ | B3126-2 to 3 ¹ / ₂ | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 7.09" | (180) | 5.28 | (2.39) | 500 | (2.22) |
| DBR4-6 | B3126-4 to 6 | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 7.09" | (180) | 10.63 | (4.82) | 500 | (2.22) |
| DBR8-10 | B3126-8-10 | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 8.34" | (212) | 15.99 | (7.25) | 1000 | (4.45) |
| DBR12-14 | B3126-12-14 | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 9.38" | (238) | 21.34 | (9.68) | 1000 | (4.45) |
| DBR16-20 | B3126-16-20 | 5" x 6" x 4.8" | (127.0 x 152.4 x 121.9) | 9.78" | (248) | 26.70 | (12.11) | 1000 | (4.45) |

† See Pipe Hanger Catalog for dimensions and specifications. ** From bottom of rubber block to bottom of pipe/tubing.

Compatible Components Available to make Dura-Blok bases more versatile (See Strut Systems Catalog for other products)



Above rollers can be mounted on C-Series and CB-Series units 19" (482mm) or longer.

Reference page 136 for general fitting and standard finish specifications.

Dura-Blok™ Rooftop Supports

ROOFTOP APPLICATIONS



Dura-Blok™ Supports

Dura Clean™ Washdown Support System

Cooper B-Line's new line of Dura-Clean™ electrical and mechanical support products are specifically designed for the critical and rigorous wash-down requirements of the Food & Beverage and Pharmaceutical industries.

Manufactured from high quality stainless steel with all angles minimized to prevent water pooling and collection, Dura-Clean™ strut and hanger components are designed with the durability and flexibility needed for applications where pipe, conduit and enclosures are subjected to regular, high pressure, high moisture wash-down environments.

Dura-Clean™ products can be installed in trapeze configurations for hanging piping, conduit or virtually any type of roof supported racking system - or wall-mount configurations for vertical or horizontal pipe support runs and enclosure support.

The new Dura-Clean™ Washdown Support System products from Cooper B-Line.

- Highest quality.
- Lasting durability.
- Immediate availability.

Recommended Torque

| Bolt Size | 3/8"-16 | 1/2"-13 |
|-----------|---------|---------|
| Foot/Lbs. | 19 | 50 |
| Nm | 26 | 68 |

Materials

| Finish Code | Finish | Specification |
|-------------|--------------------------|---------------|
| SS4 | Stainless Steel Type 304 | ASTM A240 |
| SS6 | Stainless Steel Type 316 | ASTM A240 |



Metric

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

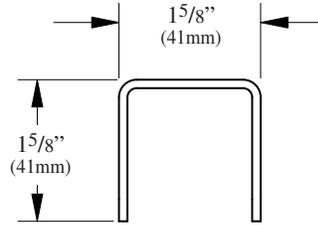


DURA CLEAN™ CHANNEL

- Thickness: 12 Gauge (2.6mm)
- Standard Lengths: 12" (.30m), 24" (.61m), 48" (1.22m), 120" (3.06m)
- Standard Finish: #4 Polished 304 Stainless Steel w/cellophane cover (other materials available upon request)
- Weight: 1.68 lbs/ft (2.50kg/m)
- 1⁵/₈" (41mm) x 1⁵/₈" (41mm) profile with 1³/₃₂" (10mm) x 3" (76mm) slot on 4" (101mm) centers
- Straight leg design does not harbor water or dust, eliminating areas known to harbor bacteria
- Profile allows product to be used with standard strut accessories

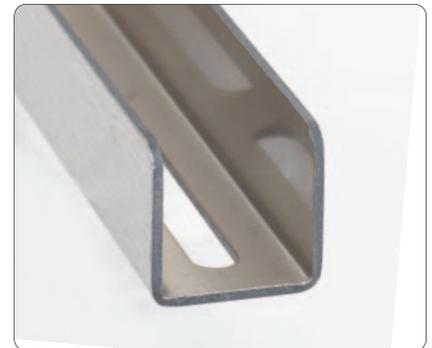


| Part No. | Length | |
|-----------|--------|--------|
| | In. | (mm) |
| DC22S-12 | 12" | (305) |
| DC22S-24 | 24" | (610) |
| DC22S-48 | 48" | (1219) |
| DC22S-120 | 120" | (3048) |



| Section Properties | | | | X - X Axis | | | | | | Y - Y Axis | | | | | | |
|--------------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|
| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (R) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (R) | |
| | lbs./ft. | kg/m | in. ² | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| DC22S | 1.68 | 0.7628 | 0.4829 | 3.1155 | 0.1328 | 5.5276 | 0.1283 | 2.1025 | 0.5244 | 1.332 | 0.2178 | 9.0655 | 0.2681 | 4.3934 | 0.6717 | 1.7061 |

| Channel | Beam Span | | Uniform Load | | Deflection | | Uniform Load @ Deflection = | | | |
|---------|-----------|------|--------------|-----|------------|------|-----------------------------|-----|------------|-----|
| | in. | mm | lbs. | N | in. | mm | 1/240 Span | | 1/360 Span | |
| | | | | | | | lbs. | N | lbs. | N |
| DC22S | 12 | 305 | 2500 | 562 | 0.0146 | 0.37 | 2500 | 562 | 2500 | 562 |
| DC22S | 18 | 457 | 1667 | 375 | 0.0329 | 0.83 | 1667 | 375 | 1667 | 375 |
| DC22S | 24 | 610 | 1250 | 281 | 0.0584 | 1.48 | 1250 | 281 | 1250 | 281 |
| DC22S | 30 | 762 | 1000 | 225 | 0.0913 | 2.32 | 1000 | 225 | 913 | 205 |
| DC22S | 36 | 914 | 833 | 187 | 0.1314 | 3.34 | 833 | 187 | 634 | 143 |
| DC22S | 42 | 1067 | 714 | 161 | 0.1788 | 4.54 | 699 | 157 | 466 | 105 |
| DC22S | 48 | 1219 | 625 | 141 | 0.2337 | 5.94 | 535 | 120 | 357 | 80 |
| DC22S | 54 | 1372 | 556 | 125 | 0.2960 | 7.52 | 423 | 95 | 282 | 63 |
| DC22S | 60 | 1524 | 500 | 112 | 0.3651 | 9.27 | 342 | 77 | 228 | 51 |



Dura Clean™

Reference page 144 for general fitting and standard finish specifications.

Dura Clean™ Wall Rails

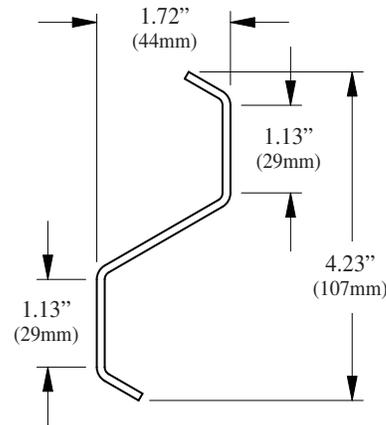


DURA CLEAN™ WALL MOUNT RAILS

- Thickness: 12 Gauge (2.6mm)
- Standard Lengths: 12" (.30m), 24" (.61m), 48" (1.22m), 120" (3.06m)
- Standard Finish: #4 Polished 304 Stainless Steel w/cellophane cover (other materials available upon request)
- Weight: 1.90 lbs/ft (2.83kg/m)
- Z-Profile with 1³/₃₂" (10mm) x 3" (76mm) slot on 4" (101mm) centers
- DCSP spacers are used to offset profile 1" (25.4mm) from mounting surface to eliminate any area that may harbor bacteria



| Part No. | Length | |
|-----------------|--------|--------|
| | In. | (mm) |
| DCWM-12 | 12" | (305) |
| DCWM-24 | 24" | (610) |
| DCWM-48 | 48" | (1219) |
| DCWM-120 | 120" | (3048) |



| Section Properties | | | | X - X Axis | | | | | | Y - Y Axis | | | | | | |
|--------------------|----------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|
| Channel | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (R) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (R) | |
| | lbs./ft. | kg/m | in. ² | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| DCWM | 1.8999 | 0.8618 | 0.5456 | 3.5200 | 0.7305 | 30.406 | 0.3564 | 5.8403 | 1.1571 | 2.939 | 0.2345 | 9.7606 | 0.2646 | 4.336 | 0.6556 | 1.6652 |

| Channel | Beam Span | | Uniform Load | | Deflection | |
|-------------|-----------|------|--------------|-----|------------|------|
| | in. | mm | lbs. | N | in. | mm |
| DCWM | 12 | 305 | 1350 | 303 | 0.0014 | 0.04 |
| DCWM | 18 | 457 | 900 | 202 | 0.0032 | 0.08 |
| DCWM | 24 | 610 | 675 | 152 | 0.0057 | 0.15 |
| DCWM | 30 | 762 | 540 | 121 | 0.0090 | 0.23 |
| DCWM | 36 | 914 | 450 | 101 | 0.0129 | 0.33 |
| DCWM | 42 | 1067 | 386 | 87 | 0.0176 | 0.45 |
| DCWM | 48 | 1219 | 338 | 76 | 0.0230 | 0.58 |
| DCWM | 54 | 1372 | 300 | 67 | 0.0290 | 0.74 |
| DCWM | 60 | 1524 | 270 | 61 | 0.0358 | 0.91 |

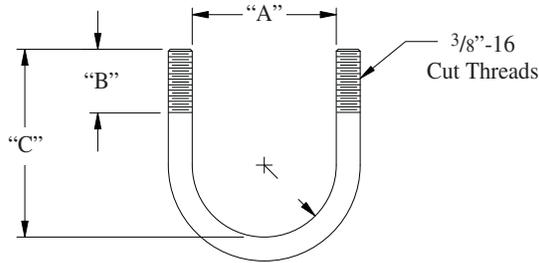


Reference page 144 for general fitting and standard finish specifications.



U-BOLTS

- Material: Stream cleaned 304 Stainless Steel
- Includes serrated flange hex nuts and flat washers
- Designed for use with rigid/emt conduit, OD tubing and copper, schedule 40/80 and Ocal pipe sizes



| Part Number | Pipe - Conduit - Tubing Sizes | | | | | | "A" | | "B" | | "C" | | Design Load | | Wt./C | |
|-------------|-------------------------------|-----------------|---------------|-------------|-------------|-----------|------|-------|------|------|------|-------|-------------|------|-------|------|
| | OD Tubing | Sch. 40/80 Pipe | Rigid Conduit | EMT Conduit | Copper Pipe | Ocal Pipe | in. | mm | in. | mm | in. | mm | lbs. | kN | lbs. | kg |
| DC-1 | 1/2", 3/4" | - | - | 1/2" | 1/2" | - | 0.81 | 20.6 | 0.88 | 22.2 | 1.50 | 38.1 | 600 | 2.67 | 27.0 | 12.2 |
| DC-2 | - | 1/2" | 1/2" | 3/4" | 3/4" | 1/2" | 0.98 | 25.0 | 0.88 | 22.2 | 1.67 | 42.5 | 600 | 2.67 | 28.4 | 12.9 |
| DC-3 | 1" | 3/4" | 3/4" | 1" | 1" | 3/4" | 1.23 | 31.1 | 1.00 | 25.4 | 1.91 | 48.6 | 600 | 2.67 | 30.4 | 13.8 |
| DC-4 | 1 1/4" | 1" | 1" | - | 1 1/4" | 1" | 1.46 | 37.0 | 1.00 | 25.4 | 2.15 | 54.5 | 900 | 4.00 | 32.3 | 14.6 |
| DC-5 | 1 1/2" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/2" | - | 1.72 | 43.7 | 1.00 | 25.4 | 2.41 | 61.2 | 900 | 4.00 | 33.3 | 15.1 |
| DC-6 | - | 1 1/2" | 1 1/2" | 1 1/2" | - | 1 1/4" | 1.96 | 49.8 | 1.00 | 25.4 | 2.65 | 67.3 | 900 | 4.00 | 36.4 | 16.5 |
| DC-7 | 2" | - | - | 2" | 2" | 1 1/2" | 2.26 | 57.4 | 1.00 | 25.4 | 2.95 | 74.9 | 1200 | 5.34 | 38.9 | 17.6 |
| DC-8 | 2 1/2" | 2" | 2" | - | 2 1/2" | 2" | 2.69 | 68.2 | 1.00 | 25.4 | 3.38 | 85.7 | 1200 | 5.34 | 42.4 | 19.2 |
| DC-9 | 3" | 2 1/2" | 2 1/2" | 2 1/2" | 3" | 2 1/2" | 3.19 | 80.9 | 1.00 | 25.4 | 3.88 | 98.4 | 1200 | 5.34 | 46.5 | 21.1 |
| DC-10 | 3 1/2" | 3" | 3" | 3" | 3 1/2" | 3" | 3.69 | 93.6 | 1.00 | 25.4 | 4.38 | 111.1 | 1800 | 8.00 | 53.0 | 24.0 |
| DC-11 | 4" | 3 1/2" | 3 1/2" | 3 1/2" | 4" | 3 1/2" | 4.25 | 108.0 | 1.00 | 25.4 | 4.88 | 123.8 | 1800 | 8.00 | 54.9 | 24.9 |
| DC-12 | - | 4" | 4" | 4" | - | 4" | 4.71 | 119.5 | 1.00 | 25.4 | 5.33 | 135.4 | 1800 | 8.00 | 58.6 | 26.6 |

HARDWARE

- Material: 316 Stainless Steel
- Flat washer for 3/8" threaded rod
- Serrated hex nut for 3/8"-16 threaded rod
- Weight/C: Flat Washers 1.7 Lbs. (0.77kg)
Serrated Hex Nuts 3.0 Lbs. (1.36kg)

| Part Number | Description |
|-------------|--------------------------|
| 3/8FWSS6 | 3/8" Flat Washer |
| SFHN3/8SS6 | 3/8"-16 Serrated Hex Nut |

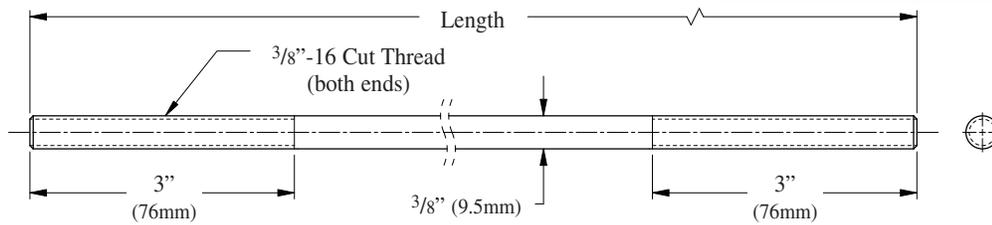


Reference page 144 for general fitting and standard finish specifications.



TREADED ROD

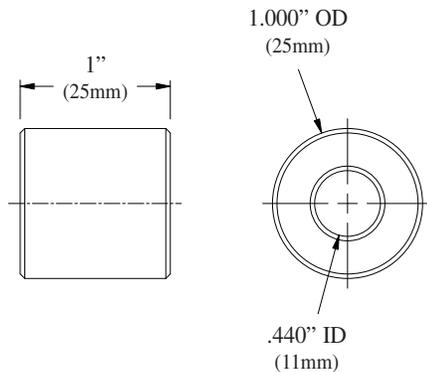
- Material: Steam cleaned 304 Stainless Steel
- Standard Lengths: 36" (.92m) & 72" (1.83m)
(other length available upon request)
- 3/8"-16 cut threads standard
- Cut threads allow the customer to cut rods to length and then field cut threads where required



| Channel | Length | | Threads Per Inch | Recommended Load | | Wt./100 pcs | |
|----------|--------|------|------------------|------------------|-----|-------------|-------|
| | in. | mm | | lbs. | N | lbs. | kg |
| DCR38-36 | 36" | 914 | 16 | 730 | 324 | 186.2 | 84.4 |
| DCR38-72 | 72" | 1829 | 16 | 730 | 324 | 372.4 | 168.9 |

SPACERS

- Material: 304 Stainless Steel
- Spacers are used to provide 1" (25mm) of separation from wall to channel, eliminating any area that may harbor bacteria.
- Weight/C: 16.9 Lbs. (7.6kg)



| Part Number | Description |
|-------------|------------------|
| DCSP SS4 | Stand-off Spacer |

Reference page 144 for general fitting and standard finish specifications.

Other Stainless Steel Products



B135
Flat Corner Plate



B102
3-Hole Corner Angle



B104
4-Hole Corner Angle



B154
2-Hole 45° Open Angle



B155
2-Hole 'U' Support



B107
5-Hole 45° Closed Angle



B172
4-Hole Splice Clevis



B280SQ
Post Base



B121
8-Hole Double Corner Connection



B123
12-Hole Triple Wing Connection

Consult Customer Service for other products that can be made in Stainless Steel material



Electrical Accessories

A complete system of top quality, time saving products, designed for surface metal raceways, lighting and cable supports. Innovative designs offer many installation advantages. B-Line's surface raceways are U.L. listed and meet the requirements of the National Electrical Code, Article 352.

Surface Raceways

B-Line's channel provides structural support in addition to a raceway system.

For U.L. wire fill see chart on page 218-219.

Cable Supports

A full range of clamps and saddles are offered in porcelain, thermoplastic elastomer and maple. B-Line's maple clamps, Insulclamp® cable clamps and porcelain saddles are furnished complete with steel clamps (electro-plated) and Everdur hardware where required.

Materials & Finishes*

Steel products are made from low carbon steel strips or plates. Porcelain saddles and clamps are made by dry process and white glazed (porcelain dielectric strength is 50 volts per mil). Maple clamps are made from kiln-dried maple wood, paraffin impregnated.

| Finish Code | Finish | Specification |
|-------------|----------------------|-------------------------------------|
| PLN | Plain | ASTM A1011 33,000 PSI min. yield |
| ZN | Electro-Plated Zinc | ASTM B633 SC3 Type III |
| GRN | Dura-Green | |
| GALV | Pre-Galvanized | ASTM B653 |
| YZN | Yellow Zinc Chromate | ASTM B633 SC3 Type II |

*Unless otherwise noted.

Design Load

Design load data published includes a Safety Factor of 3.0 (Safety Factor = Ratio of ultimate load to the design load).

U.L. listed raceway channels:

| | |
|-------------|-------------|
| B11, B11KO6 | B32, B32KO6 |
| B12, B12KO6 | B42, B42KO6 |
| B22, B22KO6 | B52, B52KO6 |
| B24, B24KO6 | B54, B54KO6 |
| B26, B26KO6 | B56, B56KO6 |

U.L. File No. E29637

In all cases, the snap-in closure strip is required to complete raceway enclosure.

Metric

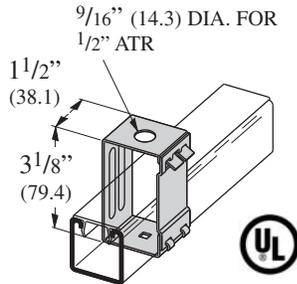
Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.



Fluorescent Fixture Hangers

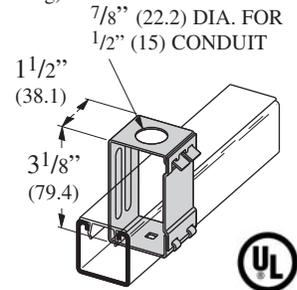
B616-9/16 CHANNEL HANGER

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Includes:
2 pcs. 3/8" Flat Washers for use with 3/8" ATR
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 25 Lbs. (11.3 kg)



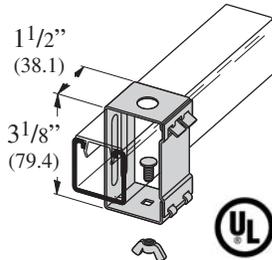
B616-7/8 CHANNEL HANGER

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 25 Lbs. (11.3 kg)



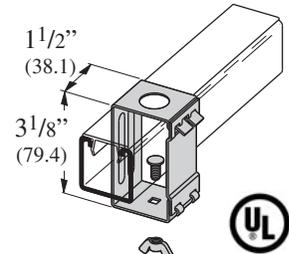
B616S-9/16 FLUORESCENT FIXTURE HANGER WITH STUD

- Design Load 150 Lbs. (.67 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Allows more than 1/2" (12.7) space between channel and fixture
- Includes:
2 pcs. 3/8" Flat Washers for use with 3/8" ATR
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



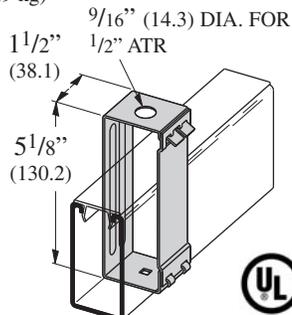
B616S-7/8 FLUORESCENT FIXTURE HANGER WITH STUD

- Design Load 150 Lbs. (.67 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Allows more than 1/2" (12.7) space between channel and fixture
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



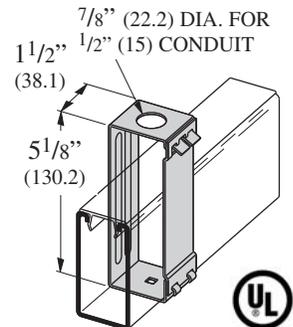
B616-22A-9/16 CHANNEL HANGER

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Includes:
2 pcs. 3/8" Flat Washers for use with 3/8" ATR
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 44 Lbs. (19.9 kg)



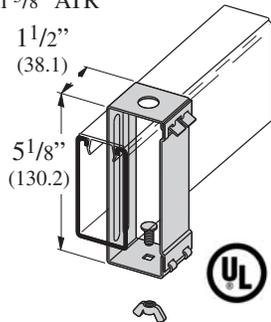
B616-22A-7/8 CHANNEL HANGER

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 44 Lbs. (19.9 kg)



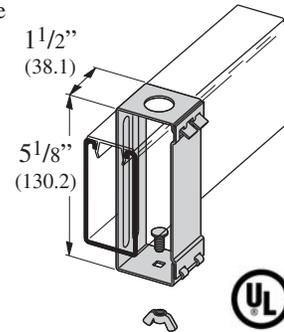
B616S-22A-9/16 FLUORESCENT FIXTURE HANGER WITH STUD

- Design Load 150 Lbs. (.67 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Includes:
2 pcs. 3/8" Flat Washers for use with 3/8" ATR
- Allows more than 1/2" (12.7) space between channel and fixture
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 49 Lbs. (22.2 kg)



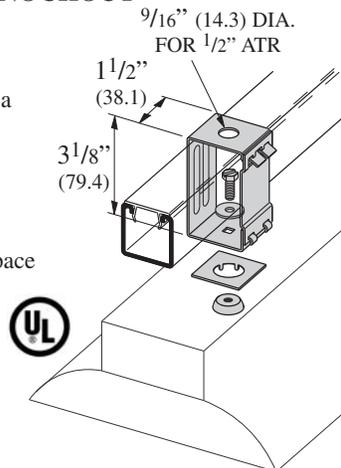
B616S-22A-7/8 FLUORESCENT FIXTURE HANGER WITH STUD

- Design Load 150 Lbs. (.67 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Allows more than 1/2" (12.7) space between channel and fixture
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 49 Lbs. (22.2 kg)



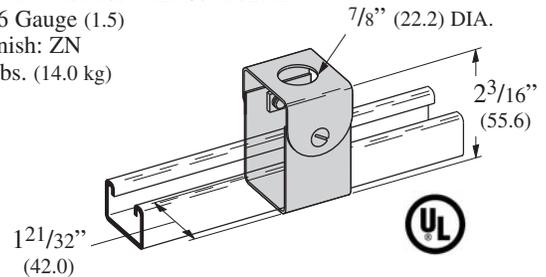
B616TG-9/16 FLUORESCENT FIXTURE HANGER FOR 1/2" (15) KNOCKOUT

- Design Load 150 Lbs. (.67 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Includes:
2 pcs. 3/8" Flat Washers for use with 3/8" ATR
- Design Load 150 Lbs. (.67 kN)
- Allows more than 1/2" (12.7) space between channel and fixture
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 32 Lbs. (14.5 kg)



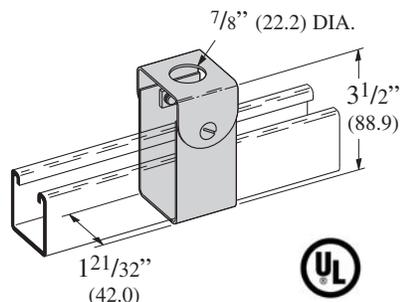
B215S CHANNEL HANGER

- Can be used with 3/8" & 1/2" threaded rod or 3/8" & 1/2" conduit
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- For use with B42, B52, B54 & B56 Channels
- Hardware included:
One (1) 3/8" x 1 1/2" FFW for use with 3/8"-16 ATR
One (1) 1/2" FW for use with 1/2"-13 ATR
One (1) 5/8" FW for use with 3/8" conduit
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 31 Lbs. (14.0 kg)



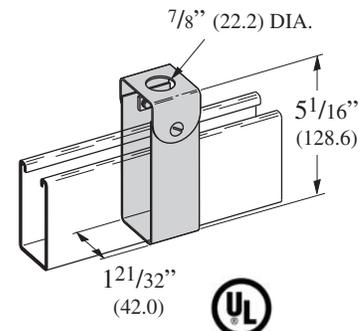
B216S CHANNEL HANGER

- Can be used with 3/8" & 1/2" threaded rod or 3/8" & 1/2" conduit
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- For use with B22, B24, B26 & B32 Channels
- Hardware included:
One (1) 3/8" x 1 1/2" FFW for use with 3/8"-16 ATR
One (1) 1/2" FW for use with 1/2"-13 ATR
One (1) 5/8" FW for use with 3/8" conduit
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 38 Lbs. (17.2 kg)



B241S CHANNEL HANGER

- Can be used with 3/8" & 1/2" threaded rod or 3/8" & 1/2" conduit
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- For use with B11 & B12 Channels.
- Hardware included:
One (1) 3/8" x 1 1/2" FFW for use with 3/8"-16 ATR
One (1) 1/2" FW for use with 1/2"-13 ATR
One (1) 5/8" FW for use with 3/8" conduit
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 47 Lbs. (21.3 kg)

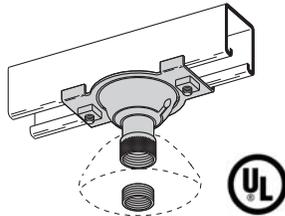


Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Fluorescent Fixture Hangers

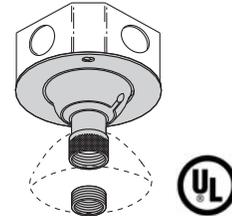
B390S 360° SWIVEL CHANNEL CONNECTOR

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Swings 15° in 360° plane
- Includes:
2 pcs. SN224-3/4"WO Stud Nut
2 pcs. 1/4"-20 Square Nut
1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Standard finish: ZN
- Wt./C 71 Lbs. (32.2 kg)



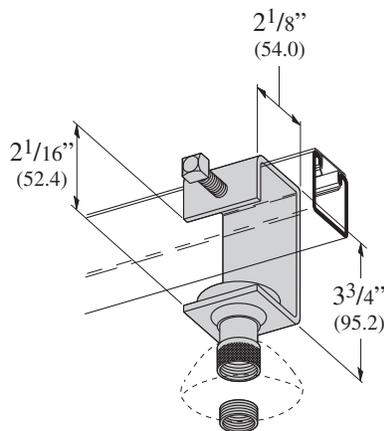
B390BX 360° SWIVEL BOX CONNECTOR

- Design Load 250 Lbs. (1.11 kN) for Connector Fitting only
- Safety Factor of 3
- Design Load 50 Lbs. (.22 kN) when used as illustrated or for use as a fixture support
- Swings 15° in 360° plane
- Includes:
1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Fits on 4" box
- Standard finish: ZN
- Wt./C 55 Lbs. (24.9 kg)



B465 H.I.D. FIXTURE HANGER

- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Swings 15° in 360° plane
- Includes:
1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Standard finish: ZN
- Wt./C 95 Lbs. (43.1 kg)



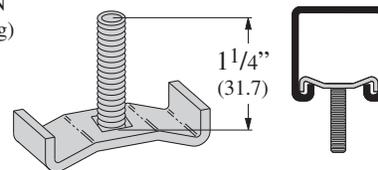
B436 FLUORESCENT FIXTURE NUT

- Standard finish: ZN
- Wt./C 2 Lbs. (.9 kg)



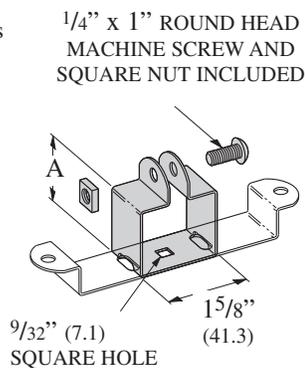
B436S FLUORESCENT FIXTURE STUD NUT

- Bolt size: 1/4" x 1 1/4"
- Standard finish: ZN
- Wt./C 4 Lbs. (1.8 kg)
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3



B460 FLUORESCENT FIXTURE HANGER

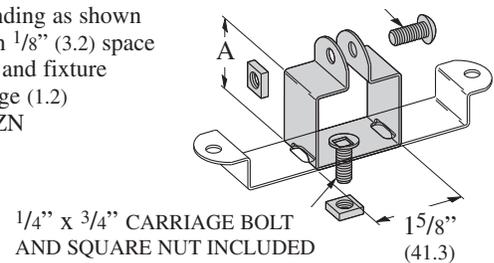
- Hanger is shipped flat and requires field bending as shown
- Allows more than 1/2" (12.7) space between channel and fixture
- Material: 18 Gauge (1.2)
- Standard finish: ZN



B464 FLUORESCENT FIXTURE HANGER

- Hanger is shipped flat and requires field bending as shown
- Allows more than 1/8" (3.2) space between channel and fixture
- Material: 18 Gauge (1.2)
- Standard finish: ZN

1/4" x 1" ROUND HEAD MACHINE SCREW AND SQUARE NUT INCLUDED



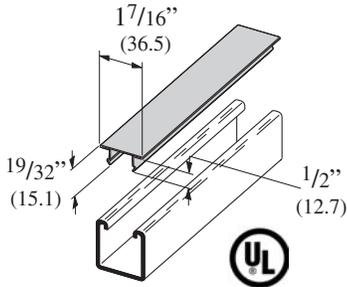
| Part No. | For Channel Size | A | | Wt./C | |
|----------|--------------------|----------|---------|-------|--------|
| | | Lbs. | kg | Lbs. | kg |
| B460-22 | B22, B24, B26, B32 | 2 1/8" | (57.5) | 17 | (7.7) |
| B460-12 | B12 | 2 15/16" | (79.5) | 20 | (9.1) |
| B460-11 | B11 | 3 3/4" | (101.6) | 23 | (10.4) |

| Part No. | For Channel Size | A | | Wt./C | |
|----------|------------------|---------|--------|-------|--------|
| | | Lbs. | kg | Lbs. | kg |
| B464-32 | B32 | 1 1/2" | (40.6) | 17 | (7.7) |
| B464-22 | B22, B24, B26 | 1 3/4" | (47.4) | 18 | (8.1) |
| B464-12 | B12 | 2 9/16" | (66.0) | 21 | (9.5) |
| B464-11 | B11 | 3 3/8" | (91.4) | 24 | (10.9) |

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

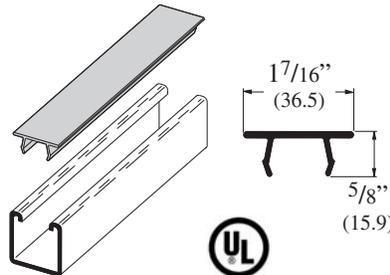
B217-20 SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- Refer to Raceway Fill Chart Pg. 214-215
- Material: 20 Gauge (.9)
- Standard finishes: GRN, GALV, YZN
- Standard length: 120" (3.05m)
- Wt./CFT 36 Lbs. (16.3 kg)



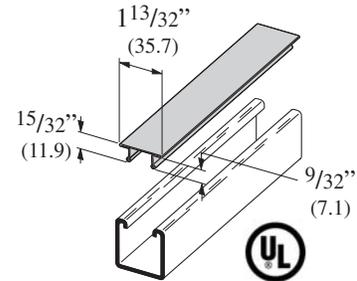
B217P PLASTIC SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- Refer to Raceway Fill Chart Pg. 214-215
- Standard finishes: Green (GRN) or Gray (GRY) Plastic
- Standard length: 120" (3.05m)
- Wt./CFT 9.2 Lbs. (4.2 kg)



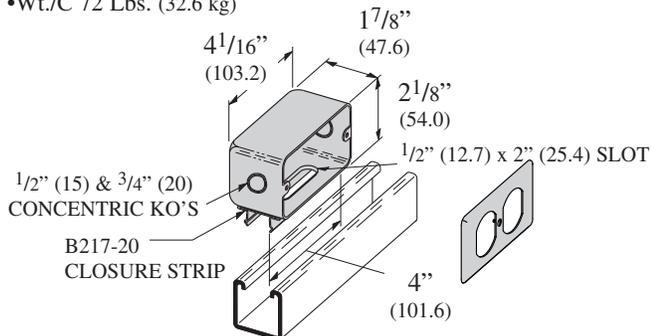
B217-24 SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- Refer to Raceway Fill Chart Pg. 214-215
- For use with 7 or fewer conductors no larger than #12 AWG
- Material: 24 Gauge (.6)
- Standard finishes: GRN, GALV, YZN
- Standard length: 120" (3.05m)
- Wt./CFT 28 Lbs. (12.7 kg)



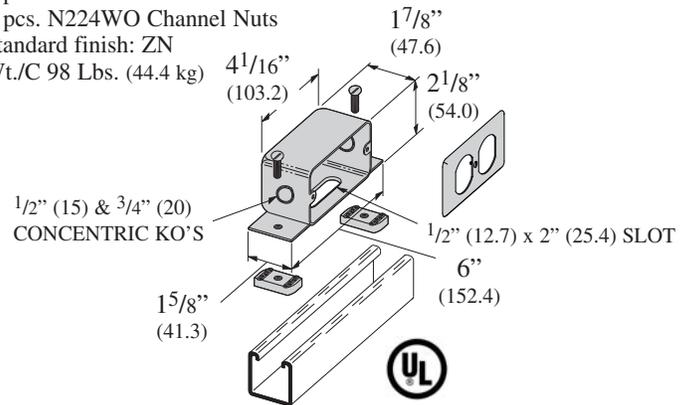
B516 SNAP-IN OUTLET BOX

- Provided with #10-32 tapped hole for grounding strap
- Duplex cover plate included
- Receptacle not furnished
- Requires ground wire installation for use with UL listed channel raceway system
- Standard finish: GALV
- Wt./C 72 Lbs. (32.6 kg)



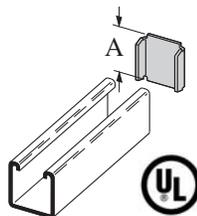
B516S OUTLET BOX

- Duplex cover plate included
- Receptacle not furnished
- Includes:
2 pcs. 1/4"-20 Flat Head Machine Screws
2 pcs. N224WO Channel Nuts
- Standard finish: ZN
- Wt./C 98 Lbs. (44.4 kg)



B203 THRU B206 B220 THRU B223 X TYPE END CAPS

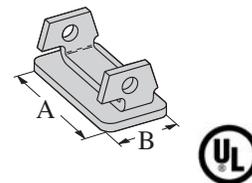
- Material: 12 Gauge (2.6)
- Standard finishes: ZN, GRN, HDG, SS4



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

B283 THRU B286 END CAPS

- Material: 12 Gauge (2.6)
- Standard finishes: ZN, GRN



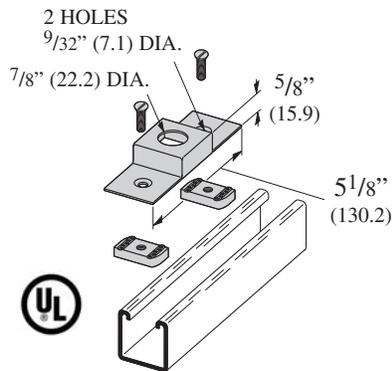
| Part No. | Use With | A | | B | | Wt./C | |
|----------|-----------|--|----|--|----|-------|-------|
| | | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B283 | B52 | 1 ¹⁹ / ₃₂ " (40.5) | | 2 ⁵ / ₃₂ " (19.8) | | 6 | (2.7) |
| B284 | B54 & B56 | 1 ¹⁹ / ₃₂ " (40.5) | | 2 ⁵ / ₃₂ " (19.8) | | 6 | (2.7) |
| B285 | B22 | 1 ¹⁹ / ₃₂ " (40.5) | | 1 ¹⁹ / ₃₂ " (40.5) | | 13 | (5.9) |
| B286 | B24 & B26 | 1 ¹⁹ / ₃₂ " (40.5) | | 1 ¹⁹ / ₃₂ " (40.5) | | 14 | (6.3) |

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Electrical Accessories

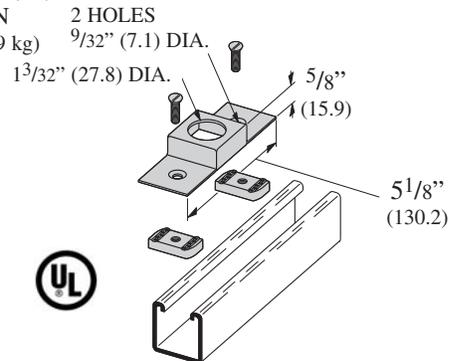
B447 CONDUIT CONNECTION PLATE FOR 1/2" (15) CONDUIT

- Includes:
 - 2 pcs. 1/4"-20 Flat Head Machine Screws
 - 2 pcs. N224WO Channel Nuts
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 35 Lbs. (15.9 kg)



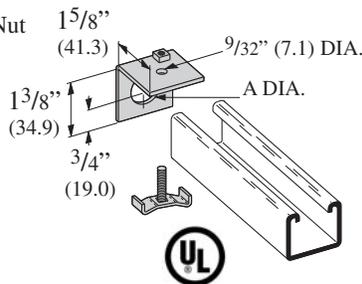
B447A CONDUIT CONNECTION PLATE FOR 3/4" (20) CONDUIT

- Includes:
 - 2 pcs. 1/4"-20 Flat Head Machine Screws
 - 2 pcs. N224WO Channel Nuts
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 35 Lbs. (15.9 kg)



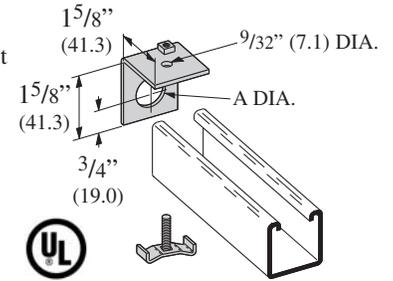
B392-32 SERIES CONNECTION END CAP

- Includes:
 - 1 pc. 1/4"-20 Square Nut
 - 1 pc. B436S Fixture Stud Nut
- Material: 11 Gauge (3.0)
- Standard finish: ZN



B392-22 SERIES CONNECTION END CAP

- Includes:
 - 1 pc. 1/4"-20 Square Nut
 - 1 pc. B436S Fixture Stud Nut
- Material: 11 Gauge (3.0)
- Standard finish: ZN

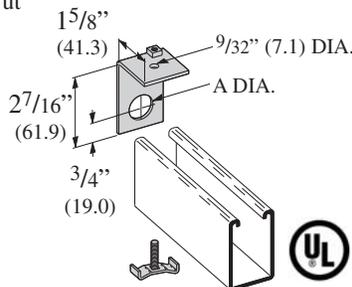


| Part No. | A | | Conduit Size | Wt./C | |
|-------------|---------|--------|--------------|-------|-------|
| | | | | Lbs. | kg |
| B392-32-1/2 | 7/8" | (22.2) | 1/2" (15) | 20 | (9.1) |
| B392-32-3/4 | 1 1/16" | (27.0) | 3/4" (20) | 19 | (8.6) |

| Part No. | A | | Conduit Size | Wt./C | |
|-------------|----------------|--------|--------------|-------|-------|
| | | | | Lbs. | kg |
| B392-22-1/2 | 7/8" | (22.2) | 1/2" (15) | 21 | (9.5) |
| B392-22-3/4 | 1 1/16" | (27.0) | 3/4" (20) | 20 | (9.1) |
| B392-22-1 | 1" PIPE THREAD | | 1" (25) | 17 | (7.7) |

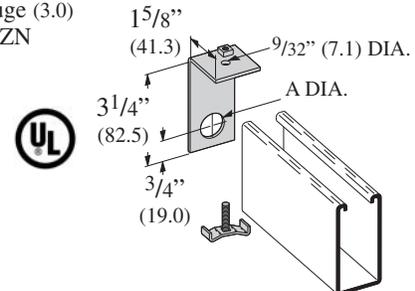
B392-12 SERIES CONNECTION END CAP

- Includes:
 - 1 pc. 1/4"-20 Square Nut
 - 1 pc. B436S Fixture Stud Nut
- Material: 11 Gauge (3.0)
- Standard finish: ZN



B392-11 SERIES CONNECTION END CAP

- Includes:
 - 1 pc. 1/4"-20 Square Nut
 - 1 pc. B436S Fixture Stud Nut
- Material: 11 Gauge (3.0)
- Standard finish: ZN



| Part No. | A | | Conduit Size | Wt./C | |
|-------------|----------------|--------|--------------|-------|--------|
| | | | | Lbs. | kg |
| B392-12-1/2 | 7/8" | (22.2) | 1/2" (15) | 27 | (12.2) |
| B392-12-3/4 | 1 1/16" | (22.7) | 3/4" (20) | 26 | (11.8) |
| B392-12-1 | 1" PIPE THREAD | | 1" (25) | 23 | (10.4) |

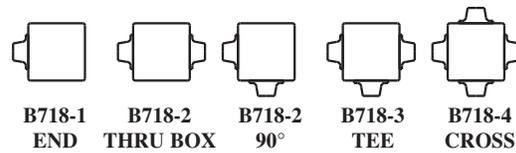
| Part No. | A | | Conduit Size | Wt./C | |
|-------------|----------------|--------|--------------|-------|--------|
| | | | | Lbs. | kg |
| B392-11-1/2 | 7/8" | (22.2) | 1/2" (15) | 36 | (16.3) |
| B392-11-3/4 | 1 1/16" | (27.0) | 3/4" (20) | 33 | (14.9) |
| B392-11-1 | 1" PIPE THREAD | | 1" (25) | 32 | (14.5) |

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

B718

UNIVERSAL JUNCTION BOX

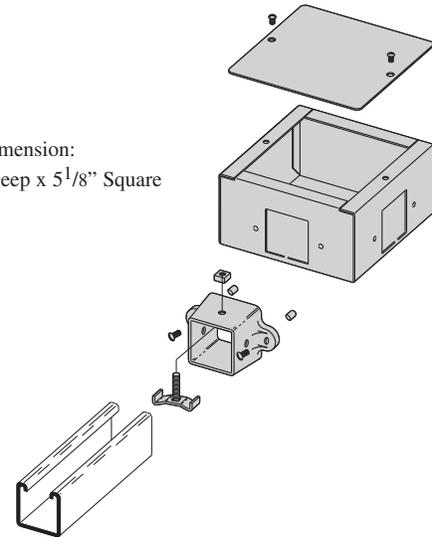
- Assemble B719 Hubs into B718 square knockouts
- Designed for use with B22, B24 & B26 Channel
- B718 Includes:
 - 1 pc. Junction Box only
 - 1 pc. Cover only
 - 2 pcs. #10-20 Round Head Machine Screws
- Standard finish: ZN
- Wt./C 180 Lbs. (81.6 kg)



SELECTION GUIDE

| Part No. | Includes | Wt./C | |
|----------|-----------------|-------|---------|
| | | Lbs. | kg |
| B718-1 | 1 B718 & 1 B719 | 205 | (93.0) |
| B718-2 | 1 B718 & 2 B719 | 230 | (104.3) |
| B718-3 | 1 B718 & 3 B719 | 255 | (115.6) |
| B718-4 | 1 B718 & 4 B719 | 280 | (127.0) |

Box Dimension:
2 1/2" Deep x 5 1/8" Square



B719AL

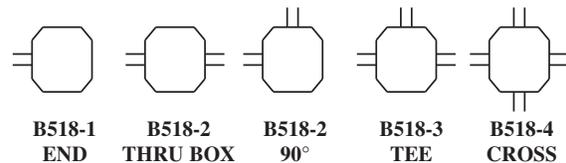
UNIVERSAL JUNCTION BOX HUB

- B719AL Includes:
 - 1 pc. B719AL Hub only
 - 1 pc. B436S Fixture Stud Nut
 - 1 pc. 1/4"-20 Square Nut
 - 2 pcs. #10-24 Self Tapping Screws
 - 2 pcs. Rubber Caps
- Material: Aluminum
- Wt./C 25 Lbs. (11.3 kg)

B518-1 THRU B518-4

UNIVERSAL JUNCTION BOX AND HUBS

- Channel Connection Kits as shown in the chart above
- Includes:
 - 1 pc. Junction Box with Screws
 - 1 pc. Box Cover
- Standard finish: ZN

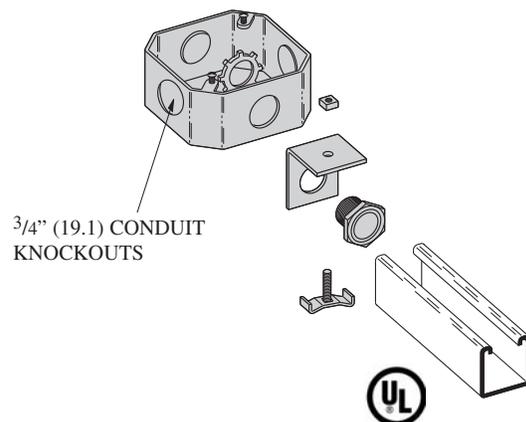


SELECTION GUIDE

| Part No. | Channel Connection Kits Included | Wt./C | |
|----------|----------------------------------|-------|--------|
| | | Lbs. | kg |
| B518-1 | 1 | 106 | (48.1) |
| B518-2 | 2 | 137 | (62.1) |
| B518-3 | 3 | 162 | (78.5) |
| B518-4 | 4 | 192 | (87.1) |

CHANNEL CONNECTION KIT

- For use with B22, B24 & B26 Channels
- Box Dimension: Standard 4" Octagon Box
- Includes:
 - 1 pc. B392-22-3/4 End Connection (See page 156)
 - 1 pc. 3/4" (20) Insulated Chase Nipple
 - 1 pc. 3/4" (20) Lock Nut
- Standard finish: ZN



3/4" (19.1) CONDUIT KNOCKOUTS

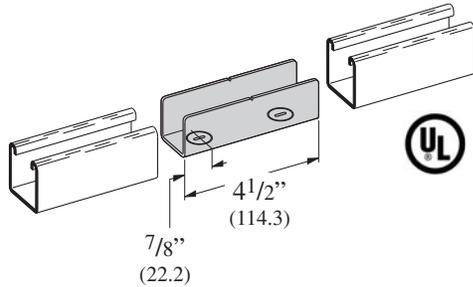


Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Strut Joiners

B766 SERIES STRAIGHT STRUT JOINER

- Includes: 2 Cam Screws
- Material: 12 Gauge (2.6)
- Standard finish: ZN

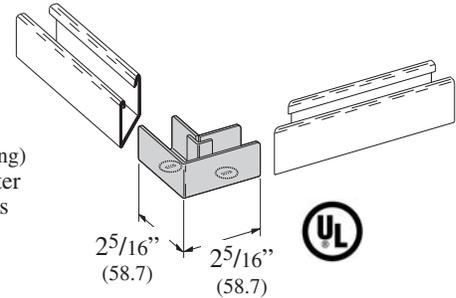


| Part No. | For Channel Size | Wt./C | |
|-----------|------------------|-------|--------|
| | | Lbs. | kg |
| B766-11 | B11 | 94 | (42.6) |
| B766-12 | B12 | 72 | (32.6) |
| B766-22 * | B22 & B24 | 50 | (22.7) |
| B766-26 | B26 | 53 | (24.0) |
| B766-32 | B32 | 44 | (19.9) |
| B766-42 | B42 | 34 | (15.4) |
| B766-52 | B52 & B54 | 28 | (12.7) |
| B766-56 | B56 | 31 | (14.0) |

B767 SERIES 90° ELBOW STRUT JOINER

- Includes: 2 Cam Screws
- Material: 12 Gauge (2.6)
- Standard finish: ZN

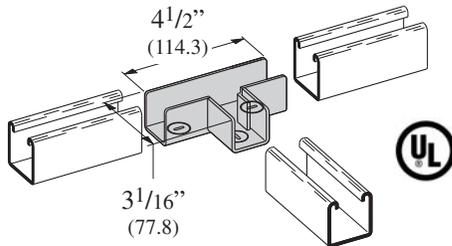
Note: B767-22
(Cast Aluminum Fitting)
does not require miter
cutting of channel as
shown in drawing.



| Part No. | For Channel Size | Wt./C | |
|-----------|------------------|-------|--------|
| | | Lbs. | kg |
| B767-11 | B11 | 74 | (33.5) |
| B767-12 | B12 | 56 | (25.4) |
| B767-22 * | B22 & B24 | 39 | (17.7) |
| B767-26 | B26 | 41 | (18.6) |
| B767-32 | B32 | 34 | (15.4) |
| B767-42 | B42 | 27 | (12.2) |
| B767-52 | B52 & B54 | 23 | (10.4) |
| B767-56 | B56 | 25 | (11.3) |

B768 SERIES TEE STRUT JOINER

- Includes: 3 Cam Screws
- Patented
- Material: 12 Gauge (2.6)
- Standard finish: ZN

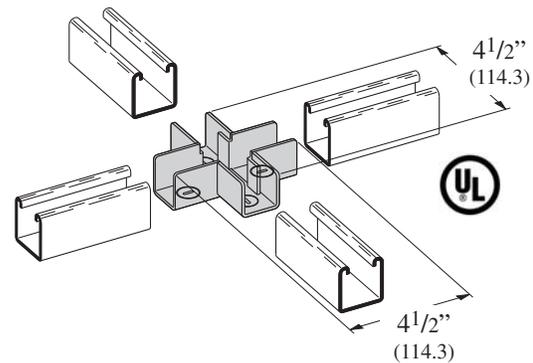


| Part No. | For Channel Size | Wt./C | |
|-----------|------------------|-------|--------|
| | | Lbs. | kg |
| B768-11 | B11 | 142 | (64.4) |
| B768-12 | B12 | 112 | (50.8) |
| B768-22 * | B22 & B24 | 79 | (35.8) |
| B768-26 | B26 | 79 | (35.8) |
| B768-32 | B32 | 72 | (32.6) |
| B768-42 | B42 | 62 | (28.1) |
| B768-52 | B52 & B54 | 57 | (25.8) |
| B768-56 | B56 | 60 | (27.2) |

* Cast Aluminum parts

B769 SERIES CROSS STRUT JOINER

- Includes: 4 Cam Screws
- Patented
- Material: 12 Gauge (2.6)
- Standard finish: ZN



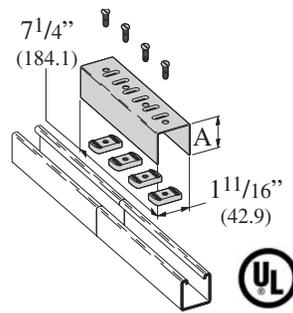
| Part No. | For Channel Size | Wt./C | |
|-----------|------------------|-------|--------|
| | | Lbs. | kg |
| B769-11 | B11 | 148 | (67.1) |
| B769-12 | B12 | 120 | (54.4) |
| B769-22 * | B22 & B24 | 87 | (39.4) |
| B769-26 | B26 | 93 | (42.2) |
| B769-32 | B32 | 78 | (35.4) |
| B769-42 | B42 | 65 | (29.5) |
| B769-52 | B52 & B54 | 58 | (26.3) |
| B769-56 | B56 | 62 | (28.1) |

Note: Strut joiners are not for structural support. A channel support is recommended within 24" (609 mm) of each joint.

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

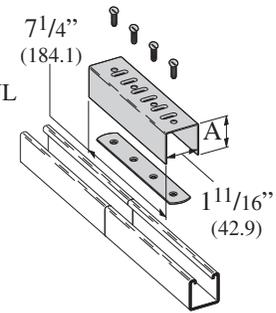
B166 FOUR HOLE SPLICE CLEVIS

- Includes:
1 Splice Clevis
4 pcs. 1/4"-20 Flat Head Machine Screws
4 pcs. N224WO Channel Nuts
- Material: 16 Gauge



B166-46 FOUR HOLE SPLICE CLEVIS ASSEMBLY

- Requires ground wire for use with UL listed channel raceway system
- Includes:
1 Splice Clevis
1 pc. B466W tapped plate
4 pcs. 1/4"-20 Flat Head Machine Screws
- Material: 16 Gauge (1.5)
- Standard finishes: ZN, GRN

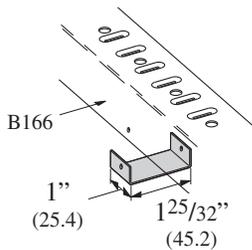


| Part No. | A | | For Channel Size | Wt./C | |
|----------|---------|--------|------------------|-------|--------|
| | | | | Lbs. | kg |
| B166-11 | 3 1/4" | (82.5) | B11 | 128 | (58.0) |
| B166-12 | 2 7/16" | (61.9) | B12 | 108 | (49.0) |
| B166-22 | 1 5/8" | (41.3) | B22, B24, B26 | 91 | (40.3) |
| B166-32 | 1 3/8" | (34.9) | B32 | 83 | (37.6) |
| B166-42 | 1" | (25.4) | B42 | 75 | (34.0) |
| B166-52 | 1 3/16" | (20.6) | B52, B54, B56 | 71 | (32.2) |

| Part No. | A | | For Channel Size | Wt./C | |
|------------|---------|--------|------------------|-------|--------|
| | | | | Lbs. | kg |
| B166-46-11 | 3 1/4" | (82.5) | B11 | 118 | (53.5) |
| B166-46-12 | 2 7/16" | (61.9) | B12 | 98 | (44.4) |
| B166-46-22 | 1 5/8" | (41.3) | B22, B24, B26 | 79 | (35.8) |
| B166-46-32 | 1 3/8" | (34.9) | B32 | 73 | (33.1) |
| B166-46-42 | 1" | (25.4) | B42 | 65 | (29.5) |
| B166-46-52 | 1 3/16" | (20.6) | B52, B54, B56 | 61 | (27.6) |

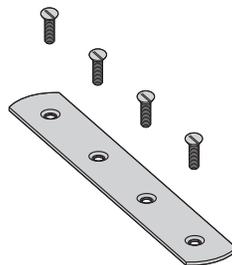
B166CL SPLICE CLEVIS CLIP

- Use to cover gap between strut
- Material: 18 Gauge (1.2)
- Standard finish: ZN
- Wt./C 4 Lbs. (1.8 kg)



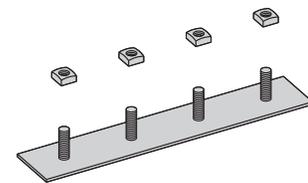
B466W TAPPED SPLICE PLATE

- Includes:
4 pcs. 1/4"-20 Flat Head Machine Screws
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 27 Lbs. (12.2 kg)
- Holes 1 3/16" (20.6) from ends and 1 7/8" (47.6) on centers



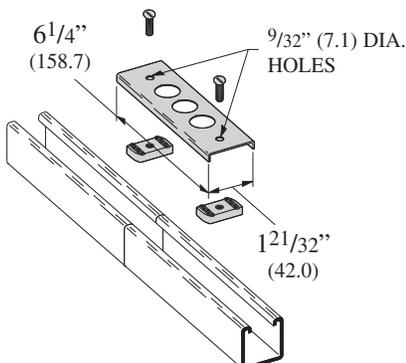
B466S STUD SPLICE PLATE

- Includes:
4 pcs. 1/4"-20 Square Nuts
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 34 Lbs. (15.4 kg)
- Studs 1 3/16" (20.6) from ends and 1 7/8" (47.6) on centers



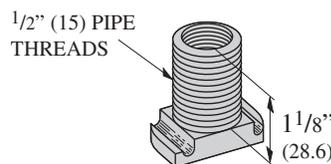
B619 KNOCK-OUT PLATE

- Requires ground wire for use with UL listed channel raceway system
- Includes:
2 pcs. 1/4"-20 Flat Head Machine Screws
2 pcs. N224WO Channel Nuts
- Material: 16 Gauge (1.5)
- 1/2" (15) Conduit Knockouts
- Standard finish: ZN
- Wt./C 40 Lbs. (18.1 kg)



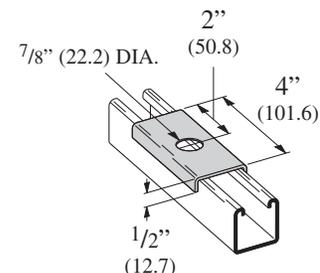
B393-1 WIRING STUD

- Requires ground wire for use with UL listed channel raceway system
- 1/2" (15) pipe threads
- Material: Cast Aluminum
- Wt./C 6 Lbs. (2.7 kg)



B589 SPACER CLEVIS

- Can be used with B393-1 wiring stud
- Material: 12 Gauge (2.6)
- Standard finish: ZN
- Wt./C 29 Lbs. (13.1 kg)

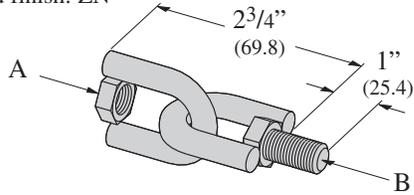


Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Electrical Hardware

B446 SWIVEL HANGER (FEMALE-MALE)

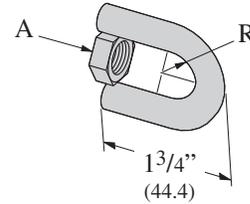
- Design Load:
(³/₈)-730 Lbs. (3.24 kN)
(¹/₂)-1350 Lbs. (6.00 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | B | Wt./C | |
|-----------------------------------|-------------------------------------|---------------------------------------|-------|--------|
| | | | Lbs. | kg |
| B446- ³ / ₈ | ³ / ₈ "-16 HN | ³ / ₈ "-16 HHCS | 28 | (12.7) |
| B446- ¹ / ₂ | ¹ / ₂ "-13 HN | ¹ / ₂ "-13 HHCS | 36 | (16.3) |

B446A SWIVEL HANGER (FEMALE ONLY)

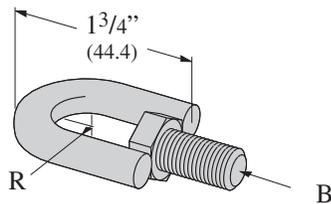
- Design Load:
(³/₈)-730 Lbs. (3.24 kN)
(¹/₂)-1350 Lbs. (6.00 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | R | Wt./C | | |
|------------------------------------|-------------------------------------|--------------------------------|-------|----|-------|
| | | | Lbs. | kg | |
| B446A- ³ / ₈ | ³ / ₈ "-16 HN | ⁹ / ₃₂ " | (7.1) | 13 | (5.9) |
| B446A- ¹ / ₂ | ¹ / ₂ "-13 HN | ³ / ₈ " | (9.5) | 15 | (6.8) |

B446B SWIVEL HANGER (MALE ONLY)

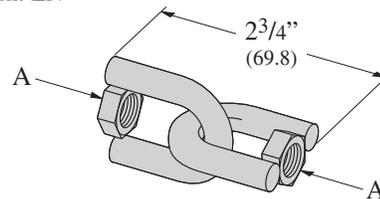
- Design Load:
(³/₈)-730 Lbs. (3.24 kN)
(¹/₂)-1350 Lbs. (6.00 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | B | R | Wt./C | | |
|------------------------------------|---------------------------------------|--------------------------------|-------|----|-------|
| | | | Lbs. | kg | |
| B446B- ³ / ₈ | ³ / ₈ "-16 HHCS | ⁹ / ₃₂ " | (7.1) | 16 | (7.2) |
| B446B- ¹ / ₂ | ¹ / ₂ "-13 HHCS | ³ / ₈ " | (9.5) | 20 | (9.1) |

B446C SWIVEL HANGER (FEMALE-FEMALE)

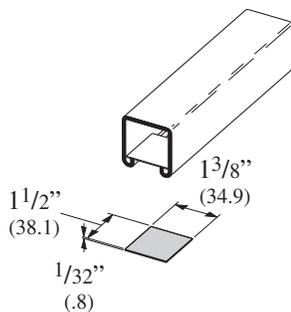
- Design Load:
(³/₈)-730 Lbs. (3.24 kN)
(¹/₂)-1350 Lbs. (6.00 kN)
- Safety Factor of 3
- Standard finish: ZN



| Part No. | A | Wt./C | |
|------------------------------------|-------------------------------------|-------|--------|
| | | Lbs. | kg |
| B446C- ³ / ₈ | ³ / ₈ "-16 HN | 26 | (11.8) |
| B446C- ¹ / ₂ | ¹ / ₂ "-13 HN | 31 | (14.0) |

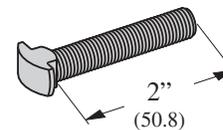
B590 FIBER WIRE RETAINER

- Installation aid for retaining wires before installing snap closure strip
- Wt./C 1 Lb. (.4 kg)



B617 SHOULDER BOLT

- Standard finish: ZN
- Wt./C 6 Lbs. (2.7 kg)

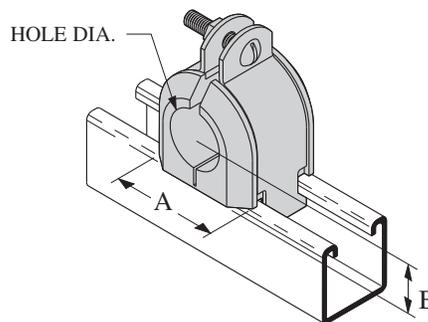


³/₈"-16 THREAD SIZE

B4060 THRU B4093

INSULCLAMP® CABLE CLAMPS (Replaces porcelain clamps)

- Assembly includes:
 - 1 Insulclamp® & 1 pr. zinc plated Pipe Straps with Everdur (Silicon Bronze) Hardware
- The thermoplastic elastomer Insulclamp has a dielectric strength of 640 volts/mil
- The flame retardant one piece design allows for trouble free assembly
- Everdur hardware is non-ferrous and prevents magnetic induction



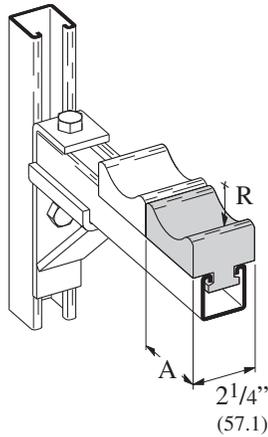
| Part No. | Hole Dia. | | Wt./C | | A | | B | | Clamp No. (included) |
|----------|-----------|---------|-------|--------|-------|---------|-------|--------|----------------------|
| | | | Lbs. | kg | | | | | |
| B4060 | 3/8" | (9.5) | 25 | (11.3) | 1.36" | (34.5) | .56" | (14.2) | B2030 |
| B4061 | 1/2" | (12.7) | 25 | (11.3) | | | | | |
| B4062 | 5/8" | (15.9) | 25 | (11.3) | | | | | |
| B4063 | 3/4" | (19.0) | 37 | (16.8) | 1.86" | (47.2) | .81" | (20.8) | B2034 |
| B4064 | 7/8" | (22.2) | 37 | (16.8) | | | | | |
| B4065 | 1" | (25.4) | 37 | (16.8) | | | | | |
| B4066 | 1 1/8" | (28.6) | 37 | (16.8) | 2.36" | (59.9) | 1.06" | (26.9) | B2038 |
| B4067 | 1 1/4" | (31.7) | 58 | (26.3) | | | | | |
| B4068 | 1 3/8" | (34.9) | 58 | (26.3) | | | | | |
| B4069 | 1 1/2" | (38.1) | 58 | (26.3) | 2.86" | (72.6) | 1.31" | (33.3) | B2042 |
| B4070 | 1 5/8" | (41.3) | 58 | (26.3) | | | | | |
| B4071 | 1 3/4" | (44.4) | 76 | (34.5) | | | | | |
| B4072 | 1 7/8" | (47.6) | 76 | (34.5) | 3.36" | (85.3) | 1.56" | (39.6) | B2046 |
| B4073 | 2" | (50.8) | 76 | (34.5) | | | | | |
| B4074 | 2 1/8" | (54.0) | 76 | (34.5) | | | | | |
| B4075 | 2 1/4" | (57.1) | 90 | (40.8) | 3.86" | (98.0) | 1.81" | (46.0) | B2050 |
| B4076 | 2 3/8" | (60.3) | 90 | (40.8) | | | | | |
| B4077 | 2 1/2" | (63.5) | 90 | (40.8) | | | | | |
| B4078 | 2 5/8" | (66.7) | 90 | (40.8) | 4.36" | (110.7) | 2.06" | (52.3) | B2054 |
| B4079 | 2 3/4" | (69.8) | 109 | (49.4) | | | | | |
| B4080 | 2 7/8" | (73.0) | 109 | (49.4) | | | | | |
| B4081 | 3" | (76.2) | 109 | (49.4) | 4.86" | (123.4) | 2.31" | (58.7) | B2058 |
| B4082 | 3 1/8" | (79.4) | 109 | (49.4) | | | | | |
| B4083 | 3 1/4" | (82.5) | 130 | (58.9) | | | | | |
| B4084 | 3 3/8" | (85.7) | 130 | (58.9) | 5.24" | (133.1) | 2.50" | (63.5) | B2018 |
| B4085 | 3 1/2" | (88.9) | 130 | (58.9) | | | | | |
| B4086 | 3 5/8" | (92.1) | 130 | (58.9) | | | | | |
| B4087 | 3 3/4" | (95.2) | 160 | (72.6) | 4.86" | (123.4) | 2.31" | (58.7) | B2058 |
| B4088 | 3 7/8" | (98.4) | 160 | (72.6) | | | | | |
| B4089 | 4" | (101.6) | 160 | (72.6) | | | | | |
| B4090 | 4 1/8" | (104.8) | 160 | (72.6) | 5.24" | (133.1) | 2.50" | (63.5) | B2018 |
| B4091 | 4 1/4" | (107.9) | 160 | (72.6) | | | | | |
| B4092 | 4 3/8" | (111.1) | 160 | (72.6) | | | | | |
| B4093 | 4 1/2" | (114.3) | 160 | (72.6) | | | | | |

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Porcelain & Maple Clamps

B4050 & B4051 PORCELAIN CABLE CHANNEL SADDLE

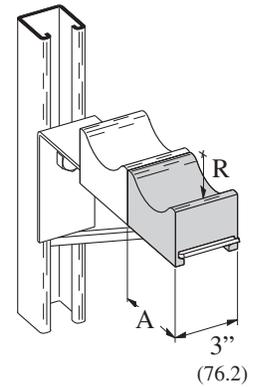
- Electrical porcelain has an dielectric strength of 50 volts/mil



| Part No. | A | | R | | Wt./C | |
|--------------|------|---------|--------|--------|-------|--------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B4050 | 3" | (76.2) | 1 3/8" | (34.9) | 72 | (32.6) |
| B4051 | 4" | (101.6) | 2 1/8" | (54.0) | 100 | (45.3) |

B4094 & B4095 PORCELAIN CABLE RACK SADDLE

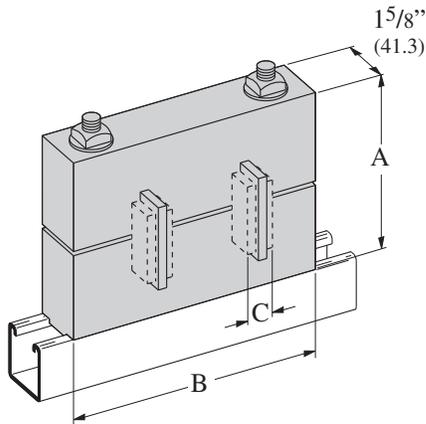
- Electrical porcelain has an dielectric strength of 50 volts/mil
- Designed for use with B449 Brackets



| Part No. | A | | R | | Wt./C | |
|--------------|--------|--------|--------|--------|-------|--------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B4094 | 2 7/8" | (73.0) | 1 3/8" | (34.9) | 67 | (30.4) |
| B4095 | 3 7/8" | (98.4) | 2 1/8" | (54.0) | 106 | (48.1) |

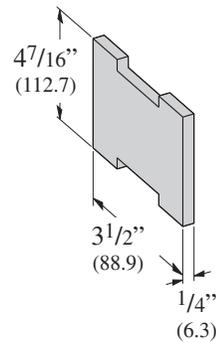
B4035A THRU B4035F 4" (101.6) BUS BAR MAPLE CLAMPS

- Assembly Includes:
 - 1 pr. Maple Clamps (Paraffin Impregnated)
 - 3 pcs. 1/2" Flat Washers
 - 3 pcs. N225WO
 - 3 pcs. SQN-1/2"
 - 3 pcs. ATR-1/2 x L (Length)
- Required number of Separators
- 1/4" (6.3) x 2" (50.8) and 1/4" (6.3) x 6" (152.4) Bus Bar Maple Clamps available



B4037B 1/4" (6.3) x 4" (101.6) BUS BAR SEPARATOR

- Wt./C 9 Lbs. (4.1 kg)



| Part No. | A | | B | | C | | No. of Bus Separators | No. of Bars Per Leg | Wt./C | |
|---------------|--------|---------|---------|---------|--------|--------|-----------------------|---------------------|-------|---------|
| | Lbs. | kg | Lbs. | kg | Lbs. | kg | | | Lbs. | kg |
| B4035A | 7 3/8" | (187.3) | 8 1/2" | (215.9) | 1/4" | (6.3) | — | 1 | 416 | (188.7) |
| B4035B | | | 9 1/2" | (241.3) | 3/4" | (19.0) | 2 | 2 | 447 | (202.7) |
| B4035C | | | 10 1/2" | (266.7) | 1 1/4" | (31.7) | 4 | 3 | 479 | (217.3) |
| B4035D | | | 11 1/2" | (292.1) | 1 3/4" | (44.4) | 6 | 4 | 511 | (231.8) |
| B4035E | | | 12 1/2" | (317.5) | 2 1/4" | (57.1) | 8 | 5 | 542 | (245.8) |
| B4035F | | | 13 1/2" | (342.9) | 2 3/4" | (69.8) | 10 | 6 | 574 | (260.3) |

Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

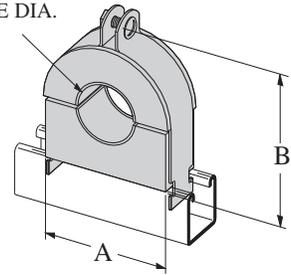
B4000 THRU B4007 MAPLE CABLE CLAMPS

- Assembly Includes:
 - 1 pr. Maple Clamps (Paraffin Impregnated)
 - 1 pr. zinc plated Steel Pipe Straps with Everdur Hardware (Silicon Bronze)
- Everdur hardware is non-ferrous and prevents magnetic induction

Note: Maple cable clamps may be replaced with Insulclamps® see page 161 for sizes

| Part No. | Specify Hole Dia. | | A | | B | | Clamp No. (included) | Wt./C | |
|--------------|-------------------|-----------------|----------|---------|----------|---------|-------------------------|-------|--------|
| | | | | | | | | Lbs. | kg |
| B4000 | 0" to 5/8" | (0.0 to 15.9) | 1 11/32" | (34.1) | 2" | (50.8) | B2010 | 24 | (10.9) |
| B4001 | 1/2" to 1" | (12.7 to 25.4) | 1 29/32" | (48.4) | 2 25/32" | (70.6) | B2012 | 44 | (19.9) |
| B4002 | 3/4" to 1 1/2" | (19.0 to 38.1) | 2 3/8" | (60.3) | 3 9/32" | (83.3) | B2013 | 58 | (26.3) |
| B4003 | 1 1/4" to 1 3/4" | (31.7 to 44.4) | 2 7/8" | (73.0) | 3 3/4" | (95.2) | B2014 | 66 | (29.9) |
| B4004 | 1 1/2" to 2 1/4" | (38.1 to 57.1) | 3 1/2" | (88.9) | 4 3/8" | (111.1) | B2015 | 86 | (39.0) |
| B4005 | 2" to 2 1/2" | (50.8 to 63.5) | 4" | (101.6) | 4 7/8" | (123.8) | B2016 | 110 | (49.9) |
| B4006 | 2 1/4" to 3" | (38.1 to 76.2) | 4 1/2" | (114.3) | 5 3/8" | (136.5) | B2017 | 125 | (56.7) |
| B4007 | 3" to 4" | (76.2 to 101.6) | 5 9/16" | (141.3) | 6 7/16" | (163.5) | B2019 | 165 | (74.8) |

SPECIFY HOLE DIA.

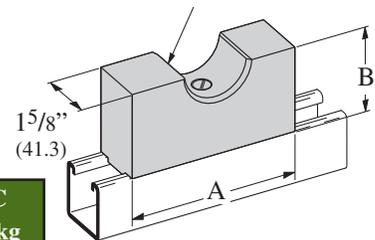


B4008 THRU B4017 SQUARE MAPLE CABLE SADDLE

- Assembly Includes:
 - 1 Maple Saddle (Paraffin Impregnated)
 - 1 pc. 3/8"-16 Flat Head Machine Screw
 - 1 pc. N228 Channel Nut
- Other sizes available

| Part No. | Specify Hole Dia. | | A | | B | | Wt./C | |
|--------------|-------------------|------------------|--------|---------|--------|---------|-------|--------|
| | | | | | | | Lbs. | kg |
| B4008 | 0" to 1" | (0.0 to 25.4) | 3" | (76.2) | 1 3/4" | (44.4) | 35 | (15.9) |
| B4009 | 1" to 1 1/2" | (25.4 to 38.1) | 3 1/2" | (88.9) | 2" | (50.8) | 42 | (19.0) |
| B4010 | 1 1/2" to 2" | (38.1 to 50.8) | 4" | (101.6) | 2 1/4" | (57.1) | 53 | (24.0) |
| B4011 | 2" to 2 1/2" | (50.8 to 63.5) | 4 1/2" | (114.3) | 2 1/2" | (63.5) | 62 | (28.1) |
| B4012 | 2 1/2" to 3" | (63.5 to 76.2) | 5" | (127.0) | 2 3/4" | (69.8) | 76 | (34.5) |
| B4013 | 3" to 3 1/2" | (76.2 to 88.9) | 5 1/2" | (139.7) | 3" | (76.2) | 85 | (38.5) |
| B4014 | 3 1/2" to 4" | (88.9 to 101.6) | 6" | (152.4) | 3 1/4" | (82.5) | 95 | (43.1) |
| B4015 | 4" to 4 1/2" | (101.6 to 114.3) | 7" | (177.8) | 3 3/4" | (95.2) | 105 | (47.8) |
| B4016 | 4 1/2" to 5" | (114.3 to 127.0) | 7 1/2" | (190.5) | 4" | (101.6) | 115 | (52.4) |
| B4017 | 5" to 6" | (127.0 to 152.4) | 9" | (228.6) | 5" | (127.0) | 126 | (57.1) |

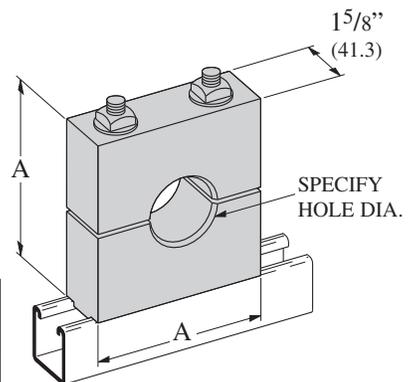
SPECIFY HOLE DIA.



B4033A THRU B4033I MAPLE CABLE CLAMPS

- Assembly Includes:
 - 1 pr. Maple Clamps (Paraffin Impregnated)
 - 2 pcs. 3/8"-16 Stud Bolts
 - 2 pcs. 3/8"-16 Flat Washers
 - 2 pcs. 3/8"-16 Square Nuts
 - 2 pcs. N228 Channel Nuts
- Other sizes available

| Part No. | Specify Hole Dia. | | A | | Wt./C | |
|---------------|-------------------|------------------|--------|---------|-------|---------|
| | | | | | Lbs. | kg |
| B4033A | 0" to 1" | (0.0 to 25.4) | 3 1/2" | (88.9) | 85 | (38.5) |
| B4033B | 1" to 1 1/2" | (25.4 to 38.1) | 4" | (101.6) | 95 | (43.1) |
| B4033C | 1 1/2" to 2" | (38.1 to 50.8) | 4 1/2" | (114.3) | 118 | (53.5) |
| B4033D | 2" to 2 1/2" | (50.8 to 63.5) | 5 1/2" | (127.0) | 162 | (73.5) |
| B4033E | 2 1/2" to 3" | (63.5 to 76.2) | 6" | (152.4) | 187 | (84.8) |
| B4033F | 3" to 3 1/2" | (76.2 to 88.9) | 6 1/2" | (165.1) | 209 | (94.8) |
| B4033G | 3 1/2" to 4" | (88.9 to 101.6) | 7" | (177.8) | 248 | (112.5) |
| B4033H | 4" to 4 1/2" | (101.6 to 114.3) | 7 1/2" | (190.5) | 270 | (122.5) |
| B4033I | 4 1/2" to 5" | (114.3 to 127.0) | 8" | (203.2) | 298 | (135.2) |



Reference page 150 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 218 - 219.

Aluminum & Stainless Steel

Aluminum

Aluminum channels, fittings and accessories offer excellent corrosion resistance and are suitable for many indoor and outdoor applications. Aluminum's high strength to weight ratio greatly reduces overall cost of installation through ease of handling and cutting. B-Line's channels are extruded from aluminum alloy 6063-T6. Closure strips are extruded from aluminum alloy 6063-T5. Fittings and accessories are made from aluminum alloy 5052-H32.

Stainless Steel

Where corrosion problems persist and other material and fittings are ineffective, we recommend use of B-Line's corrosion resistant stainless steel channels and accessories. Channels and fittings are available in two types of stainless steel:

SS4-AISI Type 304

SS6-AISI Type 316

Fittings

Most fittings, as shown in this catalog, can be supplied in aluminum or stainless steel. Consult factory for possible minimum production quantities and set-up charges.

Load Data

Aluminum

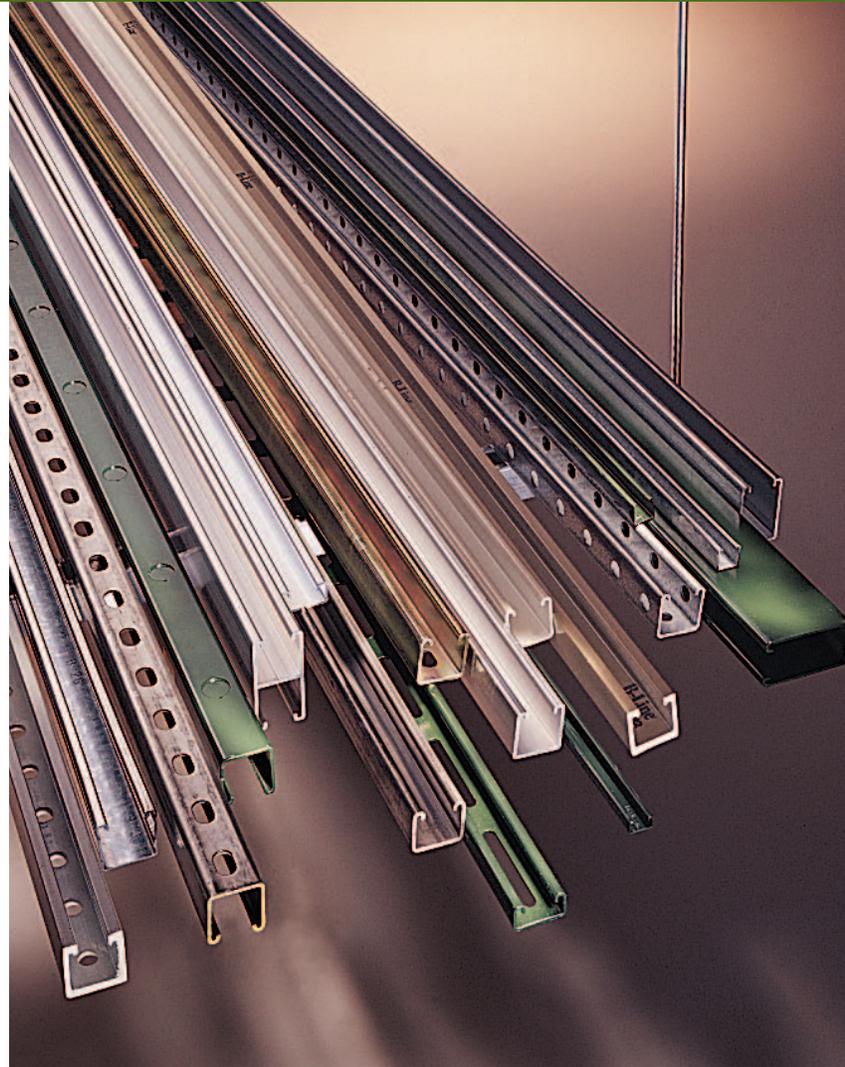
Channel's approximate load data can be determined by multiplying load data in the steel channel section of this catalog by a factor of 0.38.

Stainless Steel

Channel load data is the same as the data in the steel channel section of this catalog.

Metric

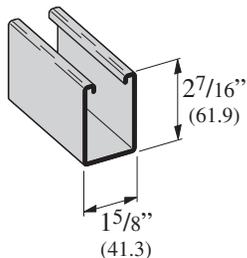
Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.



Aluminum Channel & Closure Strips

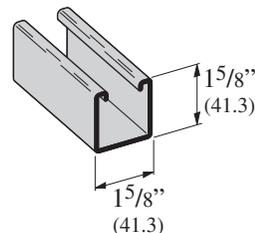
B12AL

- Thickness: .105 (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: .86 Lbs./Ft. (1.28 kg/m)



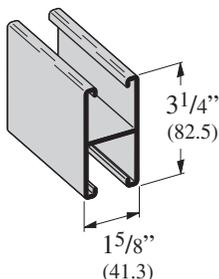
B22AL

- Thickness: .105 (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: .66 Lbs./Ft. (0.98 kg/m)



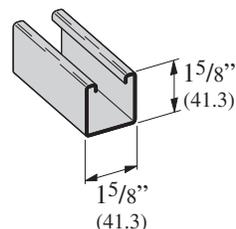
B22AAL

- Thickness: .105 (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: 1.18 Lbs./Ft. (1.75 kg/m)



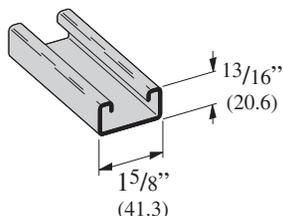
B24AL

- Thickness: .080 (2.0 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: .52 Lbs./Ft. (0.77 kg/m)



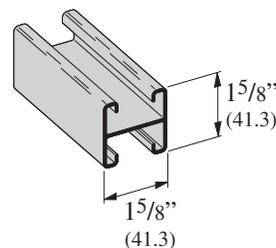
B54AL

- Thickness: .080 (2.0 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: .37 Lbs./Ft. (0.55 kg/m)



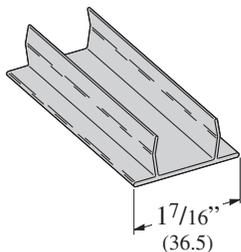
B54AAL

- Thickness: .080 (2.0 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: .57 Lbs./Ft. (0.84 kg/m)



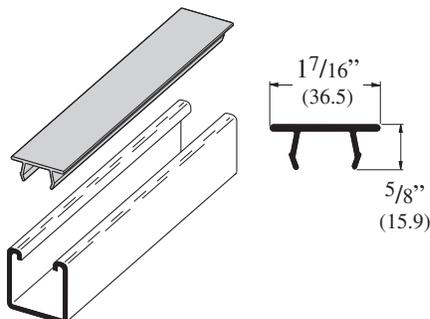
B217AL CLOSURE STRIP

- Standard Length: 10' (304.8 cm)
- Material: Aluminum
- Weight: .15 Lbs./Ft. (0.23 kg/m)



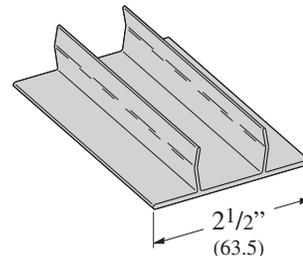
B217P PLASTIC CLOSURE STRIP

- Standard Length: 10' (304.8 cm)
- Material: PVC
- Weight: .09 Lbs./Ft. (0.14 kg/m)



B217FFAL CLOSURE STRIP

- Standard Length: 10' (304.8 cm)
- Material: Aluminum
- Weight: .16 Lbs./Ft. (0.24 kg/m)

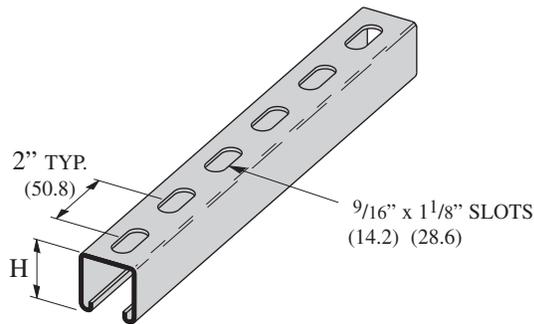


Reference page 164 for general fitting specifications. Other channel combinations available-see steel section for styles.

Aluminum

SH TYPE CHANNEL

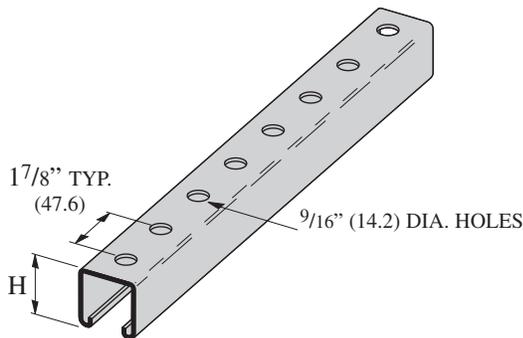
•Material: Aluminum



| Part No. | Thickness | | H | Wt./C | |
|----------|-----------|-------|---------------|----------|--------|
| | | | | Lbs./Ft. | kg/m |
| B12SH AL | .105 | (2.6) | 27/16" (61.9) | .83 | (1.23) |
| B22SH AL | .105 | (2.6) | 15/8" (41.3) | .63 | (.93) |
| B24SH AL | .080 | (2.0) | 15/8" (41.3) | .49 | (.73) |
| B54SH AL | .080 | (2.0) | 13/16" (20.6) | .34 | (.50) |

H-17/8 TYPE CHANNEL

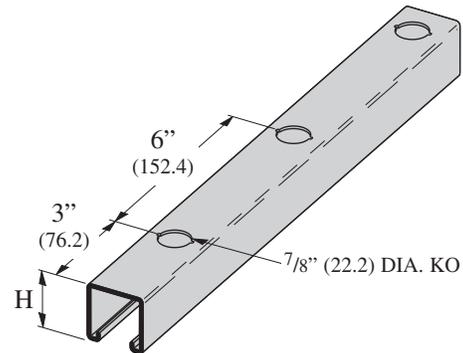
•Material: Aluminum



| Part No. | Thickness | | H | Wt./C | |
|-------------|-----------|-------|---------------|----------|--------|
| | | | | Lbs./Ft. | kg/m |
| B12H17/8 AL | .105 | (2.6) | 27/16" (61.9) | .86 | (1.28) |
| B22H17/8 AL | .105 | (2.6) | 15/8" (41.3) | .66 | (.98) |
| B24H17/8 AL | .080 | (2.0) | 15/8" (41.3) | .52 | (.77) |
| B54H17/8 AL | .080 | (2.0) | 13/16" (20.6) | .37 | (.55) |

KO6 TYPE KNOCKOUT CHANNEL

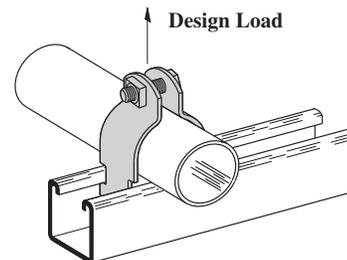
•Material: Aluminum



| Part No. | Thickness | | H | Wt./C | |
|-----------|-----------|-------|---------------|----------|--------|
| | | | | Lbs./Ft. | kg/m |
| B12KO6 AL | .105 | (2.6) | 27/16" (61.9) | .86 | (1.28) |
| B22KO6 AL | .105 | (2.6) | 15/8" (41.3) | .66 | (.98) |
| B24KO6 AL | .080 | (2.0) | 15/8" (41.3) | .52 | (.77) |
| B54KO6 AL | .080 | (2.0) | 13/16" (20.6) | .37 | (.55) |

B2000 SERIES RIGID CONDUIT CLAMPS

- Safety Factor of 5
- Machine Screw and Square Nut included
- Pipe clamp material 5052-H32

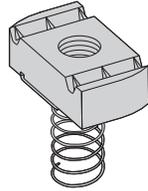


| Part No. | Conduit or Pipe Size | | Material Thickness | | Design Load | | Wt./C | |
|----------|----------------------|-------|--------------------|-------|-------------|--------|-------|--------|
| | | | | | Lbs. | kN | Lbs. | kg |
| B2007 AL | 3/8" | (10) | .063 | (1.6) | 180 | (.80) | 4 | (1.8) |
| B2008 AL | 1/2" | (15) | .063 | (1.6) | 180 | (.80) | 4 | (1.8) |
| B2009 AL | 3/4" | (20) | .080 | (2.0) | 270 | (1.20) | 6 | (2.7) |
| B2010 AL | 1" | (25) | .080 | (2.0) | 270 | (1.20) | 7 | (3.2) |
| B2011 AL | 1 1/4" | (32) | .080 | (2.0) | 270 | (1.20) | 8 | (3.6) |
| B2012 AL | 1 1/2" | (40) | .100 | (2.5) | 360 | (1.60) | 11 | (5.0) |
| B2013 AL | 2" | (50) | .100 | (2.5) | 360 | (1.60) | 12 | (5.4) |
| B2014 AL | 2 1/2" | (65) | .100 | (2.5) | 360 | (1.60) | 13 | (5.9) |
| B2015 AL | 3" | (80) | .100 | (2.5) | 360 | (1.60) | 16 | (7.2) |
| B2016 AL | 3 1/2" | (90) | .125 | (3.2) | 450 | (2.00) | 22 | (10.0) |
| B2017 AL | 4" | (100) | .125 | (3.2) | 450 | (2.00) | 24 | (10.9) |
| B2018 AL | 4 1/2" | (115) | .125 | (3.2) | 450 | (2.00) | 26 | (11.8) |
| B2019 AL | 5" | (125) | .125 | (3.2) | 450 | (2.00) | 27 | (12.2) |
| B2020 AL | 6" | (150) | .125 | (3.2) | 450 | (2.00) | 33 | (14.9) |

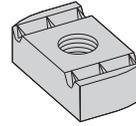
Reference page 164 for general fitting specifications. Other channel combinations available-see steel section for styles.

ALUMINUM FITTINGS

Most fittings, as shown in this catalog, can be supplied in aluminum. See "Fittings" section of this catalog. Consult factory for possible minimum production quantities and set-up charges.



SPRING NUT



NUT WITHOUT SPRING

NUTS FOR B12 CHANNEL

| Part Number | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|-----------|-------|-------|-------|
| With Spring | Without Spring | | | | Lbs. | kg |
| N724SS6 | N224WOSS6 | 1/4"-20 | 1/4" | (6.3) | 6.6 | (3.0) |
| N728SS6 | N228WOSS6 | 3/8"-16 | 3/8" | (9.5) | 10.6 | (4.8) |
| N725SS6 | N225WOSS6 | 1/2"-13 | 3/8" | (9.5) | 9.7 | (4.4) |

NUTS FOR B22, B24 CHANNELS

| Part Number | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|-----------|-------|-------|-------|
| With Spring | Without Spring | | | | Lbs. | kg |
| N224SS6 | N224WOSS6 | 1/4"-20 | 1/4" | (6.3) | 6.6 | (3.0) |
| N228SS6 | N228WOSS6 | 3/8"-16 | 3/8" | (9.5) | 10.6 | (4.8) |
| N225SS6 | N225WOSS6 | 1/2"-13 | 3/8" | (9.5) | 9.7 | (4.4) |

NUTS FOR B54 CHANNEL

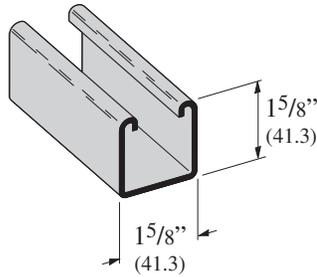
| Part Number | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|-----------|-------|-------|-------|
| With Spring | Without Spring | | | | Lbs. | kg |
| N524SS6 | N224WOSS6 | 1/4"-20 | 1/4" | (6.3) | 6.6 | (3.0) |
| N528SS6 | N228WOSS6 | 3/8"-16 | 3/8" | (9.5) | 10.6 | (4.8) |
| N525SS6 | N525WOSS6 | 1/2"-13 | 3/8" | (9.5) | 9.7 | (4.4) |

B-Line recommends the use of Stainless Steel channel nuts with Aluminum channel. For channel nut pull-out strength and slip resistance, use the channel nut information provided on pg. 50 & 51. A (.70) multiplier is to be applied to obtain the appropriate derated values for aluminum channel.

Reference page 164 for general fitting specifications. Other channel combinations available-see steel section for styles.

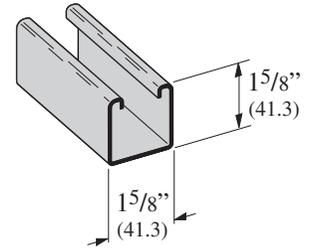
B22SS*

- *Substitute 4 for Stainless Steel Type 304 or 6 for Stainless Steel Type 316
- Thickness: 12 Ga. (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4, SS6
- Weight: 1.90 Lbs./Ft. (2.83 kg/m)



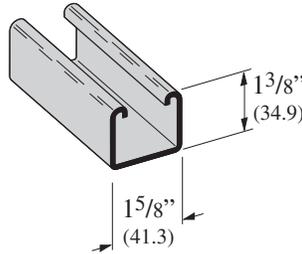
B24SS*

- *Substitute 4 for Stainless Steel Type 304 or 6 for Stainless Steel Type 316
- Thickness: 14 Ga. (1.9 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4, SS6
- Weight: 1.40 Lbs./Ft. (2.08 kg/m)



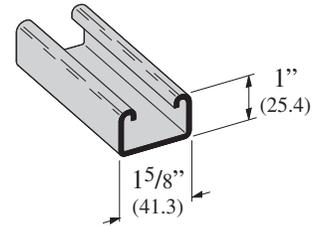
B32SS4

- Thickness: 12 Ga. (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4
- Weight: 1.70 Lbs./Ft. (2.53 kg/m)



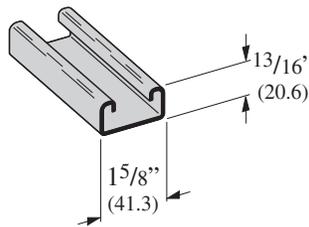
B42SS4

- Thickness: 12 Ga. (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4
- Weight: 1.44 Lbs./Ft. (2.14 kg/m)

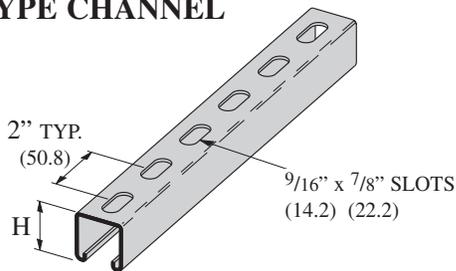


B54SS*

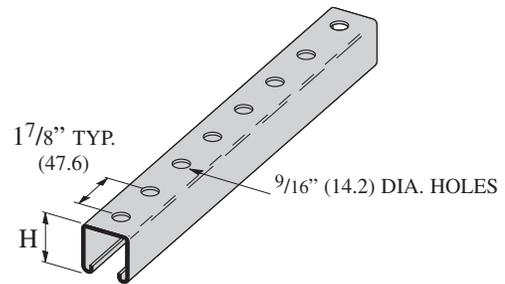
- *Substitute 4 for Stainless Steel Type 304 or 6 for Stainless Steel Type 316
- Thickness: 14 Ga. (1.9 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4, SS6
- Weight: .97 Lbs./Ft. (1.44 kg/m)



SH TYPE CHANNEL



H-17/8 TYPE CHANNEL



| Part No. | Thickness | H | Wt./C Lbs./Ft. kg/m |
|-----------|--------------|----------------|------------------------|
| B22SH SS4 | 12 Ga. (2.6) | 1 5/8" (41.3) | 1.82 (2.70) |
| B22SH SS6 | 12 Ga. (2.6) | 1 5/8" (41.3) | 1.82 (2.70) |
| B24SH SS4 | 14 Ga. (1.9) | 1 5/8" (41.3) | 1.34 (1.99) |
| B24SH SS6 | 14 Ga. (1.9) | 1 5/8" (41.3) | 1.34 (1.99) |
| B32SH SS4 | 12 Ga. (2.6) | 1 3/8" (34.9) | 1.62 (2.41) |
| B42SH SS4 | 12 Ga. (2.6) | 1" (25.4) | 1.36 (2.02) |
| B54SH SS4 | 14 Ga. (1.9) | 1 3/16" (20.6) | .91 (1.35) |
| B54SH SS6 | 14 Ga. (1.9) | 1 3/16" (20.6) | .91 (1.35) |

| Part No. | Thickness | H | Wt./C Lbs./Ft. kg/m |
|--------------|--------------|----------------|------------------------|
| B22H17/8 SS4 | 12 Ga. (2.6) | 1 5/8" (41.3) | 1.85 (2.75) |
| B24H17/8 SS4 | 14 Ga. (1.9) | 1 5/8" (41.3) | 1.36 (2.02) |
| B24H17/8 SS6 | 14 Ga. (1.9) | 1 5/8" (41.3) | 1.36 (2.02) |
| B32H17/8 SS4 | 12 Ga. (2.6) | 1 3/8" (34.9) | 1.65 (2.45) |
| B42H17/8 SS4 | 12 Ga. (2.6) | 1" (25.4) | 1.39 (2.07) |
| B54H17/8 SS4 | 14 Ga. (1.9) | 1 3/16" (20.6) | .93 (1.38) |
| B54H17/8 SS6 | 14 Ga. (1.9) | 1 3/16" (20.6) | .93 (1.38) |

Reference page 164 for general fitting specifications. Other channel combinations available-see steel section for styles.

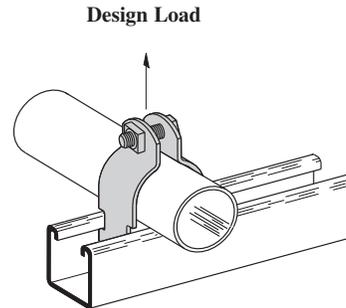
STAINLESS STEEL FITTINGS

Most fittings, as shown in this catalog, can be supplied in Type 304 or Type 316 stainless steel. See "Fittings" section of this catalog. Consult factory for possible minimum production quantities and set-up charges.

B2000 SERIES PIPE AND TUBING CLAMPS

- Safety Factor of 5
- Combination Recess Hex Head Machine Screw and Square Nut included
- Material: Stainless Steel Type 304 & 316

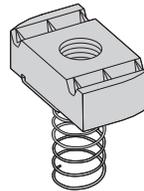
| Part No. | Conduit Pipe Size | | Material Thickness | | Design Load | | Wt./C | |
|-----------|----------------------|-------|-----------------------|-------|-------------|--------|-------|--------|
| | | | | | Lbs. | kN | Lbs. | kg |
| B2007 SS4 | 3/8" | (10) | 16 Ga. | (1.5) | 400 | (1.78) | 10 | (4.5) |
| B2008 SS4 | 1/2" | (15) | 16 Ga. | (1.5) | 400 | (1.78) | 11 | (5.0) |
| B2009 SS4 | 3/4" | (20) | 14 Ga. | (1.9) | 600 | (2.67) | 15 | (6.8) |
| B2010 SS4 | 1" | (25) | 14 Ga. | (1.9) | 600 | (2.67) | 16 | (7.2) |
| B2011 SS4 | 1 1/4" | (32) | 14 Ga. | (1.9) | 600 | (2.67) | 20 | (9.1) |
| B2012 SS4 | 1 1/2" | (40) | 12 Ga. | (2.6) | 800 | (3.56) | 30 | (13.6) |
| B2013 SS4 | 2" | (50) | 12 Ga. | (2.6) | 800 | (3.56) | 34 | (15.4) |
| B2014 SS4 | 2 1/2" | (65) | 12 Ga. | (2.6) | 800 | (3.56) | 38 | (17.2) |
| B2015 SS4 | 3" | (80) | 12 Ga. | (2.6) | 800 | (3.56) | 44 | (19.9) |
| B2016 SS4 | 3 1/2" | (90) | 12 Ga. | (2.6) | 1000 | (4.45) | 51 | (23.1) |
| B2017 SS4 | 4" | (100) | 12 Ga. | (2.6) | 1000 | (4.45) | 55 | (24.9) |
| B2018 SS4 | 4 1/2" | (115) | 12 Ga. | (2.6) | 1000 | (4.45) | 59 | (26.7) |
| B2019 SS4 | 5" | (125) | 12 Ga. | (2.6) | 1000 | (4.45) | 64 | (29.0) |
| B2020 SS4 | 6" | (150) | 12 Ga. | (2.6) | 1000 | (4.45) | 80 | (36.3) |



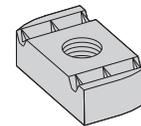
CHANNEL NUTS

•For Channel Nuts pull-out strength and slip resistance, use the data shown in "Channel Nuts & Hardware" section of this catalog.

Note: Reduce slip load by 50% due to hardness of material.



SPRING NUT



NUT WITHOUT SPRING

NUTS FOR B22, B24, B32 CHANNELS

| Part Number | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|-----------|-------|-------|-------|
| With Spring | Without Spring | | | | Lbs. | kg |
| N224SS6 | N224WOSS6 | 1/4"-20 | 1/4" | (6.3) | 6.6 | (3.0) |
| N228SS6 | N228WOSS6 | 3/8"-16 | 3/8" | (9.5) | 10.6 | (4.8) |
| N225SS6 | N225WOSS6 | 1/2"-13 | 3/8" | (9.5) | 9.7 | (4.4) |

NUTS FOR B42, B52, B54 CHANNELS

| Part Number | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|-----------|-------|-------|-------|
| With Spring | Without Spring | | | | Lbs. | kg |
| N524SS6 | N224WOSS6 | 1/4"-20 | 1/4" | (6.3) | 6.6 | (3.0) |
| N528SS6 | N228WOSS6 | 3/8"-16 | 3/8" | (9.5) | 10.6 | (4.8) |
| N525SS6 | N225WOSS6 | 1/2"-13 | 3/8" | (9.5) | 9.7 | (4.4) |

Reference page 164 for general fitting specifications. Other channel combinations available-see steel section for styles.

Fiberglass

B-Line offers two fire retardant (FR) resins for strut systems, polyester and vinyl ester. Both resins are ideal for corrosive environments.

While polyester is sufficient for most uses, vinyl ester is suitable for a broader range of environments.

Please refer to the "Corrosion Resistance Guide" for specific applications, page 171.

Materials & Finishes

B-Line Fiberglass Strut systems are manufactured from glass fiber-reinforced plastic shapes that meet ASTM E-84, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to insure a resin-rich surface and ultraviolet resistance.

Fittings

The following dimensions apply to all fittings except as noted on the drawings:

Hole Size— $13/32$ " (10.3 mm) Dia.

Hole Spacing— $13/16$ " (20.6 mm) from end and $17/8$ " (47.6 mm) on center.

Width— $15/8$ " (41.3 mm)

Thickness— $1/4$ " (6.3 mm)

Metric

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



CHANNEL RESIN INFORMATION

B-Line offers two fire retardant (FR) resins for strut systems, polyester and vinyl ester. Both resins are ideal for corrosive environments.

While polyester is sufficient for most uses, vinyl ester is suitable for a broader range of environments.

Please refer to the "Corrosion Resistance Guide" below for specific applications.

| Corrosion Resistance Guide | | | | | |
|-------------------------------|-------------|--------------|-------------------------|-------------|--------------|
| Chemicals | 70°F (21°C) | 160°F (71°C) | Chemicals | 70°F (21°C) | 160°F (71°C) |
| Acetic acid 5% | BFP/BFV | BFP/BFV | Methyl alcohol 10% | BFP/BFV | BFV-150° ** |
| Acetic acid 52% | BFP/BFV | BFV-210° ** | Naphtha | BFP/BFV | BFP/BFV |
| Aluminum potassium sulfate 5% | BFP/BFV | BFP/BFV | Nitric acid 5% | BFP/BFV | BFP/BFV |
| Ammonium hydroxide 10% | BFP/BFV | BFV-150° ** | Nitric acid 20% | BFV | BFV-120° ** |
| Ammonium nitrate | BFP/BFV | BFP/BFV | Phosphoric acid 10% | BFP/BFV | BFP/BFV |
| Benzene sulfonic acid 5% | BFP/BFV | BFP/BFV | Phosphoric acid 30% | BFP/BFV | BFP/BFV |
| Calcium chloride | BFP/BFV | BFP/BFV | Phosphoric acid 85% | BFP/BFV | BFP/BFV |
| Carbon tetrachloride | BFV | BFV-100° ** | Sodium bicarbonate 10% | BFP/BFV | BFP/BFV |
| Chlorine dioxide 15% | BFP/BFV | BFV-150° ** | Sodium bisulfate | BFP/BFV | BFP/BFV |
| Chromic acid 5% | BFV | BFV-150° ** | Sodium carbonate | BFP/BFV | BFV |
| Copper sulfate | BFP/BFV | BFP/BFV | Sodium chloride | BFP/BFV | BFP/BFV |
| Diesel fuel | BFP/BFV | BFV | Sodium hydroxide 1-50% | BFV | BFV-120° ** |
| Ethylene glycol | BFP/BFV | BFP/BFV | Sodium hypochlorite 5% | BFP/BFV | BFV-120° ** |
| Fatty acids 100% | BFP/BFV | BFP/BFV | Sodium nitrate | BFP/BFV | BFP/BFV |
| Ferrous sulfate | BFP/BFV | BFP/BFV | Sodium silicate | BFP/BFV | BFV-210° ** |
| Fluosilicic acid 0-20% | BFV | BFV | Sodium sulfate | BFP/BFV | BFP/BFV |
| Gasoline | BFP/BFV | BFV | Sulfuric acid 0-30% | BFP/BFV | BFP/BFV |
| Hydrochloric acid 1% | BFP/BFV | BFP/BFV | Sulfuric acid 30-50% | BFV | BFV |
| Hydrochloric acid 15% | BFP/BFV | BFV-180° ** | Sulfuric acid 50-70% | BFV | BFV-180° ** |
| Hydrochloric acid 37% | BFP/BFV | BFV-150° ** | Trisodium phosphate 25% | BFP/BFV | BFV-210° ** |
| Kerosene | BFP/BFV | BFP/BFV | Trisodium phosphate-All | BFV | BFV-210° ** |
| Magnesium chloride | BFP/BFV | BFP/BFV | Water, Distilled | BFP/BFV | BFP/BFV |

BFP - BFP parts recommended BFV - BFV parts recommended ** - Not recommended to exceed this temperature

Information contained in this chart is based on data from raw material suppliers.

Temperatures are not the minimum nor the maximum (except where specifically stated) but represent standard test conditions. The products may be suitable at higher temperatures but individual test data should be required to establish suitability.

The recommendations or suggestions contained in this chart are made without guarantee or representation as to results. We suggest that you evaluate the recommendations and suggestions in your own laboratory or actual field trial prior to use.

Recommended Guideline:

| Temperature | Design Load Multiplier |
|--------------|------------------------|
| 75°F (24°C) | 100% |
| 100°F (38°C) | 90% |
| 125°F (52°C) | 78% |
| 150°F (66°C) | 68% |
| 175°F (79°C) | 60% |
| 200°F (93°C) | 52% |

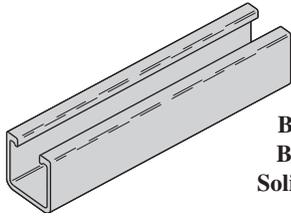
| Flame Retardant Properties | BFP | BFV |
|---|----------------|----------------|
| Flame Resistance (FTMS 406-2023) ign/burn, seconds | 75/75 | 75/75 |
| Intermittent Flame Test (HLT-15), rating | 100 | 100 |
| Flammability Test (ASTM D635) Ignition Burning Time | none 0 sec. | none 0 sec. |
| Surface Burning Characteristics (ASTM E84), Flame spread index | 25 | 25 |
| UL 94 Flame Class | V-0 | V-0 |

Reference page 170 for general fitting specifications.

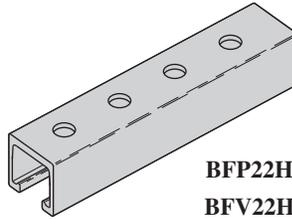
Fiberglass

BFP22 THRU BFV22SH

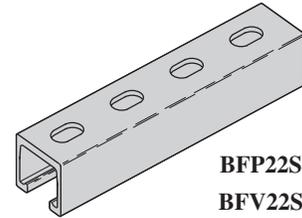
- Channel lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



**BFP22
BFV22**
Solid Back

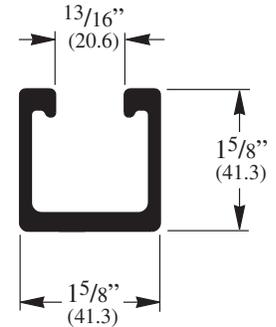


**BFP22H1 7/8
BFV22H1 7/8**
9/16" (14.3) holes
1 7/8" (47.6) on centers



**BFP22SH
BFV22SH**
9/16" (14.3) x 7/8" (22.2) slots
2" (50.8) on centers

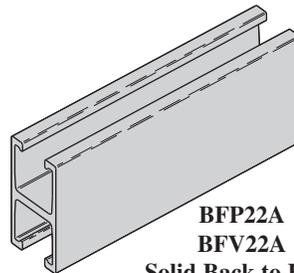
| Part No. | Material | Description | Color | Weight | |
|--------------|-------------------|---------------|-------|----------|-------|
| | | | | Lbs./ft. | kg/m |
| BFP22* | Polyester Resin | Solid Back | Gray | .63 | (.94) |
| BFV22* | Vinyl Ester Resin | Solid Back | Beige | .63 | (.94) |
| BFP22H1 7/8* | Polyester Resin | Holes in Back | Gray | .60 | (.89) |
| BFV22H1 7/8* | Vinyl Ester Resin | Holes in Back | Beige | .60 | (.89) |
| BFP22SH* | Polyester Resin | Slots in Back | Gray | .61 | (.91) |
| BFV22SH* | Vinyl Ester Resin | Slots in Back | Beige | .61 | (.91) |



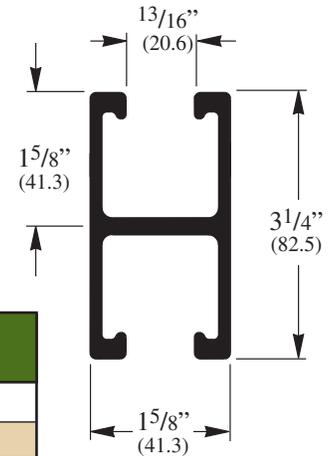
* Insert -10 for 10'-0" (3.05 m) length or -20 for 20'-0" (6.09 m) length

BFP22A BFV22A

- Channel Lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



**BFP22A
BFV22A**
Solid Back to Back



| Part No. | Material | Description | Color | Weight | |
|----------|-------------------|--------------|-------|----------|--------|
| | | | | Lbs./ft. | kg/m |
| BFP22A* | Polyester Resin | Back To Back | Gray | 1.15 | (1.71) |
| BFV22A* | Vinyl Ester Resin | Back To Back | Beige | 1.15 | (1.71) |

* Insert -10 for 10'-0" (3.05 m) length or -20 for 20'-0" (6.09 m) length

WARNING: Appropriate protective clothing and respiratory protection device should be worn when field cutting or grinding fiberglass.

Published design loads on page 172 are based on usage at 70°F (21°C) and must be reduced for continuous exposure to higher temperatures. Refer to the chart below for high temperature applications.

Field Cutting Sealant Kits

RSK010 Pint Sealing Kit (473 cm³)
includes sealant and brush applicator

- Seals exposed fibers after field cutting. •
- UV resistant •

| Temperature | Design Load Multiplier |
|--------------|------------------------|
| 75°F (24°C) | 100% |
| 100°F (38°C) | 90% |
| 125°F (52°C) | 78% |
| 150°F (66°C) | 68% |
| 175°F (79°C) | 60% |
| 200°F (93°C) | 52% |

Reference page 170 for general fitting specifications.

BEAM LOADING DATA FOR GLASS REINFORCED POLYESTER RESIN

| Beam Span | | Part No. | Maximum Allowable Beam Load | | Deflection @ Maximum Allowable Beam Load | | Allowable Load @ Deflection = | | | |
|-----------|--------|---------------|-----------------------------|---------|--|----------|-------------------------------|---------|------------|--------|
| | | | | | | | 1/240 Span | | 1/360 Span | |
| in. | mm | | Lbs. | kN | in. | mm | Lbs. | kN | Lbs. | kN |
| 12" | (305) | BFP22 | 1781 | (7.92) | 0.064 | (1.62) | 1392 | (6.19) | 928 | (4.13) |
| | | BFP22A | 2259 | (10.05) | 0.037 | (.94) | 2259 | (10.05) | 2051 | (9.12) |
| 24" | (609) | BFP22 | 890 | (3.96) | 0.256 | (6.50) | 347 | (1.54) | 231 | (1.03) |
| | | BFP22A | 1127 | (5.01) | 0.147 | (3.73) | 767 | (3.41) | 511 | (2.27) |
| 36" | (914) | BFP22 | 592 | (2.63) | 0.576 | (14.63) | 153 | (0.68) | 101 | (0.45) |
| | | BFP22A | 750 | (3.33) | 0.330 | (8.38) | 338 | (1.50) | 224 | (0.99) |
| 48" | (1219) | BFP22 | 443 | (1.97) | 1.024 | (26.01) | 85 | (0.38) | 55 | (0.24) |
| | | BFP22A | 560 | (2.49) | 0.587 | (14.91) | 188 | (0.83) | 123 | (0.55) |
| 60" | (1524) | BFP22 | 353 | (1.57) | 1.600 | (40.64) | 53 | (0.23) | 34 | (0.15) |
| | | BFP22A | 446 | (1.98) | 0.918 | (23.32) | 117 | (0.52) | 76 | (0.34) |
| 72" | (1829) | BFP22 | 293 | (1.30) | 2.303 | (58.49) | 35 | (0.15) | 22 | (0.10) |
| | | BFP22A | 370 | (1.64) | 1.322 | (33.58) | 78 | (0.34) | 50 | (0.22) |
| 96" | (2438) | BFP22 | 218 | (0.97) | 4.095 | (104.01) | 17 | (0.07) | 9 | (0.04) |
| | | BFP22A | 273 | (1.21) | 2.350 | (59.69) | 39 | (0.17) | 23 | (0.10) |
| 120" | (3048) | BFP22 | 172 | (0.76) | 6.398 | (162.51) | 8 | (0.03) | 3 | (0.01) |
| | | BFP22A | 214 | (0.95) | 3.671 | (93.24) | 19 | (0.08) | 9 | (0.04) |

BEAM LOADING DATA FOR GLASS REINFORCED VINYL ESTER RESIN

| Beam Span | | Part No. | Maximum Allowable Beam Load | | Deflection @ Maximum Allowable Beam Load | | Allowable Load @ Deflection = | | | |
|-----------|--------|---------------|-----------------------------|---------|--|----------|-------------------------------|---------|------------|---------|
| | | | | | | | 1/240 Span | | 1/360 Span | |
| in. | mm | | Lbs. | kN | in. | mm | Lbs. | kN | Lbs. | kN |
| 12" | (305) | BFV22 | 2220 | (9.87) | 0.071 | (1.80) | 1568 | (6.97) | 1045 | (4.65) |
| | | BFV22A | 6442 | (28.65) | 0.039 | (0.99) | 6442 | (29.65) | 5549 | (24.68) |
| 24" | (609) | BFV22 | 1109 | (4.93) | 0.283 | (7.19) | 391 | (1.74) | 260 | (1.15) |
| | | BFV22A | 3219 | (14.32) | 0.155 | (3.94) | 2079 | (9.25) | 1385 | (6.16) |
| 36" | (914) | BFV22 | 738 | (3.28) | 0.637 | (16.18) | 172 | (0.76) | 114 | (0.51) |
| | | BFV22A | 2144 | (9.53) | 0.348 | (8.84) | 922 | (4.10) | 613 | (2.72) |
| 48" | (1219) | BFV22 | 553 | (2.46) | 1.133 | (28.78) | 96 | (0.43) | 63 | (0.28) |
| | | BFV22A | 1606 | (7.14) | 0.619 | (15.72) | 516 | (2.29) | 342 | (1.52) |
| 60" | (1524) | BFV22 | 441 | (1.96) | 1.770 | (44.96) | 60 | (0.26) | 39 | (0.17) |
| | | BFV22A | 1283 | (5.70) | 0.967 | (24.56) | 327 | (1.45) | 216 | (0.96) |
| 72" | (1829) | BFV22 | 366 | (1.63) | 2.549 | (64.74) | 40 | (0.18) | 25 | (0.11) |
| | | BFV22A | 1067 | (4.74) | 1.393 | (35.38) | 224 | (0.99) | 147 | (0.65) |
| 96" | (2438) | BFV22 | 273 | (1.21) | 4.531 | (115.09) | 19 | (0.08) | 11 | (0.05) |
| | | BFV22A | 796 | (3.54) | 2.477 | (62.91) | 121 | (0.54) | 78 | (0.34) |
| 120" | (3048) | BFV22 | 216 | (0.96) | 7.079 | (179.80) | 9 | (0.04) | 7 | (0.02) |
| | | BFV22A | 633 | (2.81) | 3.870 | (98.30) | 72 | (0.32) | 44 | (0.19) |

Loading Information

Beam Loads:

The above charts list the total allowable uniform load for various simple spans based on a minimum safety factor of 2. If the load is concentrated at center span, multiply the load from the above charts by 0.5 and the corresponding deflection by 0.8.

All beams should be supported in a manner to prevent rotation at supports. Long, deep beams should be tied between supports to prevent twist.

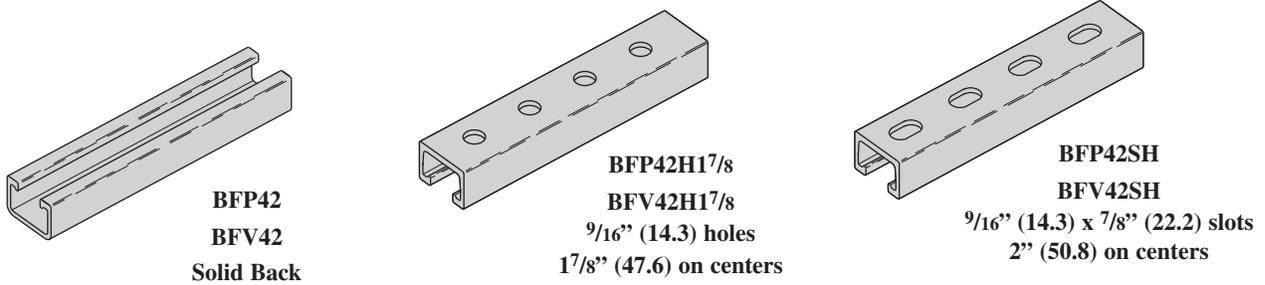
For channels with holes or slots use 90% of recommended load shown in channel loading chart.

Reference page 170 for general fitting specifications.

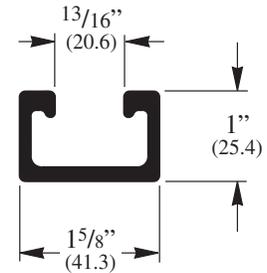
Fiberglass

BFP42 THRU BFV42SH

- Channel lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



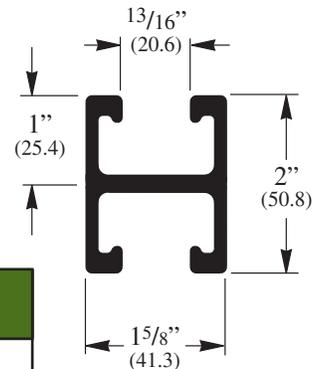
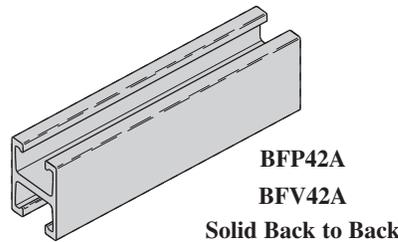
| Part No. | Material | Description | Color | Weight | |
|-------------------------------|-------------------|---------------|-------|----------|-------|
| | | | | Lbs./ft. | kg/m |
| BFP42* | Polyester Resin | Solid Back | Gray | .48 | (.71) |
| BFV42* | Vinyl Ester Resin | Solid Back | Beige | .48 | (.71) |
| BFP42H1^{7/8}* | Polyester Resin | Holes in Back | Gray | .46 | (.68) |
| BFV42H1^{7/8}* | Vinyl Ester Resin | Holes in Back | Beige | .46 | (.68) |
| BFP42SH* | Polyester Resin | Slots in Back | Gray | .47 | (.70) |
| BFV42SH* | Vinyl Ester Resin | Slots in Back | Beige | .47 | (.70) |



* Insert -10 for 10'-0" (3.05 m) length or -20 for 20'-0" (6.09 m) length

BFP42A BFV42A

- Channel lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



| Part No. | Material | Description | Color | Weight | |
|----------------|-------------------|--------------|-------|----------|--------|
| | | | | Lbs./ft. | kg/m |
| BFP42A* | Polyester Resin | Back To Back | Gray | .85 | (1.26) |
| BFV42A* | Vinyl Ester Resin | Back To Back | Beige | .85 | (1.26) |

* Insert -10 for 10'-0" (3.05 m) length or -20 for 20'-0" (6.09 m) length

WARNING: Appropriate protective clothing and respiratory protection device should be worn when field cutting or grinding fiberglass.

Published design loads on page 174 are based on usage at 70°F (21°C) and must be reduced for continuous exposure to higher temperatures. Refer to the chart below for high temperature applications.

Field Cutting Sealant Kits

RSK010 Pint Sealing Kit (473 cm³)
includes sealant and brush applicator

- Seals exposed fibers after field cutting. •
- UV resistant •

| Temperature | Design Load Multiplier |
|--------------|------------------------|
| 75°F (24°C) | 100% |
| 100°F (38°C) | 90% |
| 125°F (52°C) | 78% |
| 150°F (66°C) | 68% |
| 175°F (79°C) | 60% |
| 200°F (93°C) | 52% |

Reference page 170 for general fitting specifications.

BEAM LOADING DATA FOR GLASS REINFORCED POLYESTER RESIN

| Beam Span | | Part No. | Maximum Allowable Beam Load | | Deflection @ Maximum Allowable Beam Load | | Allowable Load @ Deflection = | | | |
|-----------|--------|----------|-----------------------------|---------|--|----------|-------------------------------|--------|------------|--------|
| | | | | | | | 1/240 Span | | 1/360 Span | |
| in. | mm | | Lbs. | kN | in. | mm | Lbs. | kN | Lbs. | kN |
| 12" | (305) | BFP42 | 841 | (3.74) | 0.104 | (2.64) | 403 | (1.79) | 269 | (1.19) |
| | | BFP42A | 2325 | (10.34) | 0.060 | (1.52) | 1948 | (8.66) | 1299 | (5.78) |
| 24" | (609) | BFP42 | 420 | (1.87) | 0.417 | (10.59) | 100 | (0.44) | 66 | (0.29) |
| | | BFP42A | 1161 | (5.16) | 0.239 | (6.07) | 486 | (2.16) | 323 | (1.43) |
| 36" | (914) | BFP42 | 279 | (1.24) | 0.938 | (23.82) | 43 | (0.19) | 29 | (0.13) |
| | | BFP42A | 773 | (3.44) | 0.537 | (13.64) | 214 | (0.95) | 142 | (0.63) |
| 48" | (1219) | BFP42 | 208 | (0.92) | 1.667 | (42.34) | 23 | (0.10) | 15 | (0.06) |
| | | BFP42A | 578 | (2.57) | 0.955 | (24.26) | 119 | (0.53) | 78 | (0.34) |
| 60" | (1524) | BFP42 | 166 | (0.74) | 2.604 | (66.14) | 14 | (0.06) | 8 | (0.03) |
| | | BFP42A | 461 | (2.05) | 1.491 | (37.87) | 74 | (0.33) | 48 | (0.21) |
| 72" | (1829) | BFP42 | 137 | (0.61) | 3.750 | (95.25) | 8 | (0.03) | 5 | (0.02) |
| | | BFP42A | 383 | (1.70) | 2.148 | (54.56) | 49 | (0.22) | 31 | (0.14) |
| 96" | (2438) | BFP42 | 101 | (0.45) | 6.667 | (169.34) | 3 | (0.01) | – | – |
| | | BFP42A | 284 | (1.26) | 3.818 | (96.98) | 24 | (0.10) | 14 | (0.04) |
| 120" | (3048) | BFP42 | 79 | (0.35) | 10.417 | (264.59) | – | – | – | – |
| | | BFP42A | 224 | (0.99) | 5.966 | (151.53) | 11 | (0.05) | 5 | (0.02) |

BEAM LOADING DATA FOR GLASS REINFORCED VINYL ESTER RESIN

| Beam Span | | Part No. | Maximum Allowable Beam Load | | Deflection @ Maximum Allowable Beam Load | | Allowable Load @ Deflection = | | | |
|-----------|--------|----------|-----------------------------|---------|--|----------|-------------------------------|---------|------------|---------|
| | | | | | | | 1/240 Span | | 1/360 Span | |
| in. | mm | | Lbs. | kN | in. | mm | Lbs. | kN | Lbs. | kN |
| 12" | (305) | BFV42 | 988 | (4.39) | 0.112 | (2.84) | 440 | (1.96) | 293 | (1.30) |
| | | BFV42A | 2865 | (12.74) | 0.063 | (1.60) | 2278 | (10.13) | 1518 | (6.75) |
| 24" | (609) | BFV42 | 493 | (2.19) | 0.448 | (11.38) | 109 | (0.48) | 73 | (0.32) |
| | | BFV42A | 1431 | (6.36) | 0.252 | (6.40) | 568 | (2.52) | 378 | (1.68) |
| 36" | (914) | BFV42 | 328 | (1.46) | 1.009 | (25.63) | 48 | (0.21) | 31 | (0.14) |
| | | BFV42A | 953 | (4.24) | 0.566 | (14.37) | 251 | (1.11) | 166 | (0.74) |
| 48" | (1219) | BFV42 | 245 | (1.09) | 1.793 | (45.54) | 26 | (0.11) | 16 | (0.07) |
| | | BFV42A | 713 | (3.17) | 1.006 | (25.55) | 139 | (0.62) | 92 | (0.41) |
| 60" | (1524) | BFV42 | 195 | (0.87) | 2.802 | (71.17) | 15 | (0.06) | 9 | (0.04) |
| | | BFV42A | 569 | (2.53) | 1.572 | (39.93) | 87 | (0.38) | 57 | (0.25) |
| 72" | (1829) | BFV42 | 162 | (0.72) | 4.035 | (102.49) | 9 | (0.04) | 5 | (0.02) |
| | | BFV42A | 473 | (2.10) | 2.264 | (57.50) | 58 | (0.26) | 37 | (0.16) |
| 96" | (2438) | BFV42 | 120 | (0.53) | 7.173 | (182.19) | 3 | (0.01) | 1 | (0.004) |
| | | BFV42A | 351 | (1.56) | 4.025 | (102.23) | 29 | (0.13) | 17 | (0.07) |
| 120" | (3048) | BFV42 | 94 | (0.42) | 11.207 | (284.66) | – | – | – | – |
| | | BFV42A | 278 | (1.23) | 6.288 | (159.71) | 14 | (0.06) | 7 | (0.03) |

Loading Information

Beam Loads:

The above charts list the total allowable uniform load for various simple spans based on a minimum safety factor of 2. If the load is concentrated at center span, multiply the load from the above charts by 0.5 and the corresponding deflection by 0.8.

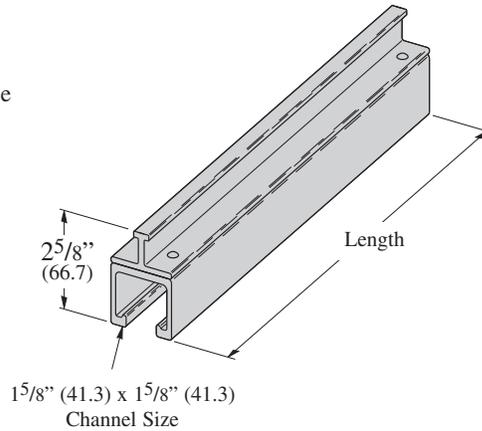
All beams should be supported in a manner to prevent rotation at supports. Long, deep beams should be tied between supports to prevent twist. For channels with holes or slots use 90% of recommended load shown in channel loading chart.

Reference page 170 for general fitting specifications.

Fiberglass

BF*22I CONCRETE INSERTS

- Design Load 300 Lbs (1.47 kN)
- Safety Factor of 3
- Standard lengths: 6" (152), 12" (305), 24" (609), 36" (914), 48" (1219), 60" (1524), 72" (1829), 84" (2133), 96" (2438), 108" (2743) and 120" (3048)
- Available Material:
 - *Insert P for BFP - Polyester Resin channel and tee
 - *Insert V for BFV - Vinyl Ester Resin channel with Polyester Resin tee
- Shipped with removable styrofoam insert



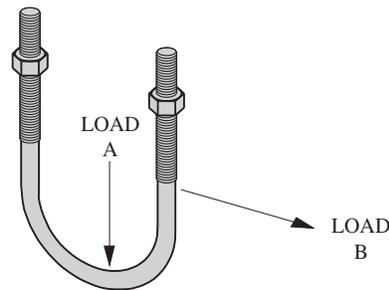
Field Cutting Sealant Kits

RSK010 Pint Sealing Kit (473 cm³)
includes sealant and brush applicator

- Seals exposed fibers after field cutting. •
- UV resistant •

BFV501 SERIES U-BOLTS WITH HEX NUTS

- Design Load Safety Factor of 3
- Load A: Straight down loading
- Load B: Side loading
- Inner surface of U-Bolt is flat to provide additional contact surface area
- Material: Glass Reinforced Polyurethane

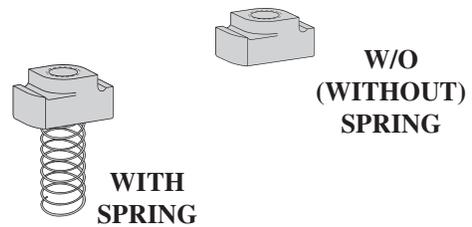


| Part No. | Nominal Pipe Size | | Thread Size | Design Load A | | Design Load B | | Maximum Torque | | Wt./C | |
|---------------------|-------------------|-------|-------------|---------------|--------|---------------|-------|----------------|-------|-------|--------|
| | in. | mm | | Lbs. | kN | Lbs. | kN | in.-Lbs. | N•m | Lbs. | kg |
| BFV501-1/2 | 1/2 | (15) | 3/8"-16 | 300 | (1.33) | 150 | (.67) | 30 | (3.4) | 3.5 | (1.59) |
| BFV501-3/4 | 3/4 | (20) | 3/8"-16 | 300 | (1.33) | 150 | (.67) | 30 | (3.4) | 3.9 | (1.77) |
| BFV501-1 | 1 | (25) | 3/8"-16 | 300 | (1.33) | 150 | (.67) | 30 | (3.4) | 4.4 | (1.99) |
| BFV501-1 1/4 | 1 1/4 | (32) | 3/8"-16 | 300 | (1.33) | 150 | (.67) | 30 | (3.4) | 4.8 | (2.18) |
| BFV501-1 1/2 | 1 1/2 | (40) | 3/8"-16 | 300 | (1.33) | 150 | (.67) | 30 | (3.4) | 5.2 | (2.36) |
| BFV501-2 | 2 | (50) | 1/2"-13 | 600 | (2.67) | 200 | (.89) | 60 | (6.8) | 7.7 | (3.49) |
| BFV501-2 1/2 | 2 1/2 | (65) | 1/2"-13 | 600 | (2.67) | 200 | (.89) | 60 | (6.8) | 10.2 | (4.63) |
| BFV501-3 | 3 | (80) | 1/2"-13 | 600 | (2.67) | 200 | (.89) | 60 | (6.8) | 12.6 | (5.71) |
| BFV501-3 1/2 | 3 1/2 | (90) | 1/2"-13 | 600 | (2.67) | 200 | (.89) | 60 | (6.8) | 15.1 | (6.85) |
| BFV501-4 | 4 | (100) | 1/2"-13 | 600 | (2.67) | 200 | (.89) | 60 | (6.8) | 17.6 | (7.98) |

Reference page 170 for general fitting specifications.

CHANNEL NUTS

- Design Load Safety Factor of 3
- Overall Nut Height $5/8''$ (15.9)
- Maximum torque and slip resistance loads shown are when using stainless steel bolts. When using fiberglass hardware use Max. Torque for fiberglass bolts, and multiply slip resistance loads by .14 for $3/8''$ and .60 for $1/2''$ thread size.
- Material: Glass Reinforced Polyurethane
- Spring Material: Zinc Plated Steel

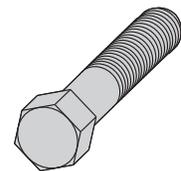


| Part No. With Spring | Part No. W/O Spring | Thread Size | Pull-Out | | Slip Resistance | | Max. Torque | | Wt./C | |
|-------------------------|------------------------|----------------|----------|--------|-----------------|-------|-------------|--------|-------|--------|
| | | | Lbs | kN | Lbs. | N | in.-Lbs. | N•m | Lbs. | kg |
| BFV-224 | BFV-224WO | $1/4''$ -20 | 300 | (1.33) | 150 | (.67) | 200 | (22.6) | 2.4 | (1.09) |
| BFV-223 | BFV-223WO | $5/16''$ -18 | 300 | (1.33) | 150 | (.67) | 200 | (22.6) | 2.5 | (1.13) |
| BFV-228 | BFV-228WO | $3/8''$ -16 | 300 | (1.33) | 150 | (.67) | 200 | (22.6) | 2.3 | (1.04) |
| BFV-225 | BFV-225WO | $1/2''$ -13 | 300 | (1.33) | 150 | (.67) | 200 | (22.6) | 2.1 | (0.95) |

BFVHHCS HEX HEAD CAP SCREWS

- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyurethane

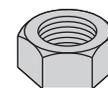
| Part No. | Thread Size | Design Load (in tension) | | Max. Torque | | Wt./C | |
|---|----------------|-----------------------------|--------|-------------|--------|-------|--------|
| | | Lbs. | kN | in.-Lbs. | N•m | Lbs. | kg |
| BFVHHCS $5/16$ x 1 | $5/16''$ -18 | 190 | (.84) | 30 | (3.4) | .4 | (.18) |
| BFVHHCS $5/16$ x $1 1/4$ | $5/16''$ -18 | 190 | (.84) | 30 | (3.4) | .5 | (.23) |
| BFVHHCS $5/16$ x $1 1/2$ | $5/16''$ -18 | 190 | (.84) | 30 | (3.4) | .6 | (.27) |
| BFVHHCS $5/16$ x 2 | $5/16''$ -18 | 190 | (.84) | 30 | (3.4) | .8 | (.36) |
| BFVHHCS $3/8$ x 1 | $3/8''$ -16 | 300 | (1.33) | 45 | (5.1) | .9 | (.41) |
| BFVHHCS $3/8$ x $1 1/4$ | $3/8''$ -16 | 300 | (1.33) | 45 | (5.1) | 1.1 | (.50) |
| BFVHHCS $3/8$ x $1 1/2$ | $3/8''$ -16 | 300 | (1.33) | 45 | (5.1) | 1.3 | (.59) |
| BFVHHCS $3/8$ x 2 | $3/8''$ -16 | 300 | (1.33) | 45 | (5.1) | 1.3 | (.59) |
| BFVHHCS $3/8$ x $2 1/2$ | $3/8''$ -16 | 300 | (1.33) | 45 | (5.1) | 1.5 | (.68) |
| BFVHHCS $1/2$ x 1 | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 1.4 | (.63) |
| BFVHHCS $1/2$ x $1 1/4$ | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 1.8 | (.81) |
| BFVHHCS $1/2$ x $1 1/2$ | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 2.2 | (1.00) |
| BFVHHCS $1/2$ x 2 | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 3.0 | (1.36) |
| BFVHHCS $1/2$ x $2 1/2$ | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 3.7 | (1.68) |
| BFVHHCS $1/2$ x 3 | $1/2''$ -13 | 490 | (2.18) | 110 | (12.4) | 4.5 | (2.04) |



BFVHN HEX NUTS

- $3/4''$ & $1''$ sizes are available. Contact inside sales for details
- Material: Glass Reinforced Polyurethane

| Part No. | Thread Size | Nut Thickness | | Wt./C | |
|--------------------------------|----------------|---------------|--------|-------|-------|
| | | in. | mm | Lbs. | kg |
| BFVHN $5/16$ | $5/16''$ -18 | $17/64$ | (6.7) | .2 | (.09) |
| BFVHN $3/8$ | $3/8''$ -16 | $21/64$ | (8.3) | .3 | (.13) |
| BFVHN $1/2$ | $1/2''$ -13 | $7/16$ | (11.1) | .7 | (.32) |
| BFVHN $5/8$ | $5/8''$ -11 | $35/64$ | (13.9) | 1.4 | (.63) |



Reference page 170 for general fitting specifications.

Fiberglass

BFVATR ALL THREADED ROD

- Design Load Safety Factor of 3
- Use ATR nuts in place of hex nuts with $3/8$ "-16 and $1/2$ "-13 threaded rod in order to obtain minimum required thread engagement of $17/32$ " (13.5) to obtain design load shown below.
- Material: Glass Reinforced Vinyl Ester

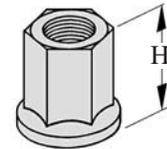
| Part No. | Thread Size | Design Load (in tension) | | Max. Torque | | Wt./Ft. | |
|--------------------|-------------|--------------------------|--------|-------------|--------|---------|-------|
| | | Lbs. | kN | in.-Lbs. | N•m | Lbs. | kg |
| BFVATR $3/8$ x 48" | $3/8$ "-16 | 425 | (1.89) | 45 | (5.1) | .08 | (.04) |
| BFVATR $1/2$ x 48" | $1/2$ "-13 | 750 | (3.33) | 110 | (12.4) | .13 | (.06) |
| BFVATR $5/8$ x 48" | $5/8$ "-11 | 950 | (4.22) | 230 | (26.0) | .21 | (.09) |



BFVATRH THREADED ROD NUTS

- ATR Nut is required with $3/8$ "-16 and $1/2$ "-13 ATR to provide additional thread engagement which is critical to ATR load carrying capacity.
- Material: Glass Reinforced Polyurethane

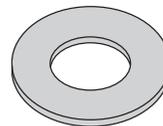
| Part No. | Thread Size | H | | Wt./C | |
|---------------|-------------|-------|------|-------|-------|
| | | in. | mm | Lbs. | kg |
| BFVATRH $3/8$ | $3/8$ "-16 | $3/4$ | (19) | .8 | (.36) |
| BFVATRH $1/2$ | $1/2$ "-13 | $7/8$ | (22) | 1.7 | (.77) |



BFVFW FLAT WASHERS

- Material: PVC

| Part No. | Hole Size in. | Wt./C | |
|-------------|---------------|-------|-------|
| | | Lbs. | kg |
| BFVFW $3/8$ | $3/8$ | .5 | (.22) |
| BFVFW $1/2$ | $1/2$ | .5 | (.22) |
| BFVFW $5/8$ | $5/8$ | .5 | (.22) |
| BFVFW $3/4$ | $3/4$ | .5 | (.22) |
| BFVFW 1 | 1 | .5 | (.22) |



BFV655 SERIES ROD COUPLINGS

- Material: Glass Reinforced Polyurethane

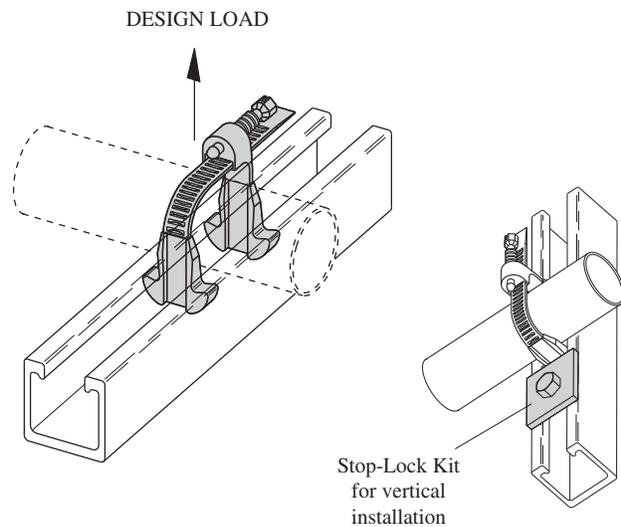
| Part No. | Thread Size | Wt./C | |
|---------------|-------------|-------|--------|
| | | Lbs. | kg |
| BFV655- $3/8$ | $3/8$ "-16 | 7.4 | (3.35) |
| BFV655- $1/2$ | $1/2$ "-13 | 11.3 | (5.12) |
| BFV655- $5/8$ | $5/8$ "-11 | 16.7 | (7.57) |



Reference page 170 for general fitting specifications.

BFV100 thru BFV300 ADJUSTABLE PIPE CLAMPS

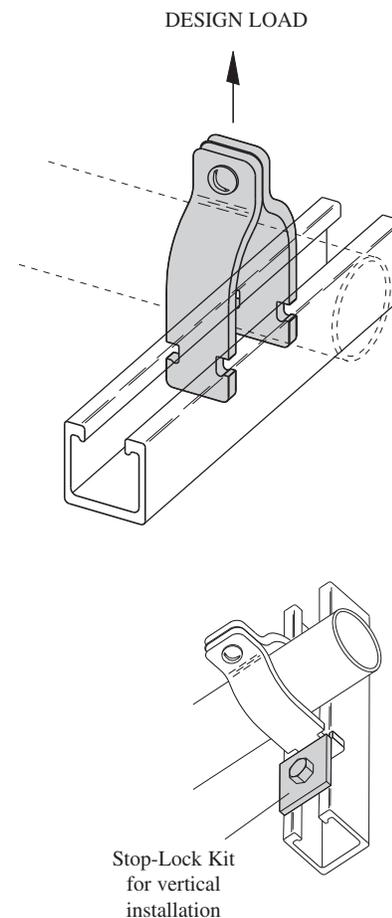
- Completely Non-Metallic
- Adjustable to U.S. & Metric Pipe Diameters
- Fits OD Sizes 3/4" (19.0) to 3 1/2" (88.9)
- Easy To Install
- No Special Tools Required
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyurethane
- Not recommended for vertical installation without additional Stop-Lock Kit. Kit includes one square washer, channel nut and hex head cap screw. Order (Stop-Lock Kit) BFVSL-3/8 for 3/8"-16 hardware or BFVSL-1/2 for 1/2"-13 hardware. Mount kit below clamp when used in vertical strut to prevent clamp slipping.



| Part No. | Nominal Pipe Sizes | | Pipe O.D. Range | | Design Load | | Max. Torque | |
|----------|--------------------|-----------|-----------------|---------------|-------------|-------|-------------|--------|
| | in. | mm | in. | mm | Lbs. | kN | in.-Lbs. | N•m |
| BFV100 | 1/2 - 1 1/2 | (15 - 40) | .75 - 1.90 | (21.3 - 48.3) | 135 | (.60) | 10 | (1.13) |
| BFV200 | 1 1/2 - 2 | (40 - 51) | 1.90 - 2.37 | (48.3 - 60.3) | 135 | (.60) | 36 | (4.07) |
| BFV300 | 2 1/2 - 3 | (63 - 76) | 2.87 - 3.50 | (73.0 - 88.9) | 145 | (.64) | 36 | (4.07) |

BFV2000 SERIES NON-METALLIC PIPE CLAMPS

- For rigid and PVC conduit.
- Standard hardware includes slotted round head machine screw and square nut in 316 stainless steel
- Design Load Safety Factor of 3
- Material: Glass Reinforced PPO
- Not recommended for vertical installation without additional Stop-Lock Kit. Kit includes one square washer, channel nut and hex head cap screw. Order (Stop-Lock Kit) BFVSL-3/8 for 3/8"-16 hardware or BFVSL-1/2 for 1/2"-13 hardware. Mount kit below clamp when used in vertical strut to prevent clamp slipping.
- If non-metallic hardware is required, add N to the part number. **Example: BFV2008N**



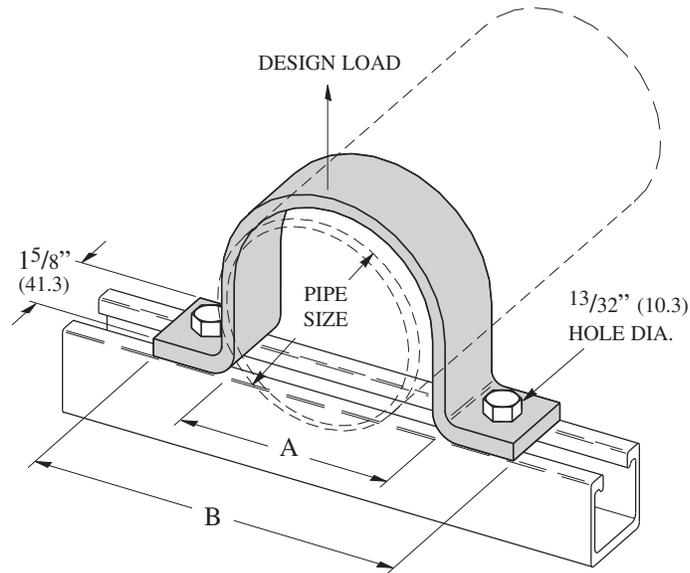
| Part No. | Nominal Pipe Size | | Design Load | | Maximum Torque | |
|----------|-------------------|-------|-------------|--------|----------------|--------|
| | in. | mm | Lbs. | kN | in.-Lbs. | N•m |
| BFV2008 | 1/2 | (15) | 300 | (1.33) | 10 | (1.13) |
| BFV2009 | 3/4 | (20) | 300 | (1.33) | 10 | (1.13) |
| BFV2010 | 1 | (25) | 300 | (1.33) | 10 | (1.13) |
| BFV2011 | 1 1/4 | (32) | 300 | (1.33) | 10 | (1.13) |
| BFV2012 | 1 1/2 | (40) | 300 | (1.33) | 10 | (1.13) |
| BFV2013 | 2 | (50) | 300 | (1.33) | 10 | (1.13) |
| BFV2014 | 2 1/2 | (65) | 300 | (1.33) | 10 | (1.13) |
| BFV2015 | 3 | (80) | 300 | (1.33) | 10 | (1.13) |
| BFV2016 | 3 1/2 | (90) | 300 | (1.33) | 10 | (1.13) |
| BFV2017 | 4 | (100) | 300 | (1.33) | 10 | (1.13) |

Reference page 170 for general fitting specifications.

Fiberglass

BFP2400 SERIES 2-HOLE PIPE CLAMPS

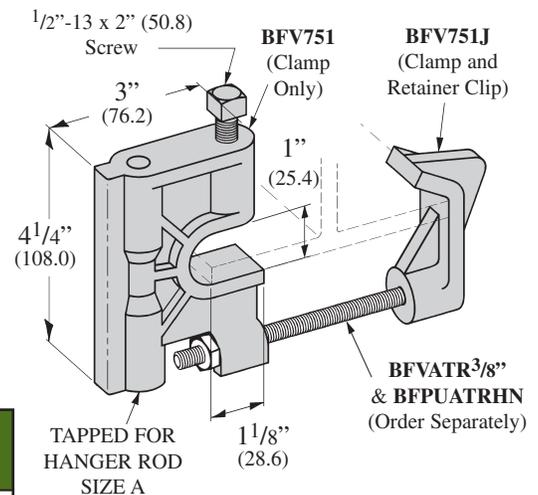
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyester



| Part No. | Nominal Pipe Size | | A | | B | | Design Load | |
|------------------|-------------------|-------|-------------------------------|-------|-------------------------------|-------|-------------|--------|
| | in. | mm | in. | mm | in. | mm | Lbs. | kN |
| BFP2400-2 | 2 | (50) | 2 ³ / ₈ | (60) | 5 ¹ / ₂ | (140) | 115 | (0.51) |
| BFP2400-3 | 3 | (80) | 3 ¹ / ₂ | (89) | 6 ³ / ₄ | (171) | 130 | (0.58) |
| BFP2400-4 | 4 | (100) | 4 ¹ / ₂ | (114) | 7 ³ / ₄ | (197) | 150 | (0.66) |
| BFP2400-6 | 6 | (150) | 6 ⁵ / ₈ | (168) | 10 | (254) | 150 | (0.66) |

BFV751 & BFV751J BEAM CLAMP

- Design Load Safety Factor of 3
- BFV751J (clip included) must be used when installed on tapered flange beams.
- Material: Glass Reinforced Polyurethane
- Setscrew material: Stainless Steel 316 ASTM F593 Group 2, S4

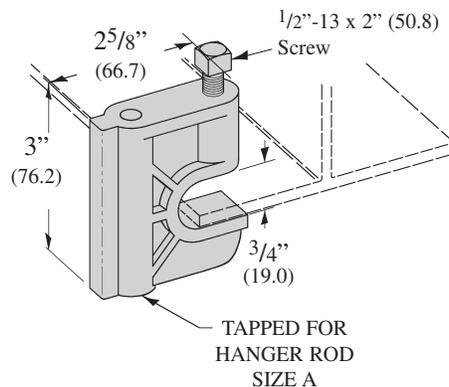


| Part No. | For Hanger Rod Size A | Design Load | | Torque | |
|--------------------|-----------------------|-------------|--------|----------|------|
| | | Lbs. | kN | ft.-Lbs. | N•m |
| BFV751-3/8 | 3/8"-16 | 500 | (2.22) | 10 | (13) |
| BFV751J-3/8 | 3/8"-16 | 500 | (2.22) | 10 | (13) |
| BFV751-1/2 | 1/2"-13 | 500 | (2.22) | 10 | (13) |
| BFV751J-1/2 | 1/2"-13 | 500 | (2.22) | 10 | (13) |
| BFV751-5/8 | 5/8"-11 | 500 | (2.22) | 10 | (13) |
| BFV751J-5/8 | 5/8"-11 | 500 | (2.22) | 10 | (13) |

Reference page 170 for general fitting specifications.

BFV755 BEAM CLAMP

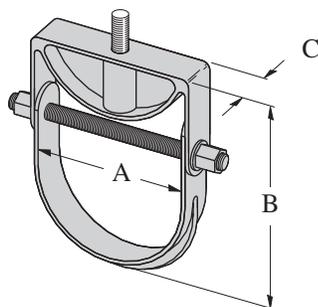
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyurethane
- Setscrew material: Stainless Steel 316
ASTM F593 Group 2, S4



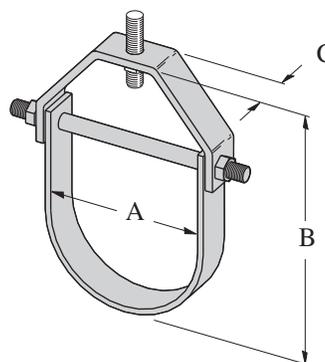
| Part No. | For Hanger Rod Size A | Design Load | | Torque | |
|------------|-----------------------|-------------|--------|----------|------|
| | | Lbs. | kN | ft.-Lbs. | N•m |
| BFV755-3/8 | 3/8"-16 | 400 | (1.78) | 10 | (13) |
| BFV755-1/2 | 1/2"-13 | 400 | (1.78) | 10 | (13) |

BFV3104 SERIES CLEVIS HANGERS

- Design Load Safety Factor of 3 at 120°F (49°C).
- Insulation may be required at higher temperatures.
- Order hanger rod and nuts separately.
- Material: Glass Reinforced Polyurethane
For BFV3104-1 thru BFV3104-6
- Material: Glass Reinforced Polyester & Vinyl Ester
For BFV3104-8 thru BFV3104-12



BFV3104-1 thru BFV3104-6



BFV3104-8 thru BFV3104-12

| Part No. | Nominal Pipe Size | | A | | B | | C | | Hanger Rod Size | Design Load | |
|---------------------|-------------------|----------|-------|-------|---------|-------|-------|------|-----------------|-------------|--------|
| | in. | mm | in. | mm | in. | mm | in. | mm | | Lbs. | kN |
| BFV3104-1 | 1 | (50) | 1 1/2 | (38) | 4 1/4 | (108) | 1 1/4 | (32) | 1/2"-13 | 670 | (2.98) |
| BFV3104-1 1/2 | 1 1/2 | (65) | 2 | (51) | 5 1/8 | (130) | 1 1/4 | (32) | 1/2"-13 | 670 | (2.98) |
| BFV3104-2 | 2 | (50) | 2 1/2 | (63) | 6 1/2 | (165) | 1 1/4 | (32) | 1/2"-13 | 730 | (3.25) |
| BFV3104-2 1/2, 3, 4 | 2 1/2-4 | (65-100) | 5 1/8 | (130) | 10 | (254) | 1 1/2 | (38) | 1/2"-13 | 1150 | (5.11) |
| BFV3104-6 | 6 | (150) | 6 3/4 | (171) | 12 5/16 | (313) | 2 | (51) | 1/2"-13 | 1170 | (5.20) |

| Part No. | Nominal Pipe Size | | A | | B | | C | | Hanger Rod Size | Design Load | |
|------------|-------------------|-------|--------|-------|--------|-------|-----|-------|-----------------|-------------|--------|
| | in. | mm | in. | mm | in. | mm | in. | mm | | Lbs. | kN |
| BF*3104-8 | 8 | (200) | 9 1/4 | (235) | 16 5/8 | (422) | 3 | (76) | 5/8"-11 | 350 | (1.55) |
| BF*3104-10 | 10 | (250) | 11 3/8 | (289) | 19 7/8 | (505) | 4 | (101) | 5/8"-11 | 450 | (2.01) |
| BF*3104-12 | 12 | (300) | 13 1/2 | (343) | 22 3/8 | (568) | 5 | (127) | 5/8"-11 | 600 | (2.69) |

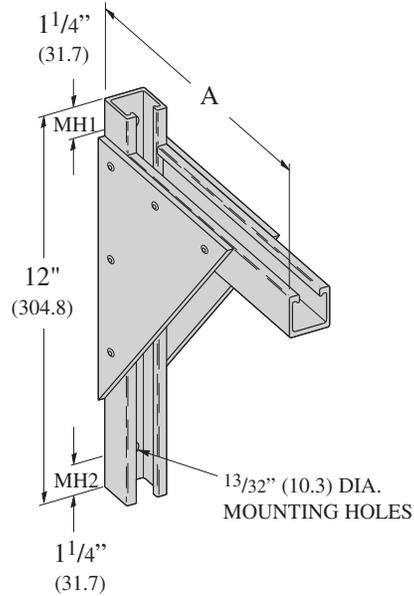
*Specify P for polyester or V for Vinyl ester.

Reference page 170 for general fitting specifications.

Fiberglass

BF*409 SERIES BRACKETS 6" (152) TO 24" (609) LONG

- Design Load Safety Factor of 3 based on uniform loading
- MH1 - From Top of Bracket to center of Mounting Hole
- MH2 - From Bottom of Bracket to center of Mounting Hole

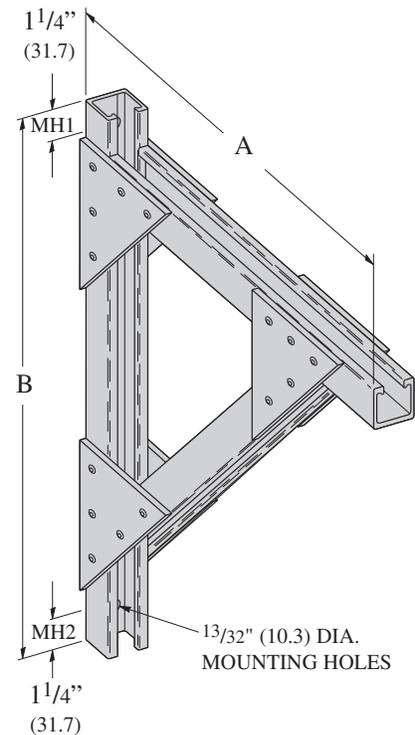


| Part No. | A | | Design Load | |
|-----------|-----|-------|-------------|--------|
| | in. | mm | Lbs. | kN |
| BF*409-6 | 10 | (250) | 1400 | (6.22) |
| BF*409-9 | 13 | (330) | 1000 | (4.45) |
| BF*409-12 | 16 | (406) | 800 | (3.56) |
| BF*409-18 | 22 | (559) | 675 | (3.00) |
| BF*409-24 | 28 | (711) | 450 | (2.00) |

* Insert P for Glass Reinforced Polyester Resin or V for Glass Reinforced Vinyl Ester Resin

BF*494 SERIES BRACKETS 24" (609) TO 36" (914) LONG

- Design Load Safety Factor of 3 based on uniform loading
- MH1 - From Top of Bracket to center of Mounting Hole
- MH2 - From Bottom of Bracket to center of Mounting Hole
- Material: Glass Reinforced Vinyl Ester or Polyester



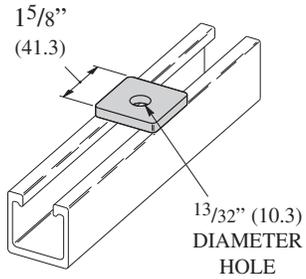
| Part No. | A | | B | | Design Load | |
|-----------|-----|--------|-----|-------|-------------|--------|
| | in. | mm | in. | mm | Lbs. | kN |
| BF*494-24 | 28 | (711) | 23 | (584) | 750 | (3.33) |
| BF*494-30 | 34 | (863) | 26 | (660) | 750 | (3.33) |
| BF*494-36 | 40 | (1016) | 29 | (736) | 750 | (3.33) |

* Insert P for Glass Reinforced Polyester Resin or V for Glass Reinforced Vinyl Ester Resin

Reference page 170 for general fitting specifications.

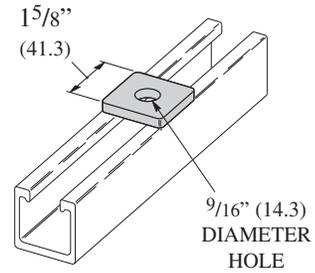
BFV201
SQUARE WASHER FOR 3/8" BOLT

•Material: Injection Molded Glass Reinforced Polyurethane



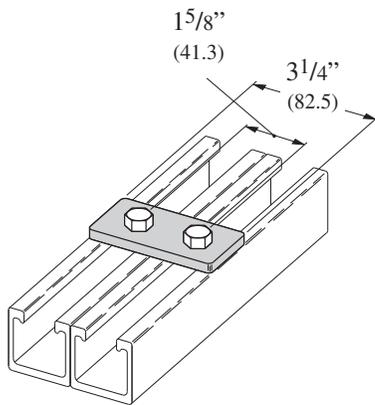
BFV202
SQUARE WASHER FOR 1/2" BOLT

•Material: Injection Molded Glass Reinforced Polyurethane



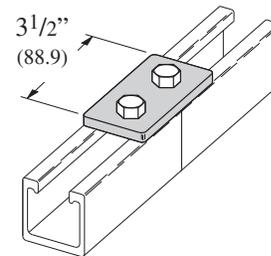
BFV340
TWO HOLE FLAT PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



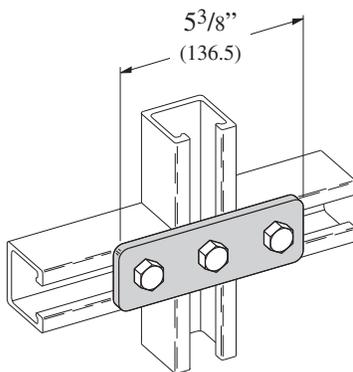
BFV129
TWO HOLE SPLICE PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



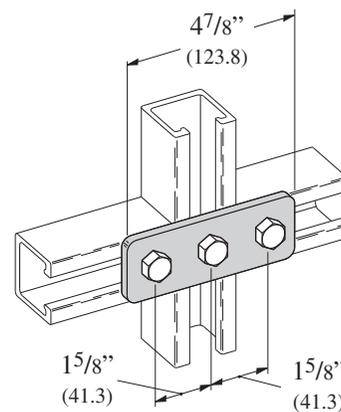
BFV141
THREE HOLE FLAT PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



BFV557
THREE HOLE FLAT PLATE

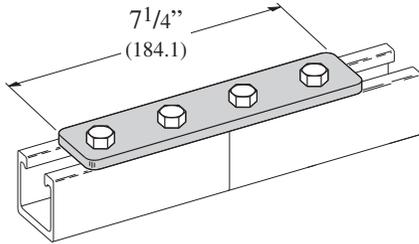
•Material: Injection Molded Glass Reinforced Polyurethane



Reference page 170 for general fitting specifications.

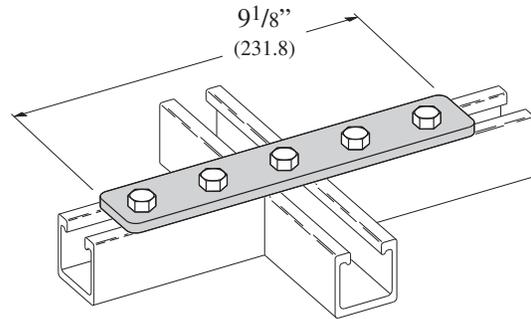
BFV341
FOUR HOLE SPLICE PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



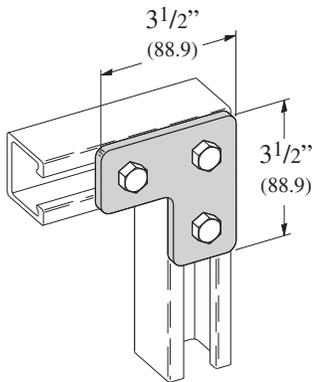
BFV342
FIVE HOLE FLAT PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



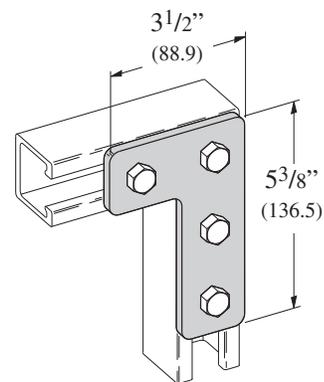
BFV140
THREE HOLE FLAT CORNER PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



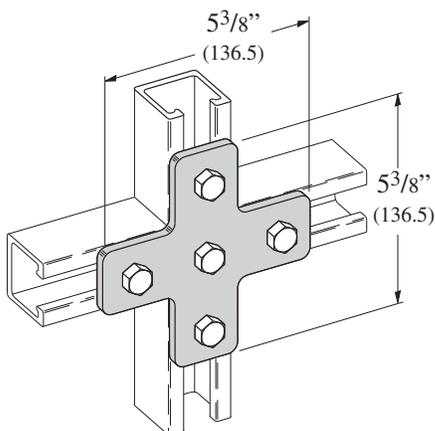
BFV143
FOUR HOLE FLAT CORNER PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



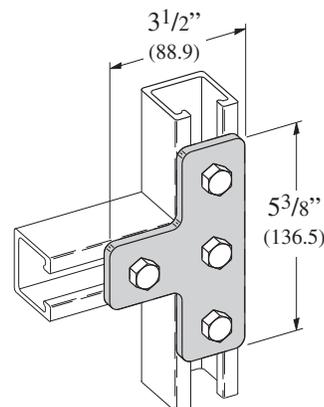
BFV132
FIVE HOLE FLAT CROSS PLATE

•Material: Injection Molded Glass Reinforced Polyurethane



BFV133
FOUR HOLE FLAT TEE PLATE

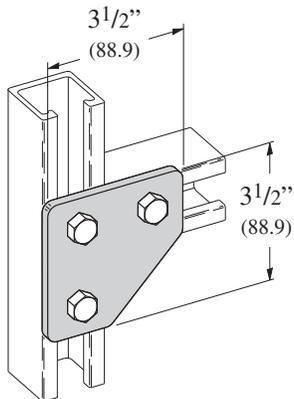
•Material: Injection Molded Glass Reinforced Polyurethane



Reference page 170 for general fitting specifications.

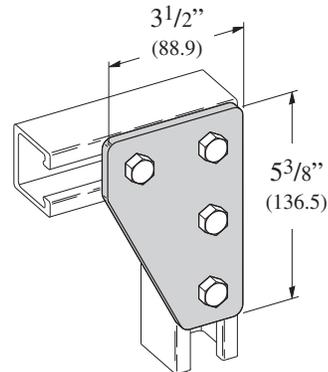
BFV135
THREE HOLE FLAT GUSSET CORNER PLATE

•Material: Injection Molding Glass Reinforced Polyurethane



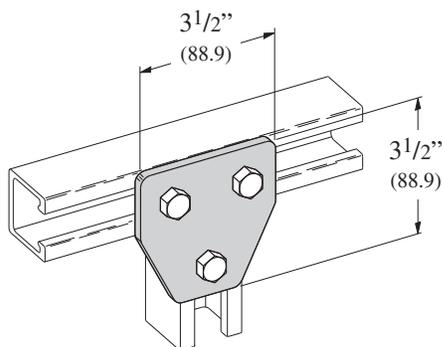
BFV142
FOUR HOLE FLAT GUSSET CORNER PLATE

•Material: Injection Molding Glass Reinforced Polyurethane



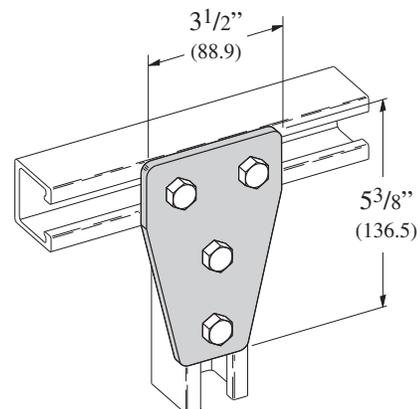
BFV337
THREE HOLE FLAT GUSSET TEE PLATE

•Material: Injection Molding Glass Reinforced Polyurethane



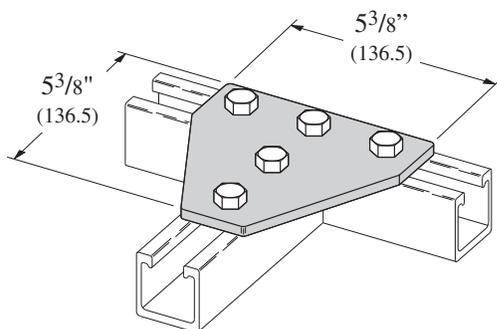
BFV136
FOUR HOLE FLAT GUSSET TEE PLATE

•Material: Injection Molding Glass Reinforced Polyurethane



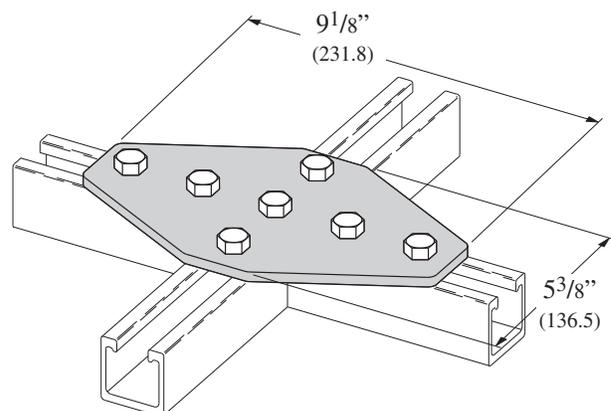
BFV532
FIVE HOLE FLAT GUSSET TEE PLATE

•Material: Injection Molding Glass Reinforced Polyurethane



BFV334
SEVEN HOLE FLAT GUSSET CROSS PLATE

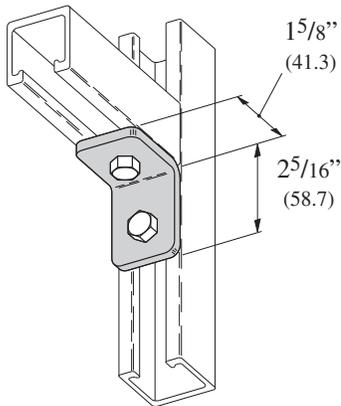
•Material: Injection Molding Glass Reinforced Polyurethane



Reference page 170 for general fitting specifications.

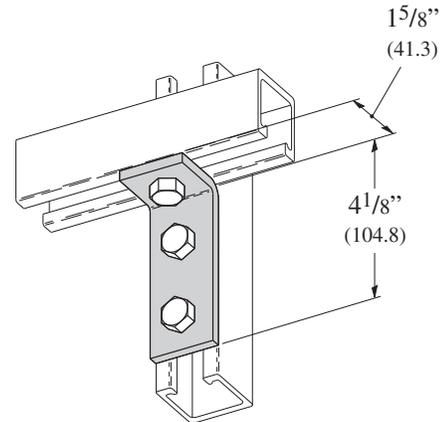
BFV101
TWO HOLE 90° CORNER ANGLE

•Material: Injection Molded Glass Reinforced Polyurethane



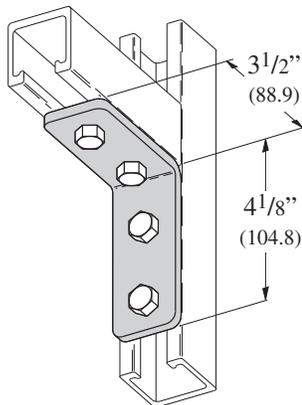
BFV103
THREE HOLE 90° CORNER ANGLE

•Material: Injection Molded Glass Reinforced Polyurethane



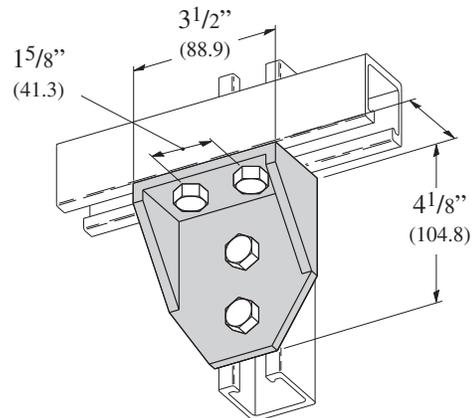
BFV104
FOUR HOLE 90° CORNER ANGLE

•Material: Injection Molded Glass Reinforced Polyurethane



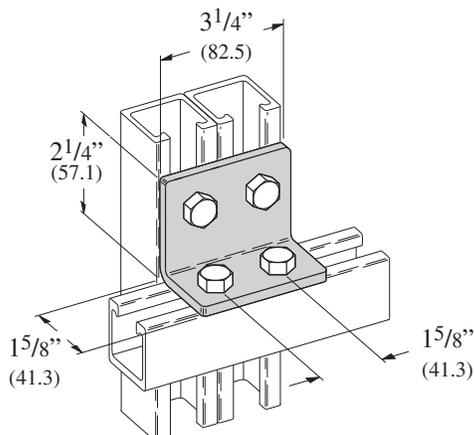
BFV118
FOUR HOLE 90° GUSSETED SHELF ANGLE

•Material: Injection Molded Glass Reinforced Polyurethane



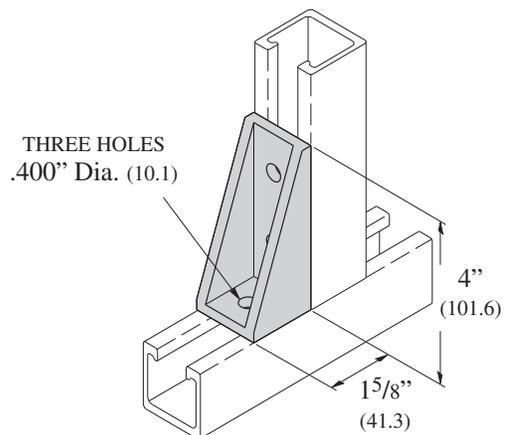
BFV558
FOUR HOLE 90° CORNER ANGLE

•Material: Injection Molded Glass Reinforced Polyurethane



BFV371-2G
THREE HOLE 90° GUSSETED CORNER ANGLE

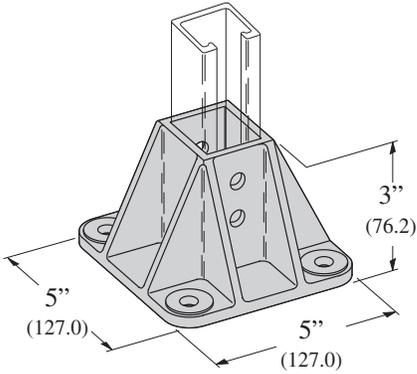
•Material: Injection Molded Glass Reinforced Polyurethane



Reference page 170 for general fitting specifications.

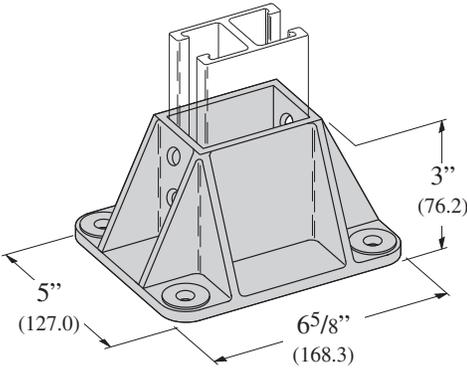
BFV280SQ
POST BASE FOR BF*22

•Material: Glass Reinforced Polyurethane



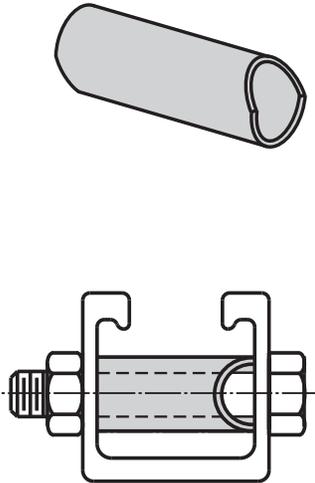
BFV281SQ
POST BASE FOR BF*22A

•Material: Glass Reinforced Polyurethane



BFV650
CHANNEL SPACER

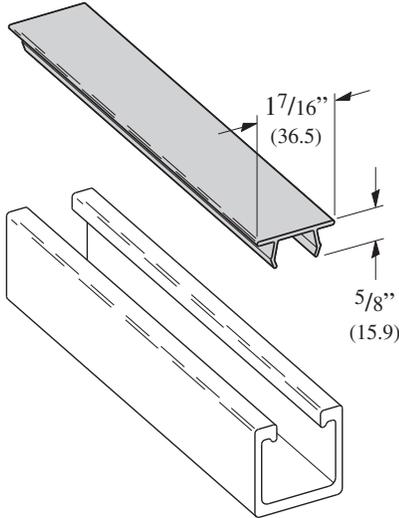
•Spacer I.D. accommodates 3/8" rod or bolts.
•Material: Polyurethane



Used when attaching fittings to side walls of channel.
This channel spacer prevents wall compression in heavy load conditions.

B217P
PLASTIC CLOSURE STRIP

•Available in 10 Ft. (3.05 m) lengths.
•Material: PVC



Reference page 170 for general fitting specifications.

Mini Channel & Fittings

B-Line's mini channels and fittings provide for an economical method of supporting light load requirements on a metal framing system.

Channel

Channels are cold formed on our modern rolling mills from 18 Ga. (1.2 mm) low carbon steel strips plain steel (ASTM A1008 33,000 PSI min. yield) and pre-galvanized steel strips, (ASTM A653 33,000 PSI min. yield). A continuous slot with inturned lips provides the ability to make attachments at any point. Channel combinations are made with new state of the art, high-tech welding equipment.

Lengths

Standard lengths are 10' (3.05 m) and 20' (6.09 m) for B62 series, and 10' (3.05 m) for B72 series. Custom lengths are available.

Fittings

Mini fittings are formed from hot rolled pickled and oiled strip or sheet steel (ASTM A1011, HSLAS, Grade 50, Class1). The following dimensions apply to all fittings except as noted on the drawings:

Hole Size— $9/32$ " (7.14 mm) Dia.

Hole Spacing— $13/32$ " (10.3 mm) from end and $11/16$ " (27.0 mm) on center.

Width— $13/16$ " (20.6 mm)

Thickness— $1/8$ " (3.2 mm)

Materials & Finishes*

| Finish Code | Finish | Specification |
|-------------|-----------------------|--------------------------------------|
| PLN | Plain | ASTM A1011, HSLAS, Grade 50, Class 1 |
| ZN | Electro-Plated Zinc | ASTM B633 SC3 Type II |
| GRN | Dura-Green | |
| GALV | Pre-Galvanized | ASTM A653 33,000 PSI min. yield |
| HDG | Hot-Dipped Galvanized | ASTM A123 |

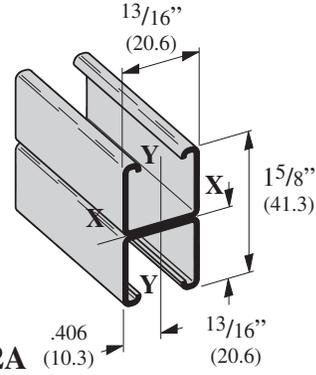
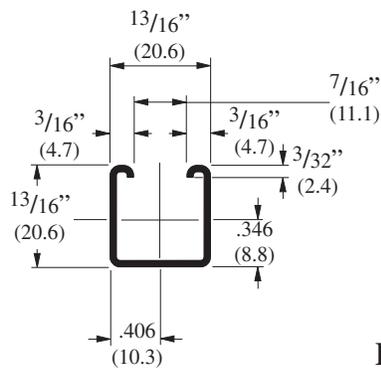
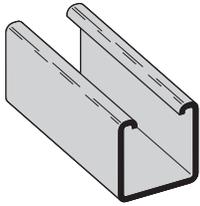
*Unless otherwise noted.

Metric

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



- Thickness: 18 Ga. (1.2 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized
- Weight: .42 Lbs./Ft. (.62 kg/m)



B62A
Wt. .84 Lbs./Ft. (1.25 kg/m)

SECTION PROPERTIES

| Channel | X - X Axis | | | | | | | | | | Y - Y Axis | | | | | |
|-------------|------------|--------|------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|------------------------|--------|-----------------------|-----------------|---------------------|-----------------|------------------------|-------|
| | Weight | | Areas of Section | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | | Moment of Inertia (I) | | Section Modulus (S) | | Radius of Gyration (r) | |
| | lbs./ft. | kg/m | sq. in. | cm ² | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm | in. ⁴ | cm ⁴ | in. ³ | cm ³ | in. | cm |
| B62 | .420 | (.62) | .123 | (.80) | .0103 | (.43) | .0221 | (.36) | .289 | (.73) | .0134 | (.56) | .0330 | (.54) | .330 | (.84) |
| B62A | .839 | (1.25) | .247 | (1.59) | .0500 | (2.08) | .0616 | (1.01) | .450 | (1.14) | .0269 | (1.12) | .0663 | (1.09) | .330 | (.84) |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

BEAM LOADING

| Beam Span | | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|-----------|--------|---------------------------|-----------------------------|----------------------|--------------|--------------------|-----------------------------|----------------------|-------------|----------------------|
| In. | mm | | Lbs. | N | In. | mm | 1/240 Span | | 1/360 Span | |
| | | | | | | Lbs. | N | Lbs. | N | |
| 12 | (305) | B62 B62A | 364 420* | (1619.1) (1868.2) | .027 .006 | (.68) (.15) | 364 420* | (1619.1) (1868.2) | 364 420* | (1619.1) (1868.2) |
| 24 | (609) | B62 B62A | 182 420* | (809.6) (1868.2) | .109 .051 | (2.77) (1.29) | 167 420* | (742.8) (1868.2) | 111 420* | (493.7) (1868.2) |
| 36 | (914) | B62 B62A | 121 341 | (538.2) (1516.8) | .245 .141 | (6.22) (3.58) | 74 341 | (329.1) (1516.8) | 50 242 | (222.4) (1076.4) |
| 48 | (1219) | B62 B62A | 91 256 | (404.8) (1138.7) | .436 .250 | (11.07) (6.35) | 42 204 | (186.8) (907.4) | 28 136 | (124.5) (604.9) |
| 60 | (1524) | B62 B62A | 73 205 | (324.7) (911.9) | .681 .391 | (17.30) (9.93) | 27 131 | (120.1) (582.7) | 18 87 | (80.0) (387.0) |
| 72 | (1829) | B62 B62A | 61 170 | (271.3) (756.2) | .981 .563 | (24.92) (14.30) | 19 91 | (84.5) (404.8) | 12 61 | (53.4) (271.3) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

COLUMN LOADING

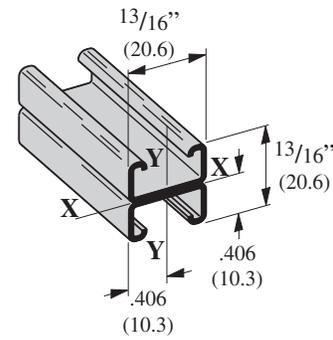
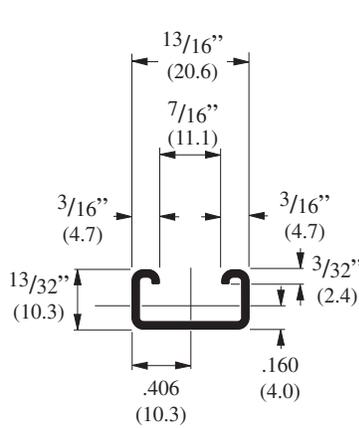
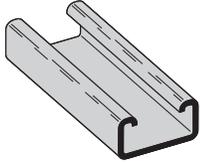
| Unbraced Height | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|-----------------|---------------------------|-----------------------------|-----------------------|--------------------|------------------|-------------------------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|
| | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 | B62 B62A | 2052 4666 | (9127.7) (20755.4) | 820 1449 | (3647) (6445) | 2161 4710 | (9612.6) (20951.1) | 1890 4593 | (8407.1) (20430.7) | 1715 4503 | (7628.7) (20030.3) |
| 24 | B62 B62A | 1350 4275 | (6005.1) (19016.1) | 645 1367 | (2869) (6081) | 1624 4453 | (7223.9) (19807.9) | 1020 3982 | (4537.2) (17712.8) | 818 3624 | (3638.6) (16120.3) |
| 36 | B62 B62A | 818 3624 | (3638.6) (16120.3) | 471 847 | (2095) (3767) | 1053 4023 | (4684.0) (17895.2) | 633 2965 | (2815.7) (13189.0) | 515 2179 | (2290.8) (9692.7) |
| 48 | B62 B62A | 589 2713 | (2620.0) (12068.0) | 369 504 | (1641) (2242) | 745 3421 | (3313.9) (15217.3) | 456 1765 | (2028.4) (7851.1) | 365** 1225 | (1623.6) (5449.1) |
| 60 | B62 B62A | 456 1765 | (2028.4) (7851.1) | 300 323 | (1334) (1437) | 579 2647 | (2575.5) (11774.4) | 347** 1129 | (1543.5) (5022.0) | 271** 784** | (1205.4) (3487.4) |
| 72 | B62 B62A | 365** 1225 | (1623.6) (5449.1) | 248 224 | (1103) (996) | 470 1856 | (2090.6) (8255.9) | 271** 784** | (1205.4) (3487.4) | - 545** | - (2424.3) |

**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 188 for general fitting specifications.

B72 Channel

- Thickness: 18 Ga. (1.2 mm)
- Standard lengths: 10' (3.05 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized
- Weight: .29 Lbs./Ft. (.43 kg/m)



B72A
Wt. .58 Lbs./Ft. (.87 kg/m)

| SECTION PROPERTIES | | X - X Axis | | | | | Y - Y Axis | | | | |
|--------------------|------------|-------------|-------------------------|--|--|--|-------------------------------------|--|--|-------------------------------------|--|
| | | Channel | Weight lbs./ft. kg/m | Areas of Section sq. in. cm ² | Moment of Inertia (I) in. ⁴ cm ⁴ | Section Modulus (S) in. ³ cm ³ | Radius of Gyration (r) in. cm | Moment of Inertia (I) in. ⁴ cm ⁴ | Section Modulus (S) in. ³ cm ³ | Radius of Gyration (r) in. cm | |
| B72 | .287 (.43) | .084 (.54) | .0018 (.07) | .0073 (.12) | .146 (.37) | .0077 (.32) | .0190 (.31) | .302 (.77) | | | |
| B72A | .574 (.85) | .169 (1.09) | .0078 (.32) | .0192 (.31) | .215 (.55) | .0155 (.65) | .0382 (.63) | .303 (.77) | | | |

Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.

BEAM LOADING

| Beam Span In. mm | Channel Style | Uniform Load and Deflection | | | | Uniform Load @ Deflection = | | | |
|---------------------|------------------|-----------------------------|---------|-------|---------|-----------------------------|----------------------|------|---------|
| | | Lbs. | N | In. | mm | 1/240 Span Lbs. N | 1/360 Span Lbs. N | | |
| 12 (305) | B72 | 116 | (516.0) | .051 | (1.29) | 113 | (502.6) | 75 | (324.7) |
| | B72A | 210* | (934.1) | .020 | (.51) | 210* | (934.1) | 210* | (934.1) |
| 24 (609) | B72 | 58 | (258.0) | .206 | (5.23) | 28 | (124.5) | 19 | (84.5) |
| | B72A | 159 | (707.2) | .125 | (3.17) | 127 | (564.9) | 85 | (378.1) |
| 36 (914) | B72 | 39 | (173.5) | .465 | (11.81) | 13 | (57.8) | 8 | (35.6) |
| | B72A | 106 | (471.5) | .281 | (7.14) | 57 | (253.5) | 38 | (169.0) |
| 48 (1219) | B72 | 29 | (129.0) | .827 | (21.00) | 7 | (31.1) | 5 | (22.2) |
| | B72A | 80 | (355.8) | .500 | (12.70) | 32 | (142.3) | 21 | (93.4) |
| 60 (1524) | B72 | 23 | (102.3) | 1.292 | (32.81) | 5 | (22.2) | 3 | (13.3) |
| | B72A | 64 | (284.7) | .782 | (19.86) | 20 | (88.9) | 14 | (62.3) |

Based on simple beam condition using an allowable design stress of 25,000 psi (172 MPa) in accordance with MFMA, with adequate lateral bracing (see page 11 for further explanation). Actual yield point of cold rolled steel is 42,000 psi. To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8. *Failure determined by weld shear.

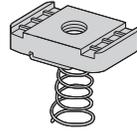
COLUMN LOADING

| Unbraced Height In. mm | Channel Style | Max. Column Loading K = .80 | | | | Max. Column Loading (Loaded @ C.G.) | | | | | |
|------------------------------|------------------|-----------------------------|---------|-----------------------|--------|-------------------------------------|---------|---------|---------|---------|---------|
| | | Loaded @ C.G. | | Loaded @ Slot Face | | K = .65 | | K = 1.0 | | K = 1.2 | |
| | | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| 12 (305) | B72 | 1598 | (7108) | 539 | (2397) | 1712 | (7615) | 1410 | (6272) | 1181 | (5253) |
| | B72A | 3600 | (16013) | 986 | (4386) | 3700 | (16458) | 3433 | (15271) | 3229 | (14363) |
| 24 (609) | B72 | 701 | (3118) | 320 | (1423) | 1050 | (4670) | 450 | (2001) | 313** | (1392) |
| | B72A | 2710 | (12054) | 802 | (3567) | 3113 | (13847) | 2043 | (9088) | 1421 | (6321) |
| 36 (914) | B72 | 313** | (1392) | 188 | (836) | 473 | (2104) | 201** | (894) | — | — |
| | B72A | 1421 | (6321) | 569 | (2531) | 2135 | (9497) | 909 | (4043) | 631** | (2807) |
| 48 (1219) | B72 | 177** | (787) | 122 | (542) | 267** | (1187) | — | — | — | — |
| | B72A | 799 | (3554) | 404 | (1797) | 1211 | (5387) | 512** | (2277) | 355** | (1579) |
| 60 (1524) | B72 | 113** | (502) | 85 | (378) | 171** | (760) | — | — | — | — |
| | B72A | 512** | (2277) | 298 | (1325) | 775 | (3447) | 327** | (1454) | — | — |

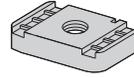
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 188 for general fitting specifications.

NUTS FOR B62, B72 CHANNEL



SPRING NUT



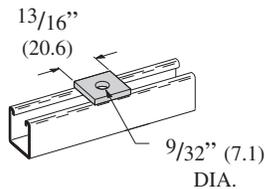
NUT WITHOUT SPRING

| Part Number | | | | Thread Size | Thickness | | Wt./C | |
|-------------|----------------|-------------|----------------|-------------|-----------|--------|-------|-------|
| B62 | | B72 | | | | | | |
| With Spring | Without Spring | With Spring | Without Spring | | | | Lbs. | kg |
| N621 | N621WO | N7221 | N621WO | #8-32 | .150 | (3.81) | 1.0 | (.45) |
| N622 | N622WO | N7222 | N622WO | #10-24 | .150 | (3.81) | 1.0 | (.45) |
| N627 | N627WO | N7227 | N627WO | #10-32 | .150 | (3.81) | 1.0 | (.45) |
| N624 | N624WO | N7224 | N624WO | 1/4-20 | .150 | (3.81) | 1.0 | (.45) |
| BMM-3L | BMM-3 | BMM-3S | BMM-3 | M3.5 x 0.6 | .150 | (3.81) | 1.0 | (.45) |
| BMM-4L | BMM-4 | BMM-4S | BMM-4 | M4 x 0.7 | .150 | (3.81) | 1.0 | (.45) |
| BMM-5L | BMM-5 | BMM-5S | BMM-5 | M5 x 0.8 | .150 | (3.81) | 1.0 | (.45) |
| BMM-6L | BMM-6 | BMM-6S | BMM-6 | M6 x 1 | .150 | (3.81) | 1.0 | (.45) |

MINI FITTINGS

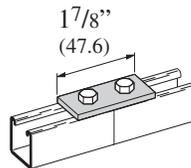
B6202 SQUARE WASHER

- Standard finishes: ZN, GRN
- Wt./C 2 Lbs. (.9 kg)



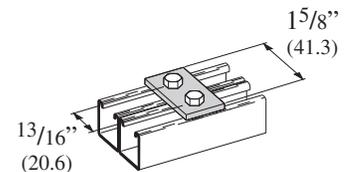
B6129 TWO HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)



B6340 TWO HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)

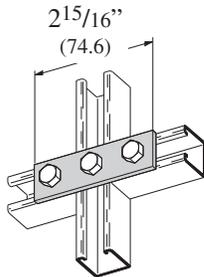


Reference page 188 for general fitting specifications.

Mini Fittings

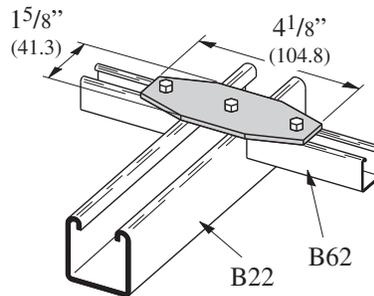
B6141 THREE HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



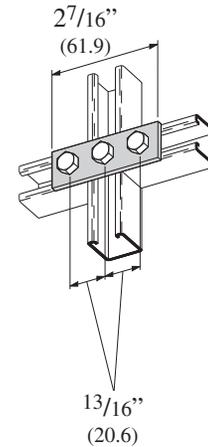
B600-62 THREE HOLE FLAT ADAPTER PLATE

- Standard finishes: ZN, GRN
- Wt./C 19 Lbs. (8.6 kg)



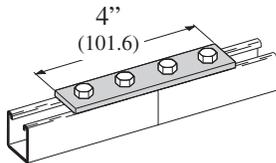
B6557 THREE HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



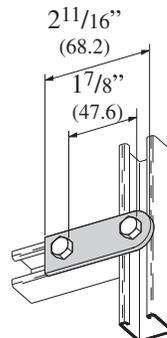
B6341 FOUR HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



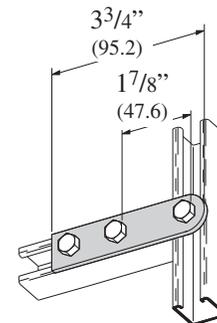
B6138 TWO HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



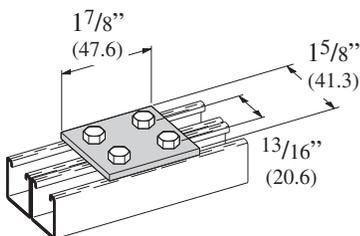
B6139 THREE HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



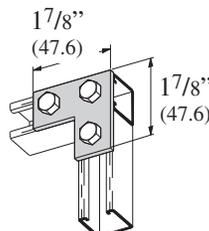
B6504 FOUR HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



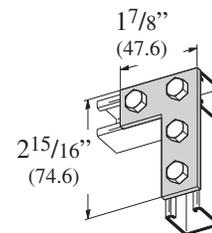
B6140 THREE HOLE CORNER PLATE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



B6143 FOUR HOLE CORNER PLATE

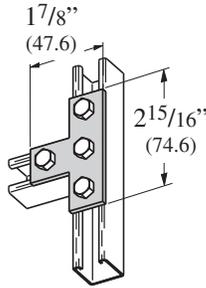
- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



Reference page 188 for general fitting specifications.

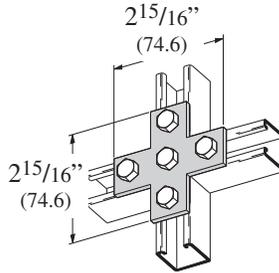
B6133
FOUR HOLE TEE PLATE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



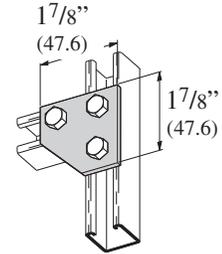
B6132
FIVE HOLE CROSS PLATE

- Standard finishes: ZN, GRN
- Wt./C 13 Lbs. (5.9 kg)



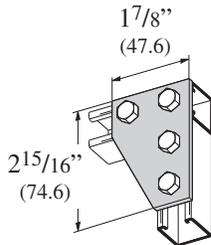
B6135
THREE HOLE CORNER GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



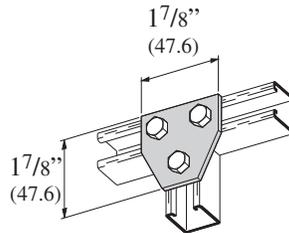
B6142
FOUR HOLE CORNER GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



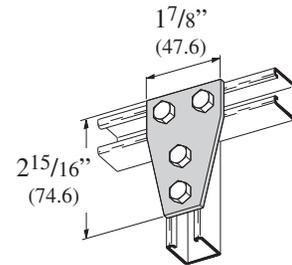
B6337
THREE HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



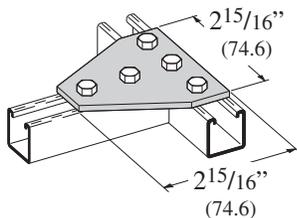
B6136
FOUR HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



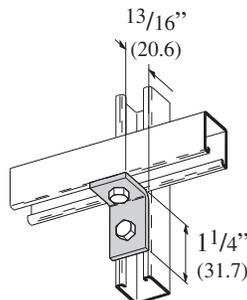
B6532
FIVE HOLE TEE GUSSET PLATE

- Standard finishes: ZN, GRN
- Wt./C 22 Lbs. (10.0 kg)



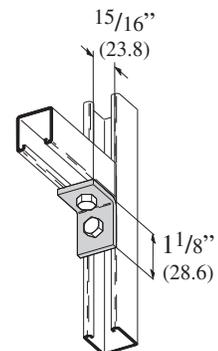
B6101
TWO HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)



B6230
TWO HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)



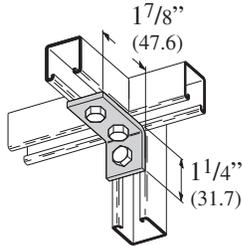
Reference page 188 for general fitting specifications.

Mini Channel & Fittings

Mini Fittings

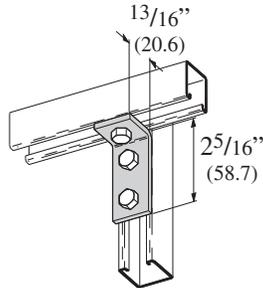
B6102 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



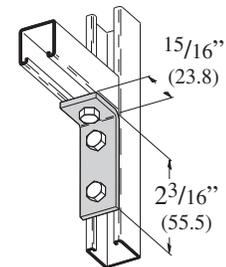
B6103 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



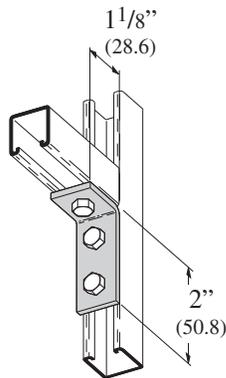
B6232 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



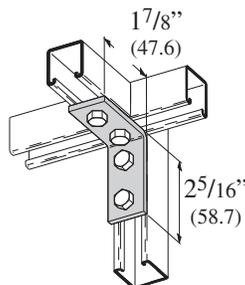
B6374 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



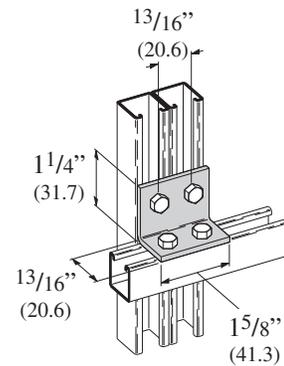
B6104 FOUR HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



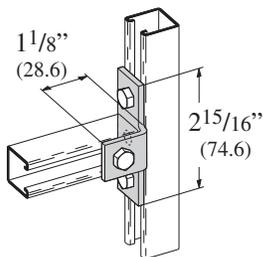
B6558 FOUR HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



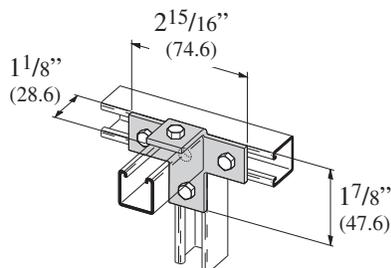
B6357 FOUR HOLE OFFSET BENT TEE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



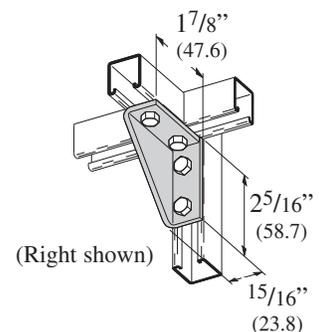
B6239 FIVE HOLE OFFSET BENT TEE

- Standard finishes: ZN, GRN
- Wt./C 14 Lbs. (6.3 kg)



B6144R&L FOUR HOLE SHELF BRACKET

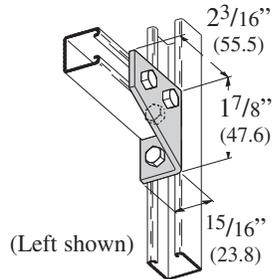
- Standard finishes: ZN, GRN
- Wt./C 19 Lbs. (8.6 kg)



Reference page 188 for general fitting specifications.

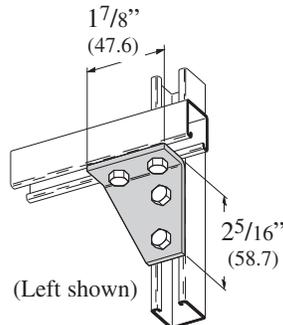
B6134R&L FOUR HOLE CORNER GUSSET

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



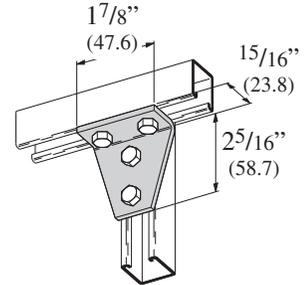
B6234 R&L FOUR HOLE CORNER GUSSET

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



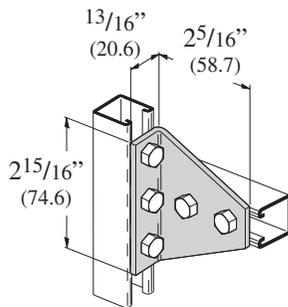
B6118 FOUR HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



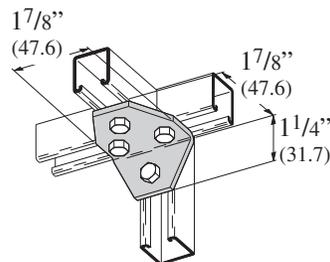
B6533 FIVE HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 22 Lbs. (10.0 kg)



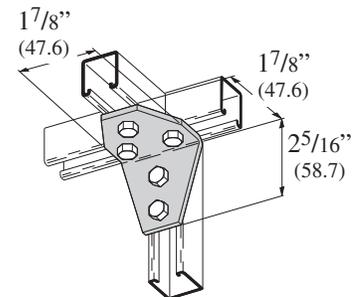
B6126 FOUR HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



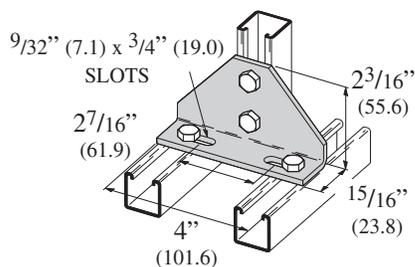
B6127 FIVE HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 18 Lbs. (8.1 kg)



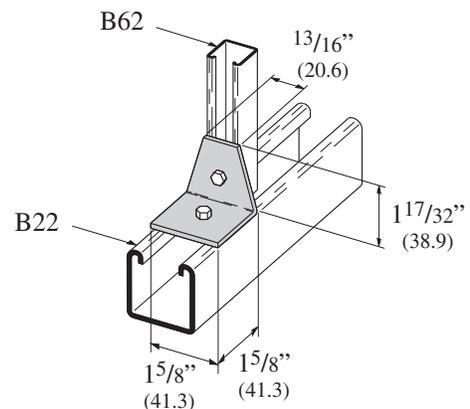
B6112 FOUR HOLE ADJUSTABLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 32Lbs. (14.5 kg)



B589-62 TWO HOLE 90° ADAPTER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)

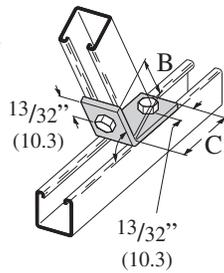


Reference page 188 for general fitting specifications.

Mini Fittings

B6147-B6152 TWO HOLE OPEN ANGLE

•Standard finishes: ZN, GRN

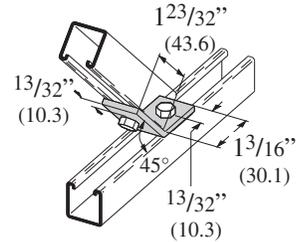


| Part No. | A | B | | C | | Wt./C | |
|----------|----------------------------------|----------------------------------|--------|----------------------------------|--------|-------|-------|
| | | Lbs. | kg | Lbs. | kg | Lbs. | kg |
| B6147 | 82 ¹ / ₂ ° | 2 ¹ / ₃₂ " | (51.6) | 2 ⁷ / ₃₂ " | (21.4) | 8.0 | (3.6) |
| B6148 | 75° | 2 ¹ / ₃₂ " | (51.6) | 2 ⁷ / ₃₂ " | (21.4) | | |
| B6149 | 67 ¹ / ₂ ° | 2" | (50.8) | 7 ⁷ / ₈ " | (22.2) | | |
| B6150 | 60° | 1 ³ / ₃₂ " | (50.0) | 1 ⁵ / ₁₆ " | (23.8) | | |
| B6151 | 52 ¹ / ₂ ° | 1 ⁷ / ₈ " | (47.6) | 1 ¹ / ₁₆ " | (27.0) | | |
| B6152 | 37 ¹ / ₂ ° | 2" | (50.8) | 2 ⁹ / ₃₂ " | (23.0) | | |

B6154 TWO HOLE OPEN ANGLE

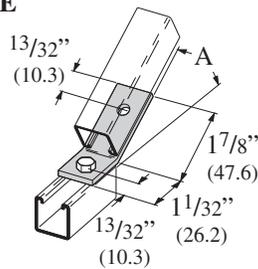
•Standard finishes: ZN, GRN

•Wt./C 8 Lbs. (3.6 kg)



B6162-B6165 TWO HOLE OPEN ANGLE

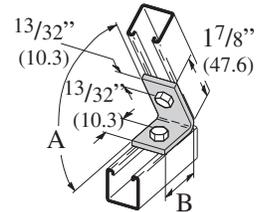
•Standard finishes: ZN, GRN



| Part No. | A | Wt./C | |
|----------|----------------------------------|-------|-------|
| | | Lbs. | kg |
| B6162 | 30° | 8.0 | (3.6) |
| B6163 | 22 ¹ / ₂ ° | | |
| B6164 | 15° | | |
| B6165 | 7 ¹ / ₂ ° | | |

B6156-B6161 TWO HOLE CLOSED ANGLE

•Standard finishes: ZN, GRN

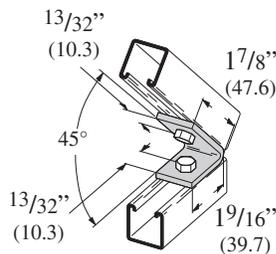


| Part No. | A | B | Wt./C | | |
|----------|----------------------------------|-----------------------------------|--------|-----|-------|
| | | | Lbs. | kg | |
| B6156 | 82 ¹ / ₂ ° | 1 ⁹ / ₃₂ " | (32.5) | 8.0 | (3.6) |
| B6157 | 75° | 1 ⁵ / ₁₆ " | (33.3) | | |
| B6158 | 67 ¹ / ₂ ° | 1 ³ / ₈ " | (34.9) | | |
| B6159 | 60° | 1 ¹³ / ₃₂ " | (35.7) | | |
| B6160 | 52 ¹ / ₂ ° | 1 ¹⁵ / ₃₂ " | (37.3) | | |
| B6161 | 37 ¹ / ₂ ° | 1 ²¹ / ₃₂ " | (42.0) | | |

B6155 TWO HOLE CLOSED ANGLE

•Standard finishes: ZN, GRN

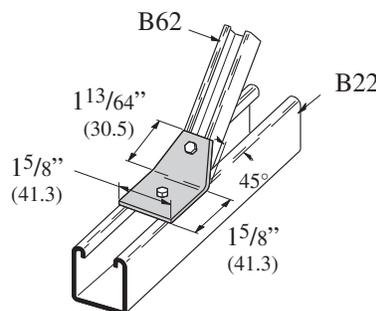
•Wt./C 8 Lbs. (3.6 kg)



B601-62 TWO HOLE 45° ADAPTER ANGLE

•Standard finishes: ZN, GRN

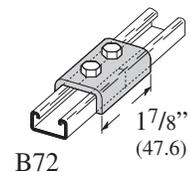
•Wt./C 14 Lbs. (6.3 kg)



B6169 TWO HOLE SPLICE CLEVIS FOR B72

•Standard finishes: ZN, GRN

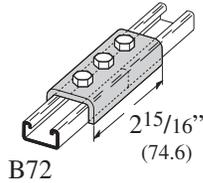
•Wt./C 11 Lbs. (5.0 kg)



Reference page 188 for general fitting specifications.

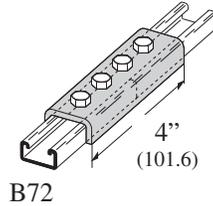
B6168
THREE HOLE SPLICE
CLEVIS FOR B72

- Standard finishes: ZN, GRN
- Wt./C 16 Lbs. (7.2 kg)



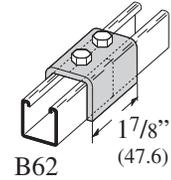
B6167
FOUR HOLE SPLICE
CLEVIS FOR B72

- Standard finishes: ZN, GRN
- Wt./C 24 Lbs. (10.9 kg)



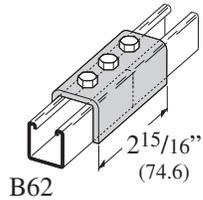
B6170
TWO HOLE SPLICE
CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 17 Lbs. (7.7 kg)



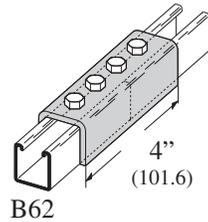
B6171
THREE HOLE SPLICE
CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 26 Lbs. (11.8 kg)



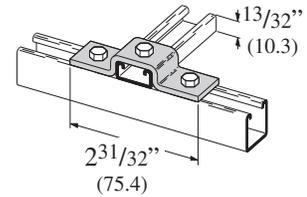
B6172
FOUR HOLE SPLICE
CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 36 Lbs. (16.3 kg)



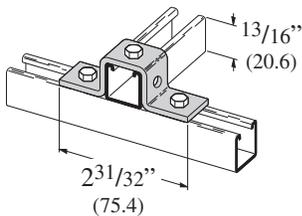
B7116
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



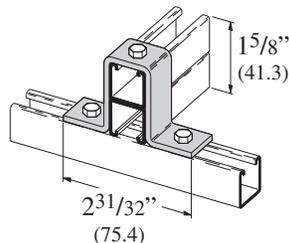
B6107
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 12 Lbs. (5.4 kg)



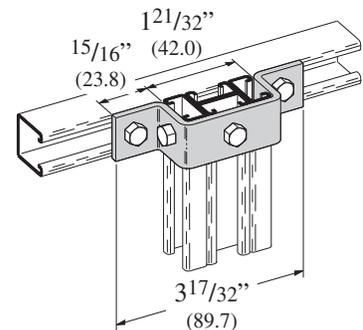
B6107-62A
THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 16 Lbs. (7.2 kg)



B6594
FIVE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 13 Lbs. (5.9 kg)

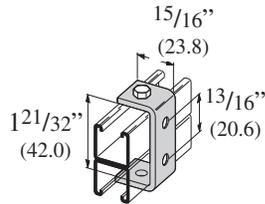


Reference page 188 for general fitting specifications.

Mini Fittings

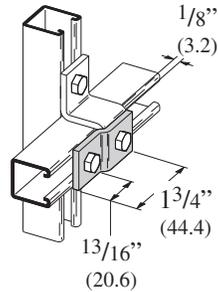
B6173 FOUR HOLE CLEVIS

- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



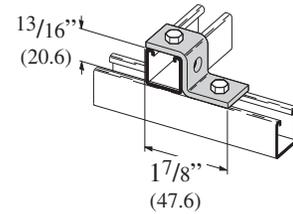
B6526 TWO HOLE OFFSET Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)



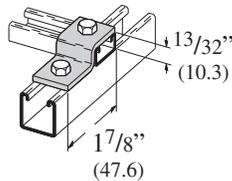
B6105 TWO HOLE Z-SUPPORT FOR B62

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



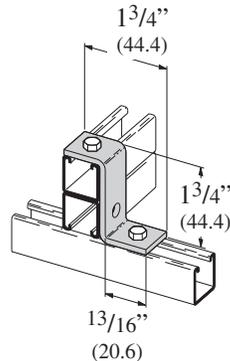
B7105 TWO HOLE Z-SUPPORT FOR B72

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



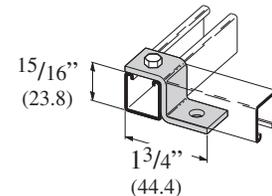
B6110 TWO HOLE Z-SUPPORT FOR B62A

- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



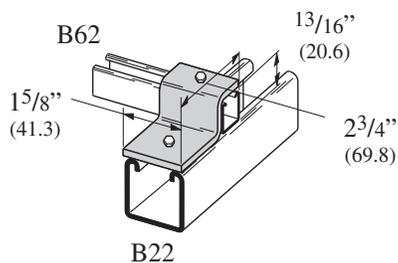
B6108 TWO HOLE OFFSET Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



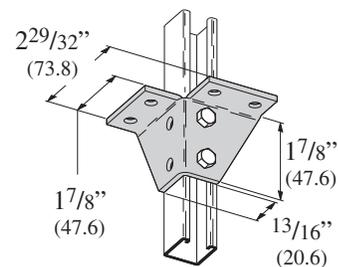
B598-62 TWO HOLE Z-ADAPTER PLATE

- Standard finishes: ZN, GRN
- Wt./C 28 Lbs. (12.7 kg)



B6571 EIGHT HOLE WING CONNECTION

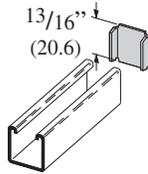
- Standard finishes: ZN, GRN
- Wt./C 28 Lbs. (12.7 kg)



Reference page 188 for general fitting specifications.

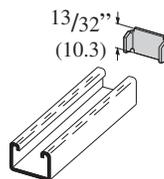
B6205 END CAP FOR B62

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN
- Wt./C 3 Lbs. (1.3 kg)



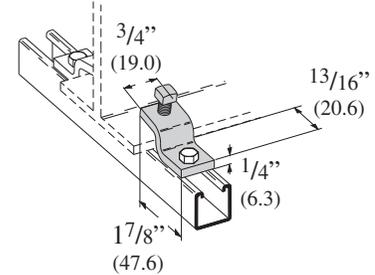
B7205 END CAP FOR B72

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN
- Wt./C 1 Lb. (.4 kg)



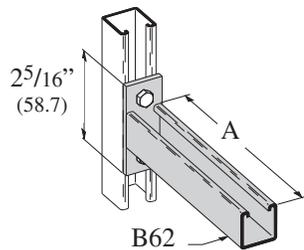
B6211 Z-BEAM CLAMP

- 5/16"-18 Setscrew included
- 13/16" (20.6) Max. Flange Thickness
- Material: ASTM A36
- Standard finishes: ZN, GRN
- Wt./C 13 Lbs. (5.9 kg)



B6409-6, 9 BRACKET

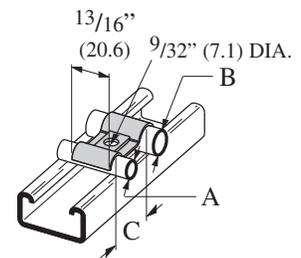
- Safety Factor of 2
- Uniform Design Load 40 Lbs. (.18 kN)
- Standard finishes: ZN, GRN



| Part No. | A | Wt./C | |
|----------|----|-------|--------|
| | | Lbs. | kg |
| B6409-6 | 6" | 28.0 | (12.7) |
| B6409-9 | 9" | 35.0 | (15.8) |

B2350-B2355 ONE HOLE DOUBLE TUBING STRAP

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN

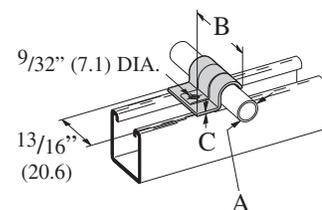


| Part No. | O.D. Size A | | O.D. Size B | | C | | Wt./C | |
|----------|-------------|--------|-------------|--------|--------|--------|-------|-------|
| | | | | | | | Lbs. | kg |
| B2350 | 1/4" | (6.3) | 1/4" | (6.3) | 3/4" | (19.0) | 1.2 | (.5) |
| B2351 | 3/8" | (9.5) | 3/8" | (9.5) | 1" | (25.4) | 2.0 | (.9) |
| B2352 | 1/2" | (12.7) | 1/2" | (12.7) | 1 1/4" | (31.7) | 2.9 | (1.3) |
| B2353 | 1/4" | (6.3) | 3/8" | (9.5) | 7/8" | (22.2) | 1.6 | (.7) |
| B2354 | 1/4" | (6.3) | 1/2" | (12.7) | 1" | (25.4) | 2.1 | (.9) |
| B2355 | 3/8" | (9.5) | 1/2" | (12.7) | 1 1/8" | (28.6) | 2.5 | (1.1) |

B2308-B2315 ONE HOLE TUBING STRAP

- Material: Sizes 1/4" - 1/2", ASTM A611 Gr. C
- 5/8" - 1", ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN

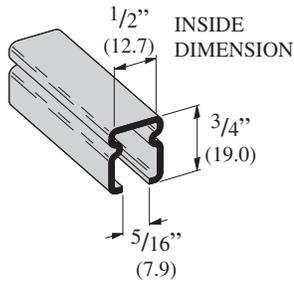
| Part No. | O.D. Size A | | B | | C | | Wt./C | |
|----------|-------------|--------|----------|--------|------|-------|-------|-------|
| | | | | | | | Lbs. | kg |
| B2308 | 1/4" | (6.3) | 1 1/32" | (26.2) | .048 | (1.2) | 1.2 | (.5) |
| B2309 | 5/16" | (7.9) | 1 3/32" | (27.8) | .048 | (1.2) | 1.4 | (.6) |
| B2310 | 3/8" | (9.5) | 1 3/16" | (30.1) | .048 | (1.2) | 1.6 | (.7) |
| B2311 | 1/2" | (12.7) | 1 21/64" | (33.7) | .048 | (1.2) | 1.9 | (.8) |
| B2312 | 5/8" | (15.9) | 1 25/64" | (35.3) | .062 | (1.6) | 2.7 | (1.2) |
| B2313 | 3/4" | (19.0) | 1 39/64" | (40.9) | .075 | (1.9) | 4.3 | (1.9) |
| B2314 | 7/8" | (22.2) | 1 51/64" | (45.6) | .075 | (1.9) | 4.9 | (2.2) |
| B2315 | 1" | (25.4) | 2 1/32" | (51.6) | .075 | (1.9) | 5.2 | (2.3) |



Reference page 188 for general fitting specifications.

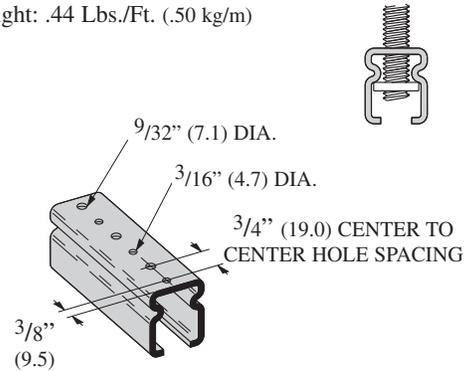
E7016

- Light duty support for electrical fixtures, conduits and boxes
- Standard 1/4"-20 square nut slips into the slot for ease of attachment
- Thickness: 16 Ga. (1.5 mm)
- Standard lengths: 120" (3.05 m)
- Standard finish: Pre-Galvanized
- Weight: .45 Lbs./Ft. (.52 kg/m)



E7016H3/4

- Pre-punched holes provide for installation on 1 1/2" (38.1) centers for 1/4"-20 ATR or for #8 screws or toggle bolts
- Thickness: 16 Ga. (1.5 mm)
- Standard lengths: 120" (3.05 m)
- Standard finish: Pre-Galvanized
- Weight: .44 Lbs./Ft. (.50 kg/m)



Design Stress = 25,000 PSI (172 MPa)
 Section Modulus (S) = .021 in.³ (.34 cm³)
 Moment of Inertia (I) = .009 in.⁴ (.37 cm⁴)
 Radius of Gyration (r) = .275 in. (.70 cm)

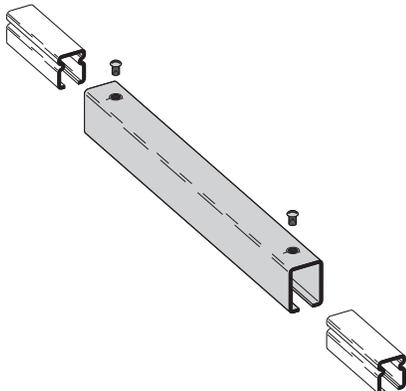
To determine concentrated load capacity at mid span, multiply uniform load by 0.5 and corresponding deflection by 0.8.

LOAD CHART

| Beam Span | | Uniform Load | | Deflection | | Uniform Load 1/240 Span | | Deflection 1/240 Span | |
|-----------|--------|--------------|------|------------|---------|----------------------------|------|--------------------------|--------|
| In. | mm | Lbs. | N | In. | mm | Lbs. | N | In. | mm |
| 12 | (305) | 347 | 1543 | .030 | (.76) | 347 | 1543 | .05 | (1.27) |
| 24 | (609) | 173 | 769 | .121 | (3.07) | 143 | 636 | .10 | (2.54) |
| 36 | (914) | 115 | 511 | .272 | (6.91) | 63 | 280 | .15 | (3.81) |
| 48 | (1219) | 86 | 382 | .484 | (12.29) | 35 | 155 | .20 | (5.08) |
| 60 | (1524) | 69 | 307 | .756 | (19.20) | 23 | 102 | .25 | (6.35) |

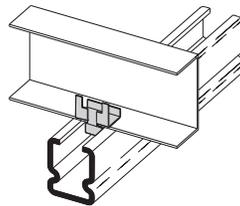
E7166 JOINER PLATE

- Joins Econo-Strut channels together to provide continuous runs
- Includes:
 - 1 pc. Joiner Plate
 - 2 pcs. 1/4"-20 x 1/2" SRHMS
- Wt./C 42 Lbs. (19.0 kg)



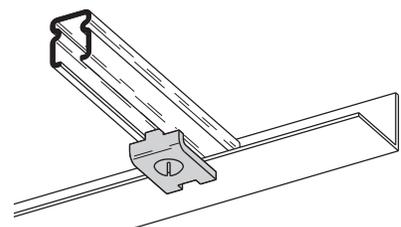
E7212 FASTENER CLIP

- Used to attach Econo-Strut to lathers channel or other light gauge carrying beams
- Wt./C 1 Lb. (.4 kg)



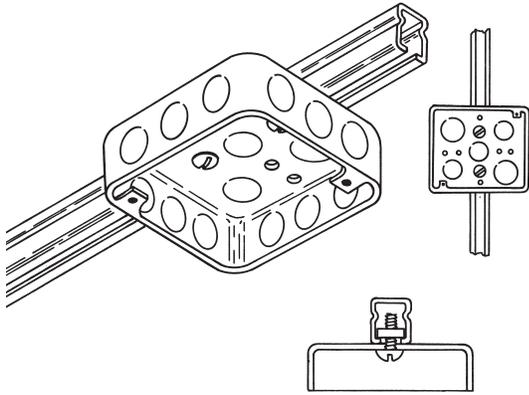
E7355 BEAM CLAMP

- Secures Econo-Strut to bar joists, angle iron, or I-Beams with a maximum flange thickness of 1/4" (6.3)
- Includes:
 - 1 Beam Clamp
 - 1 pc. 1/4"-20 x 1" SHHMS
 - 1 pc. 1/4"-20 Square Nut
- Wt./C 8 Lbs. (3.6 kg)

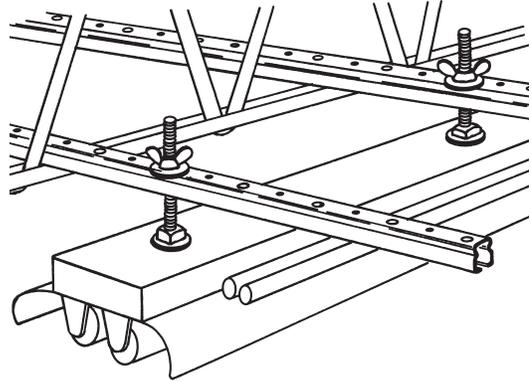


Reference page 188 for general fitting specifications.

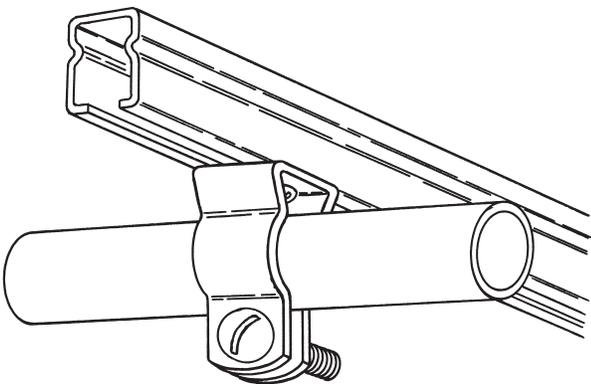
Typical Econo-Strut Applications



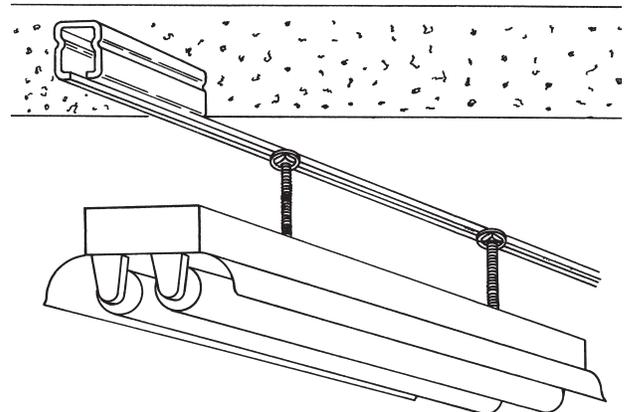
Econo-Strut supports electrical box with screws and square nuts.



Econo-Strut fixture support secured to the bar joists.



Econo-Strut pipe or conduit support.



Econo-Strut used as a continuous concrete insert.

Continuous Concrete Inserts

Continuous slot Concrete Inserts are designed to provide a pre-set support system cast in concrete ceilings, walls, and floors to allow flexibility of attachment at any point along the channel. This provides an excellent support system for pipe, conduit, and cable trays.

Continuous Concrete Inserts, manufactured from B-Line's standard channels, have formed anchors spaced on 4 inch (101.6 mm) centers. $\frac{3}{16}$ " (4.8 mm) nail-holes are provided for securing the inserts to the forms.

Available in lengths from 3 inches (7.62 cm) to 240 inches (609.6 cm), Concrete Inserts are shipped complete with end caps and styrofoam filler strips which prevent seepage of concrete into the insert. Styrofoam is easily removed by pulling the convenient pull-tab.

Materials & Finishes*

| Finish Code | Finish | Specification |
|-------------|--------------------------|-------------------------------------|
| PLN | Plain | ASTM A1011 33,000 PSI min. yield |
| GRN | Dura-Green | |
| ZN | Electro-Plated Zinc | ASTM B633 SC1 Type III |
| GALV | Pre-Galvanized | ASTM A653 33,000 PSI min. yield |
| HDG | Hot-Dipped Galvanized | ASTM A123 |
| SS4 | Stainless Steel Type 304 | ASTM A240 |
| SS6 | Stainless Steel Type 316 | ASTM A240 |

*Unless otherwise noted.



Spot Inserts

B-Line's Spot Inserts provide for economical single attachment points with full flexibility of fastener sizing, but with limited adjustment. These products are made from steel strips in accordance with ASTM A1011, 33,000 PSI min. yield. Standard finish is electro-plated zinc (ASTM B633).

Special Concrete Inserts

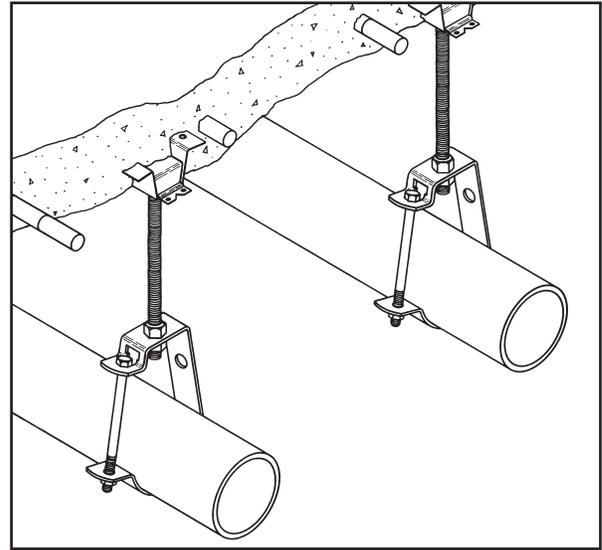
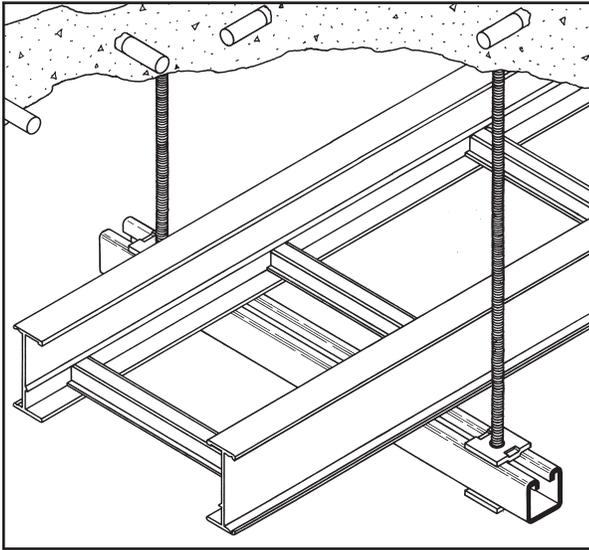
Pre-stressed inserts, inserts with studs welded to the back of the channel, and other types of special inserts are available from B-Line.

Test Data

Independent Testing Laboratory test data available upon request.

Metric

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

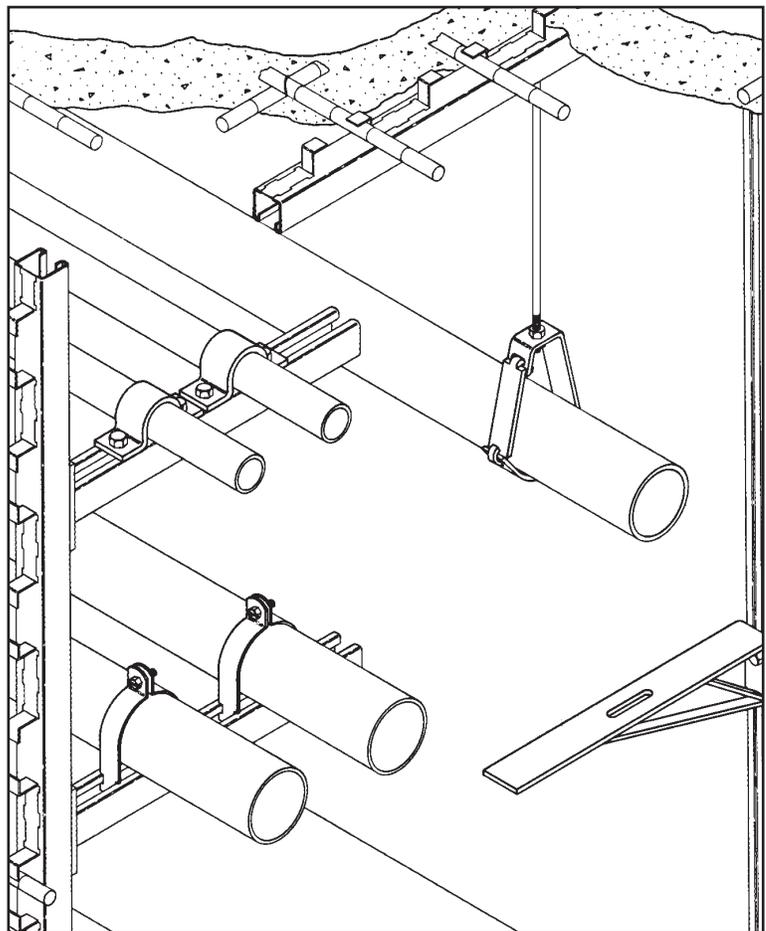


Continuous concrete inserts, installed in the ceiling, can be used to support trapeze hangers, suspended pipe racks, cable trays and single or multiple pipe hangers.

When installed in walls, continuous concrete inserts can be used as a support for tunnel stanchions, equipment braces, brackets and pipe racks.

Use spot inserts for single pipe-support or trapeze type hangers. Spot Inserts offer full flexibility of rod and fastener sizings.

B-Line Channel can be attached to continuous concrete inserts in walls or ceilings. Channel can also be attached to concrete walls and floors with expansion anchors.

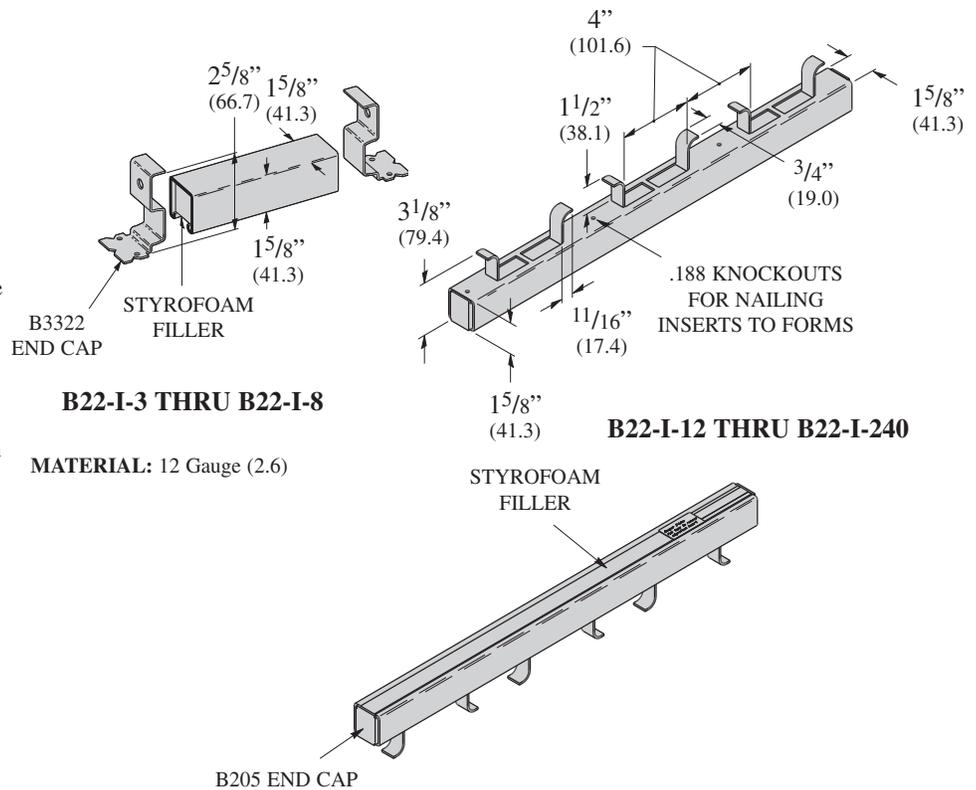


Reference page 202 for general fitting and standard finish specifications.

Continuous Concrete Inserts

B22I CONTINUOUS CONCRETE INSERT

- Design Load for B22-I-12 thru B22-I-240 is 2,000 lbs. (8.89 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 1,000 lbs. (4.45kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B22-I continuous concrete inserts are made from B22 channel. Use channel nuts designed for use in B22 channel.
- B22-I concrete inserts are supplied with styrofoam fillers. B3322 end caps are furnished with inserts through 8" (203.2 mm) long, and B205 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG



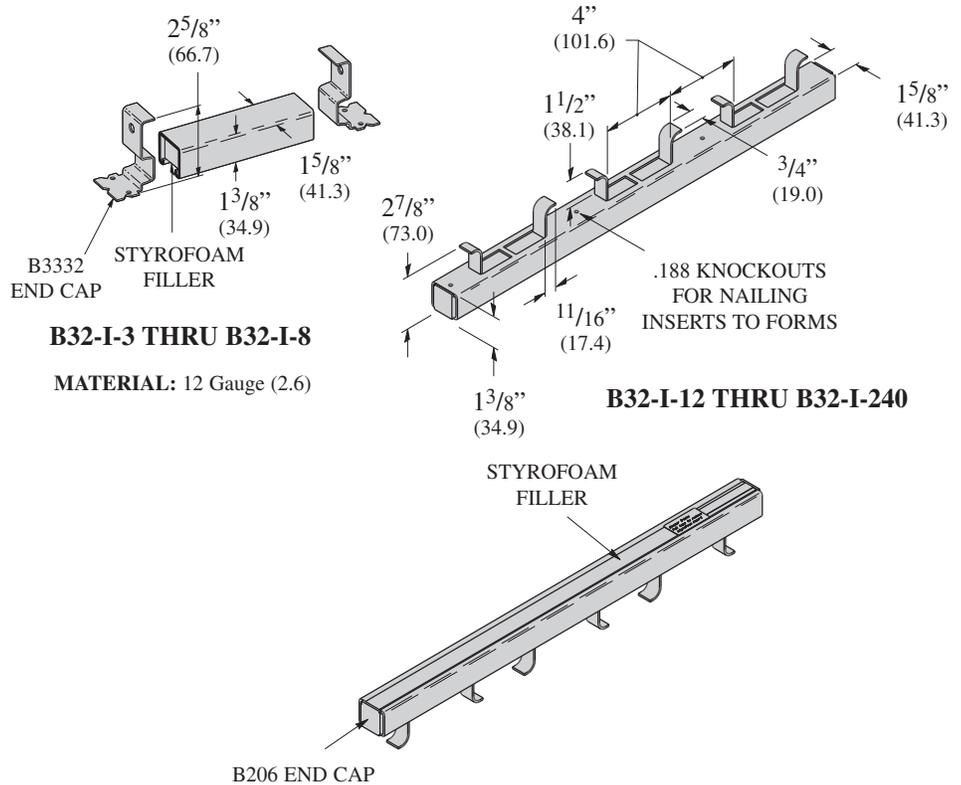
| Part No. | Length | | Wt./C | | Design Load | |
|----------|--------|-------|-------|--------|-------------|--------|
| | in. | mm | Lbs. | kg | Lbs. | kN |
| B22-I-3 | 3" | (76) | 72 | (32.6) | 500 | (2.22) |
| B22-I-4 | 4" | (101) | 88 | (39.9) | 800 | (3.56) |
| B22-I-6 | 6" | (152) | 120 | (54.4) | 1000 | (4.45) |
| B22-I-8 | 8" | (203) | 152 | (68.9) | 1200 | (5.34) |

| Part No. | Length | | Wt./C | |
|-----------|--------|--------|-------|----------|
| | in. | mm | Lbs. | kg |
| B22-I-12 | 12" | (305) | 224 | (101.6) |
| B22-I-16 | 16" | (406) | 289 | (131.1) |
| B22-I-20 | 20" | (508) | 353 | (160.1) |
| B22-I-24 | 24" | (609) | 420 | (190.5) |
| B22-I-32 | 32" | (813) | 553 | (250.8) |
| B22-I-36 | 36" | (914) | 620 | (281.2) |
| B22-I-40 | 40" | (1016) | 686 | (311.1) |
| B22-I-48 | 48" | (1219) | 820 | (371.9) |
| B22-I-60 | 60" | (1524) | 1018 | (461.7) |
| B22-I-72 | 72" | (1829) | 1218 | (552.5) |
| B22-I-84 | 84" | (2133) | 1417 | (642.7) |
| B22-I-96 | 96" | (2438) | 1616 | (733.0) |
| B22-I-108 | 108" | (2743) | 1816 | (823.7) |
| B22-I-120 | 120" | (3048) | 2016 | (914.4) |
| B22-I-144 | 144" | (3657) | 2416 | (1095.9) |
| B22-I-168 | 168" | (4267) | 2816 | (1277.3) |
| B22-I-192 | 192" | (4877) | 3216 | (1458.7) |
| B22-I-216 | 216" | (5486) | 3616 | (1640.2) |
| B22-I-240 | 240" | (6096) | 4016 | (1821.6) |

Reference page 202 for general fitting and standard finish specifications.

B32I CONTINUOUS CONCRETE INSERT

- Design Load for B32-I-12 thru B32-I-240 is 2,000 lbs. (8.89 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 1,000 lbs. (4.45kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B32-I continuous concrete inserts are made from B32 channel. Use channel nuts designed for use in B32 channel.
- B32-I concrete inserts are supplied with styrofoam fillers. B3332 end caps are furnished with inserts through 8" (203.2 mm) long, and B206 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG



| Part No. | Length | | Wt./C | | Design Load | |
|----------|--------|-------|-------|--------|-------------|--------|
| | in. | mm | Lbs. | kg | Lbs. | kN |
| B32-I-3 | 3" | (76) | 65 | (29.5) | 500 | (2.22) |
| B32-I-4 | 4" | (101) | 80 | (36.3) | 800 | (3.56) |
| B32-I-6 | 6" | (152) | 108 | (49.0) | 1000 | (4.45) |
| B32-I-8 | 8" | (203) | 137 | (62.1) | 1200 | (5.34) |

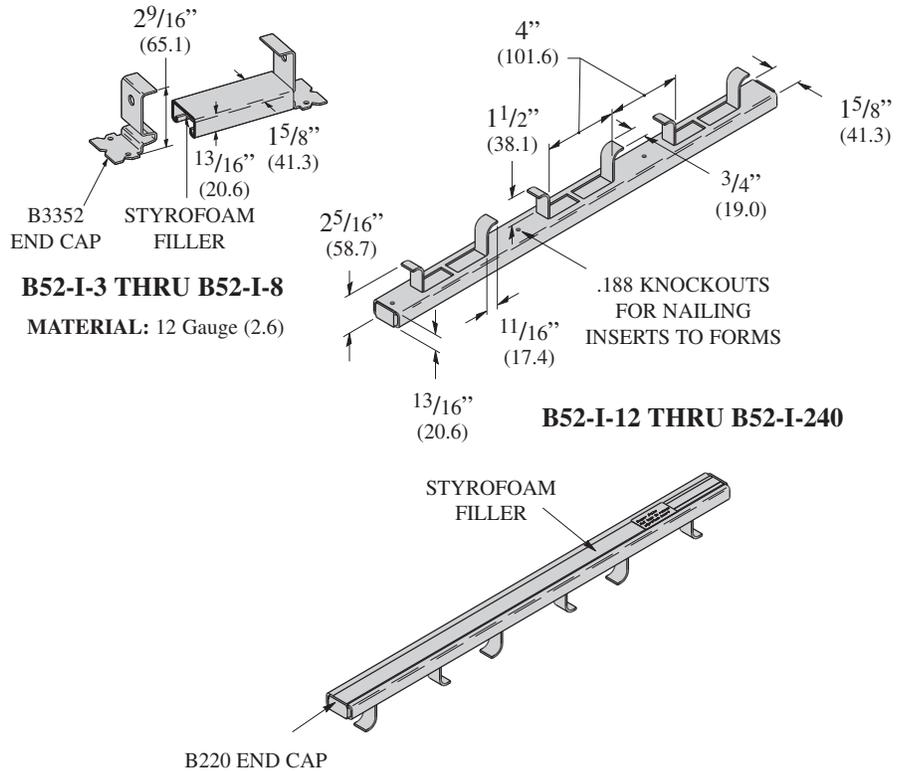
| Length Part No. | Wt./C | | Lbs. | kg |
|--------------------|-------|--------|------|----------|
| | in. | mm | | |
| B32-I-12 | 12" | (305) | 202 | (91.6) |
| B32-I-16 | 16" | (406) | 262 | (118.8) |
| B32-I-20 | 20" | (508) | 316 | (143.3) |
| B32-I-24 | 24" | (609) | 376 | (170.5) |
| B32-I-32 | 32" | (813) | 496 | (225.0) |
| B32-I-36 | 36" | (914) | 556 | (252.2) |
| B32-I-40 | 40" | (1016) | 616 | (279.4) |
| B32-I-48 | 48" | (1219) | 736 | (333.8) |
| B32-I-60 | 60" | (1524) | 915 | (415.0) |
| B32-I-72 | 72" | (1829) | 1095 | (496.7) |
| B32-I-84 | 84" | (2133) | 1274 | (577.9) |
| B32-I-96 | 96" | (2438) | 1453 | (659.0) |
| B32-I-108 | 108" | (2743) | 1633 | (740.7) |
| B32-I-120 | 120" | (3048) | 1813 | (822.3) |
| B32-I-144 | 144" | (3657) | 2173 | (985.6) |
| B32-I-168 | 168" | (4267) | 2533 | (1148.9) |
| B32-I-192 | 192" | (4877) | 2893 | (1312.2) |
| B32-I-216 | 216" | (5486) | 3253 | (1475.5) |
| B32-I-240 | 240" | (6096) | 3613 | (1638.8) |

Reference page 202 for general fitting and standard finish specifications.

Continuous Concrete Inserts

B52I CONTINUOUS CONCRETE INSERT

- Design Load for B52-I-12 thru B52-I-240 is 1,500 lbs. (6.67 kN) per foot of concrete insert length with safety factor of 3 in 3000 psi concrete.
- Loads concentrated within the last 2 inches (50.8 mm) of concrete inserts 8" (203.2 mm) and longer should not exceed 750 lbs. (3.33 kN).
- Concrete insert should be secured to the forms on 16" (406.4 mm) to 24" (609.6 mm) intervals.
- B52-I continuous concrete inserts are made from B52 channel. Use channel nuts designed for use in B52 channel.
- B52-I concrete inserts are supplied with styrofoam fillers. B3352 end caps are furnished with inserts through 8" (203.2 mm) long, and B220 end caps are furnished with inserts 12" (304.8 mm) and longer.
- Material: Plain Steel ASTM A1011 33,000 PSI min. yield or Pre-Galvanized Steel ASTM A653SS 33,000 PSI min. yield.
- Finish: Plain, Dura-Green, Pre-Galv, HDG



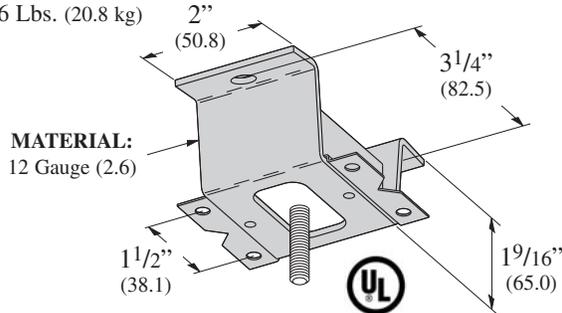
| Part No. | Length | | Wt./C | | Design Load | |
|----------|--------|-------|-------|--------|-------------|--------|
| | in. | mm | Lbs. | kg | Lbs. | kN |
| B52-I-3 | 3" | (76) | 53 | (24.0) | 400 | (1.78) |
| B52-I-4 | 4" | (101) | 63 | (28.6) | 500 | (2.22) |
| B52-I-6 | 6" | (152) | 85 | (38.5) | 750 | (3.33) |
| B52-I-8 | 8" | (203) | 106 | (48.1) | 1000 | (4.45) |

| Part No. | Length | | Wt./C | |
|-----------|--------|--------|-------|----------|
| | in. | mm | Lbs. | kg |
| B52-I-12 | 12" | (305) | 157 | (71.2) |
| B52-I-16 | 16" | (406) | 202 | (91.6) |
| B52-I-20 | 20" | (508) | 237 | (107.5) |
| B52-I-24 | 24" | (609) | 282 | (127.9) |
| B52-I-32 | 32" | (813) | 373 | (169.2) |
| B52-I-36 | 36" | (914) | 419 | (190.0) |
| B52-I-40 | 40" | (1016) | 464 | (210.4) |
| B52-I-48 | 48" | (1219) | 556 | (252.2) |
| B52-I-60 | 60" | (1524) | 692 | (313.9) |
| B52-I-72 | 72" | (1829) | 829 | (376.0) |
| B52-I-84 | 84" | (2133) | 965 | (437.7) |
| B52-I-96 | 96" | (2438) | 1107 | (502.1) |
| B52-I-108 | 108" | (2743) | 1237 | (561.1) |
| B52-I-120 | 120" | (3048) | 1374 | (623.2) |
| B52-I-144 | 144" | (3657) | 1648 | (747.5) |
| B52-I-168 | 168" | (4267) | 1922 | (871.8) |
| B52-I-192 | 192" | (4877) | 2196 | (996.1) |
| B52-I-216 | 216" | (5486) | 2470 | (1120.4) |
| B52-I-240 | 240" | (6096) | 2744 | (1244.6) |

Reference page 202 for general fitting and standard finish specifications.

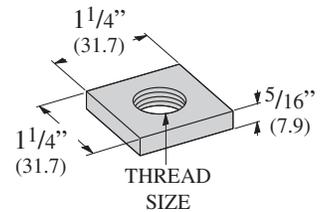
B2500 SPOT INSERT

- Design Load 600 Lbs. (2.67 kN)
- Safety Factor of 5
- Order N2500 Nuts Separately
- Material: Steel ASTM A1011
33,000 PSI min. yield
- Standard finish: ZN
- Wt./C 46 Lbs. (20.8 kg)



N2500 INSERT SQUARE NUT

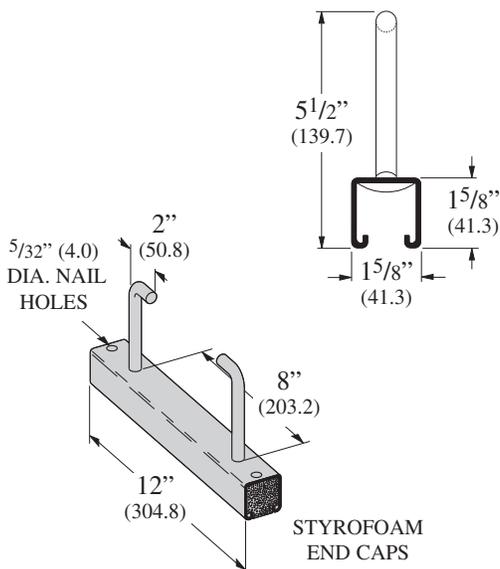
- For use in B2500 Spot Insert
- Material: Steel ASTM A36
- Standard finish: ZN



| Part No. | Thread Size | Wt./C | |
|------------|-------------|-------|-------|
| | | Lbs. | kg |
| N2500-1/4 | 1/4"-20 | 13 | (5.9) |
| N2500-5/16 | 5/16"-18 | 13 | (5.9) |
| N2500-3/8 | 3/8"-16 | 12 | (5.4) |
| N2500-1/2 | 1/2"-13 | 12 | (5.4) |
| N2500-5/8 | 5/8"-11 | 11 | (5.0) |
| N2500-3/4 | 3/4"-10 | 10 | (4.5) |
| N2500-7/8 | 7/8"-9 | 9 | (4.1) |

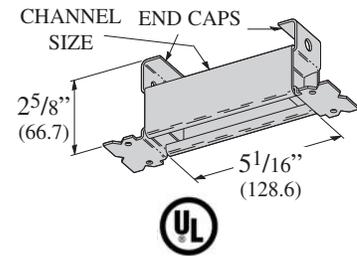
B2503 HEAVY DUTY SPOT INSERT

- Designed for use where heavy loads are required in curtain wall applications
- Design Load is 5000 Lbs. (22.2 kN) with a Safety Factor of 3
- Loading based on two N225 channel nuts spaced 3" (76.2 mm) on center and a minimum of 2" (50.8 mm) from the end of the insert
- Styrofoam end caps prevent concrete seepage into the channel
- 12" (304.8 mm) long insert is anchored into the concrete at a depth of 5 1/2" (139.7 mm)
- Material: 12 Gauge (2.6 mm) thick steel
- Standard finish: ZN
- Wt./C 42 Lbs. (19.0 kg)



B2505 THRU B2508 SPOT INSERT

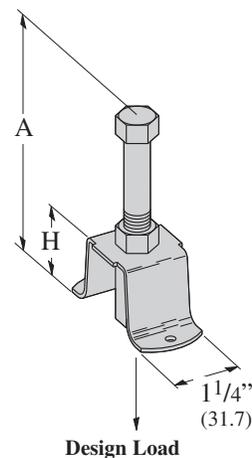
- Safety Factor of 5
- To support 10" (250) pipe use B2505 insert with 5/8"-11 Channel Nuts.
- To support up to and including 8" (200) pipes use B2506, B2507 and B2508 inserts with the desired Channel Nuts.
- Standard finish: ZN



| Part No. | Channel Style | End Cap Part No. | Design Load | | Maximum Pipe Size | Wt./C | |
|----------|---------------|------------------|-------------|--------|-------------------|-------|--------|
| | | | Lbs. | kN | | Lbs. | kg |
| B2505 | B22 | B3322 | 1200 | (5.34) | 10" (250) | 96 | (43.5) |
| B2506 | B32 | B3332 | 1000 | (4.45) | 8" (200) | 88 | (39.9) |
| B2507 | B42 | B3342 | 1000 | (4.45) | 8" (200) | 77 | (34.9) |
| B2508 | B52 | B3352 | 1000 | (4.45) | 8" (200) | 69 | (31.3) |

B2501 LIGHT DUTY SPOT INSERT

- Safety Factor of 2
- The concrete attachment problem solver for light duty applications.
- Fast and easy applications.
- No concrete leakage problems.
- One piece unitized construction.
- Color coded cap on thread for rod size identification and to prevent concrete seepage. (1/4"-Yellow, 3/8"-Red, 1/2"-Blue)



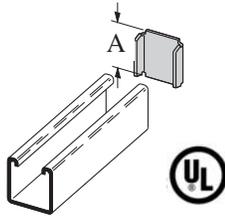
| Part No. & Size | Height A | | Height H | | Design Load | | Wt./C | |
|-----------------|----------|---------|----------|--------|-------------|--------|-------|--------|
| | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| B2501-1/4 | 2 7/16" | (61.9) | 7/8" | (22.2) | 250 | (1.11) | 16 | (7.2) |
| B2501-3/8 | 3 1/16" | (77.8) | 1 7/8" | (47.6) | 610 | (2.71) | 22 | (9.9) |
| B2501-1/2 | 4 1/8" | (104.8) | 1 7/8" | (47.6) | 880 | (3.91) | 26 | (11.7) |

Reference page 202 for general fitting and standard finish specifications.

Insert Accessories

B205, B206, B220 X TYPE END CAPS

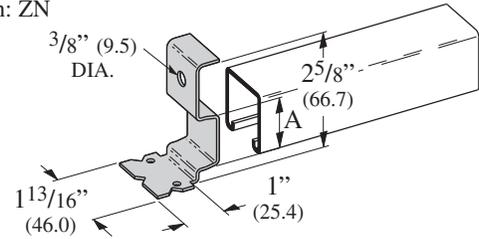
- UL listed for raceway use only
- Material: 12 Gauge (2.6)
- Standard finish: ZN



| Part No. | Use With | A | | Wt./C | |
|----------|----------|-----------------------------------|--------|-------|-------|
| | | Lbs. | kg | Lbs. | kg |
| B205 | B22 | 1 ²¹ / ₃₂ " | (42.0) | 10 | (4.5) |
| B206 | B32 | 1 ¹³ / ₃₂ " | (35.7) | 8 | (3.6) |
| B220 | B52 | 2 ⁷ / ₃₂ " | (21.4) | 4 | (1.8) |

B3322, B3332, B3342, B3352 Y TYPE END CAPS

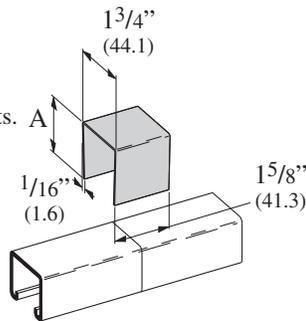
- UL listed for raceway use only
- Material: 14 Gauge (1.9)
- Standard finish: ZN



| Part No. | Use With | A | | Wt./C | |
|----------|----------|-------|--------|-------|-------|
| | | Lbs. | kg | Lbs. | kg |
| B3322 | B22 | 1.270 | (32.2) | 15 | (6.8) |
| B3332 | B32 | 1.000 | (25.4) | 15 | (6.8) |
| B3342 | B42 | .645 | (16.4) | 15 | (6.8) |
| B3352 | B52 | .460 | (11.7) | 15 | (6.8) |

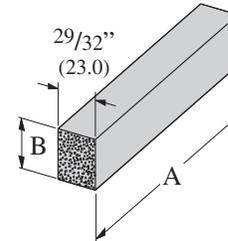
B380 JOINT SPLICE PLATE

- Used at splice points to prevent concrete seepage in long continuous runs of concrete inserts.
- Material: 18 Gauge (1.2)
- Standard finish: GALV



| Part No. | Use With | A | | Wt./C | |
|----------|----------|----------------------------------|--------|-------|-------|
| | | Lbs. | kg | Lbs. | kg |
| B380-22 | B22 | 1 ⁵ / ₈ " | (41.3) | 11 | (5.0) |
| B380-32 | B32 | 1 ³ / ₈ " | (34.9) | 10 | (4.5) |
| B380-42 | B42 | 1" | (25.4) | 9 | (4.1) |
| B380-52 | B52 | 1 ³ / ₁₆ " | (20.6) | 7 | (3.2) |

B22IFS-B52IFS STYROFOAM FILLER STRIP



| Part No. | A | | B | Wt./C | |
|----------|-----|--------|--|-------|-------|
| | Ft. | mm | | Lbs. | kg |
| B22-IFS | 4' | (1219) | 1 ⁷ / ₃₂ " (309) | 10 | (4.5) |
| B32-IFS | 4' | (1219) | 1" (254) | 9 | (4.1) |
| B52-IFS | 4' | (1219) | 2 ¹ / ₃₂ " (167) | 7 | (3.2) |

PIPE SLEEVE FASTENERS

- Allows for rigid attachment of pipe sleeves to wall and floor forms for concrete pouring.
- Accommodates Schedule 40, Schedule 80, or 5/16" (8) and smaller wall thickness.
- Simply installed with a hammer.

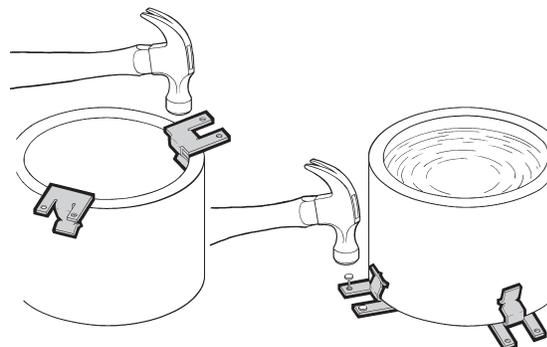


BD40



BE-5-8 & BE-9-12

| Part No. | Sleeve Diameter | Wall Thickness |
|----------|-----------------|------------------|
| BD40 | All Dia. | 5/16" & under |
| BE-5-8 | 6" | Schedule 80 pipe |
| BE-9-12 | 9" - 14" | Schedule 80 pipe |

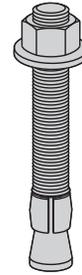


Reference page 202 for general fitting and standard finish specifications.

WEDGE ANCHOR

•Safety Factor of 4

| Catalog Number | Thread Size | Overall Length | | Max. Mat'l. Thickness to be Anchored | | Minimum Embedment Depth | | Drill Hole Diameter | |
|----------------|-------------|----------------|-------|--------------------------------------|-------|-------------------------|------|---------------------|------|
| | | in. | mm | in. | mm | in. | mm | in. | mm |
| AWA-37-225 | 3/8"-16 | 2 1/4" | (57) | 3/8" | (9) | 1 1/2" | (38) | 3/8" | (10) |
| AWA-37-275 | 3/8"-16 | 2 3/4" | (70) | 7/8" | (22) | | | 3/8" | (10) |
| AWA-37-300 | 3/8"-16 | 3" | (76) | 1 1/8" | (28) | | | 3/8" | (10) |
| AWA-37-375 | 3/8"-16 | 3 3/4" | (95) | 1 7/8" | (47) | | | 3/8" | (10) |
| AWA-37-500 | 3/8"-16 | 5" | (127) | 3 1/8" | (79) | | | 3/8" | (10) |
| AWA-50-275 | 1/2"-13 | 2 3/4" | (70) | 1/8" | (3) | 2 1/4" | (57) | 1/2" | (13) |
| AWA-50-375 | 1/2"-13 | 3 3/4" | (95) | 1" | (25) | | | 1/2" | (13) |
| AWA-50-425 | 1/2"-13 | 4 1/4" | (108) | 1 1/2" | (38) | | | 1/2" | (13) |
| AWA-50-550 | 1/2"-13 | 5 1/2" | (140) | 2 3/4" | (70) | | | 1/2" | (13) |
| AWA-50-700 | 1/2"-13 | 7" | (178) | 4 1/4" | (108) | | | 1/2" | (13) |

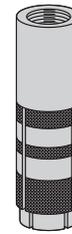


Note: For Information on wedge anchors refer to Cooper B-Line Anchor catalog.

DROP-IN

•Safety Factor of 4

| Catalog Number | Thread Size | Length | | Thread Depth | | Drill/Hole Diameter | |
|----------------|-------------|---------|------|--------------|------|---------------------|------|
| | | in. | mm | in. | mm | in. | mm |
| ADI-25 | 1/4"-20 | 1" | (25) | 7/16" | (11) | 3/8" | (10) |
| ADI-37 | 3/8"-16 | 1 9/16" | (40) | 5/8" | (16) | 1/2" | (13) |
| ADI-50 | 1/2"-13 | 2" | (51) | 13/16" | (21) | 5/8" | (16) |
| ADI-62 | 5/8"-11 | 2 1/2" | (64) | 13/16" | (30) | 7/8" | (22) |
| ADI-75 | 3/4"-10 | 3 1/8" | (79) | 13/16" | (30) | 1" | (25) |

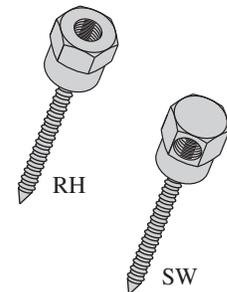


Note: For Information on drop-in anchors refer to Cooper B-Line Anchor catalog.

RAPID ROD™ HANGERS FOR CONCRETE

•Safety Factor of 4

| Catalog Number | Size | | Drill/Hole Diameter | | Rod Size | Allowable Pull-Out Load | | Allowable Shear Load | |
|----------------|----------------|----------|---------------------|-----|----------|-------------------------|-------|----------------------|-------|
| | in. | mm | in. | mm | | Lbs. | kN | Lbs. | kN |
| ARC-1-RH25 | 5/16" x 1 1/2" | (8 x 38) | 1/4" | (6) | 1/4"-20 | 702 | (3.1) | -- | -- |
| ARC-1-RH37 | 5/16" x 1 1/2" | (8 x 38) | 1/4" | (6) | 3/8"-16 | 702 | (3.1) | -- | -- |
| ARC-1-SW37 | 5/16" x 1 1/2" | (8 x 38) | 1/4" | (6) | 3/8"-16 | -- | -- | 512 | (2.3) |

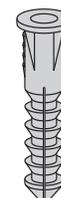


Note: For Information on Rapid Rod hangers refer to Cooper B-Line Anchor catalog.

PLASTIC SCREW ANCHORS

•Safety Factor of 4

| Catalog Number | Screw Size | Anchor Length | | Drill/Hole Diameter | | Allowable Pull Out Load | |
|----------------|-----------------|---------------|------|---------------------|-----|-------------------------|-------|
| | | in. | mm | in. | mm | Lbs. | kN |
| APS-4-87 | #4, #6, & #8 | 7/8" | (22) | 3/16" | (5) | 50 | (0.2) |
| APS-8-125 | #8, #10, & #12 | 1 1/4" | (32) | 1/4" | (6) | 100 | (0.4) |
| APS-12-150 | #12, #14, & #16 | 1 1/2" | (38) | 5/16" | (8) | 150 | (0.6) |



Note: For Information on plastic screw anchors refer to Cooper B-Line Anchor catalog.

Reference page 202 for general fitting and standard finish specifications.

Slotted Angle

B-Line Slotted Angle is an all-purpose framing system, roll formed from high strength steel strips. It is designed to be used as economical shelving, racks or electrical and mechanical supports. The unique pattern of horizontal and vertical slots permits full flexibility. Three basic sizes are available for light, medium, and heavy duty applications.

Materials & Finishes*

| Finish Code | Finish | Specification |
|-------------|---------------------|-------------------------------------|
| PLN | Plain | ASTM A1011 33,000 PSI min. yield |
| ZN | Electro-Plated Zinc | ASTM B633 SC3 |
| GRN | Dura-Green | |
| GALV | Pre-Galvanized | ASTM A653 33,000 PSI min. yield |

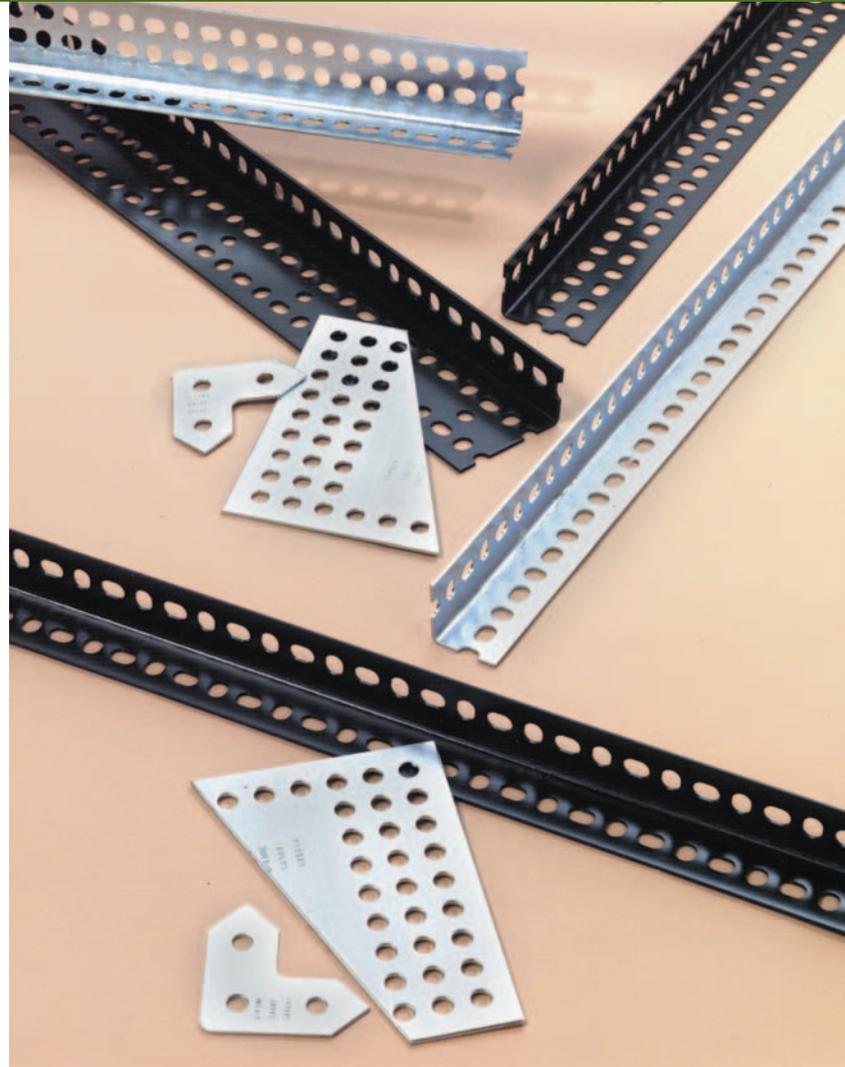
*Unless otherwise noted.

Lengths

Standard lengths are 10' (3.05 m) and 12' (3.66 m). Slotted Angle is shipped in ten piece bundles complete with 75 pieces of $\frac{3}{8}$ " x $\frac{3}{4}$ " (19mm) hex head cap screws and $\frac{3}{8}$ " hex nuts.

Metric

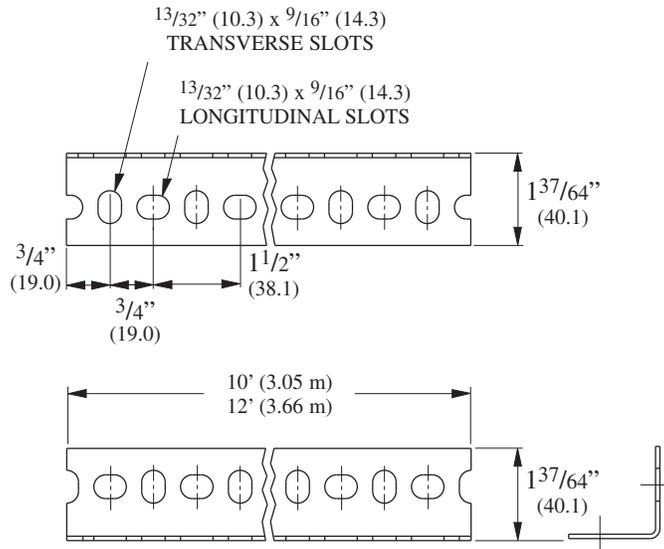
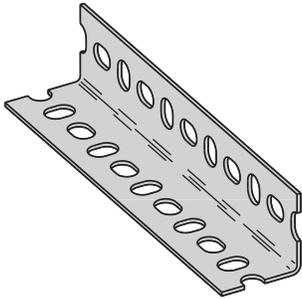
Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.



Slotted Angle Sizes

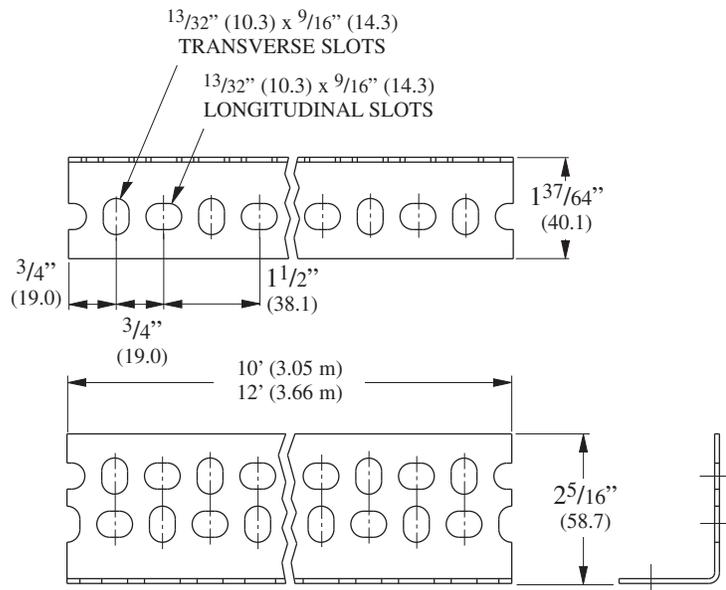
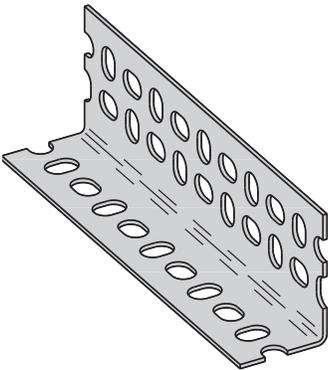
SA158

- 14 Gauge (1.9)
- 1⁵/₈" x 1⁵/₈"
- Standard finishes: ZN, GRN
- Wt./Ft. .66 Lbs. (.98 kg/m)



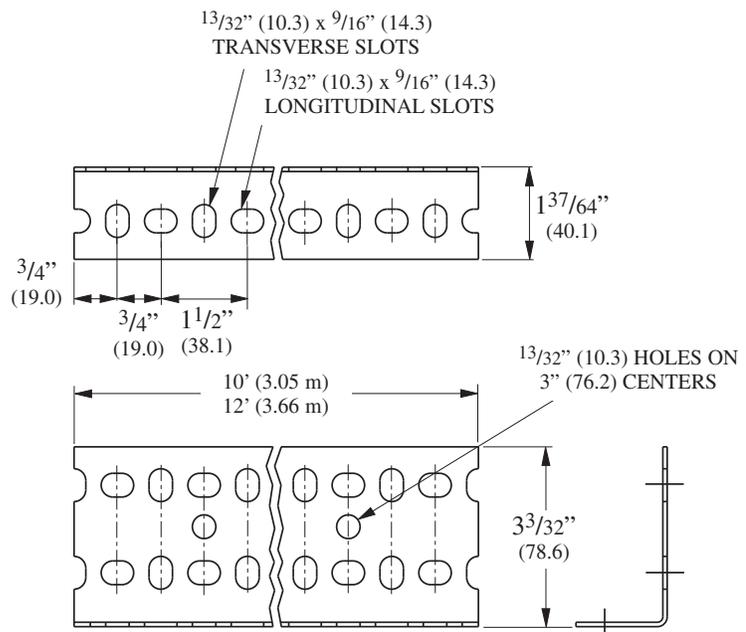
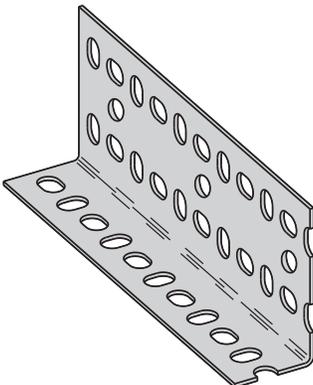
SA276

- 14 Gauge (1.9)
- 1⁵/₈" x 2³/₈"
- Standard finishes: ZN, GRN
- Wt./Ft. .78 Lbs. (1.17 kg/m)



SA318

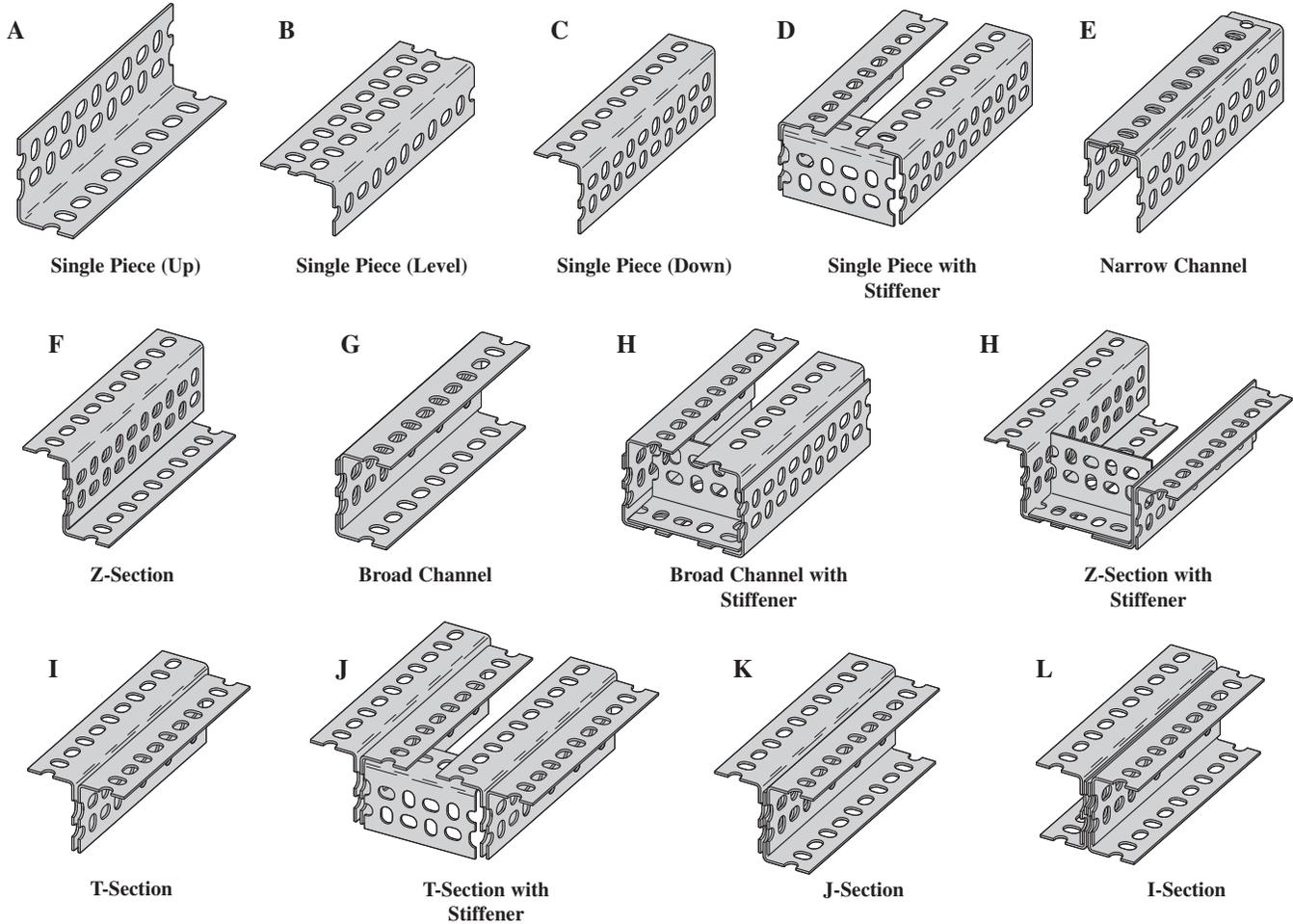
- 12 Gauge (2.6)
- 1⁵/₈" x 3¹/₈"
- Standard finishes: ZN, GRN
- Wt./Ft. 1.32 Lbs. (1.96 kg/m)



Reference page 210 for general fitting and standard finish specifications.

Slotted Angle Beam Loading & Combinations

BEAM SECTIONS



For greater strength required in some applications, Slotted Angle may be fastened together to create combination shapes. A number of these combinations are illustrated above. Refer to the following table for load capacities of these combinations.

Beam Sections illustrated are single sections, except J, N, and P.

BEAM LOADING

SA158-1⁵/₈" (41.3) x 1⁵/₈" (41.3) x 14 Gauge (1.9)

| | Beam Span | | | | | | | | | | | | | |
|----------|--------------|---------|--------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|
| | 24" (609 mm) | | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | | 84" (2133 mm) | | 96" (2438 mm) | |
| | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| A | 825 | (3670) | 525 | (2335) | 340 | (1512) | 230 | (1023) | 180 | (800) | – | – | – | – |
| B | 1100 | (4893) | 800 | (3558) | 540 | (2402) | 370 | (1646) | 250 | (1112) | – | – | – | – |
| C | 1100 | (4893) | 800 | (3558) | 540 | (2402) | 370 | (1646) | 250 | (1112) | – | – | – | – |
| D | 1300 | (5782) | 900 | (4003) | 625 | (2780) | 450 | (2001) | 330 | (1468) | 275 | (1223) | 200 | (889) |
| G | 1900 | (8451) | 1360 | (6049) | 1050 | (4670) | 825 | (3670) | 660 | (2936) | 530 | (2357) | 400 | (1779) |
| H | 2300 | (10231) | 1850 | (8229) | 1450 | (6450) | 1100 | (4893) | 950 | (4226) | 800 | (3558) | 700 | (3114) |
| I | 2200 | (9786) | 1650 | (7339) | 1225 | (5449) | 930 | (4137) | 700 | (3114) | 550 | (2446) | 450 | (2001) |

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

Reference page 210 for general fitting and standard finish specifications.

Slotted Angle Beam Loading

BEAM LOADING

SA276-1⁵/₈" (41.3) x 2³/₈" (60.3) x 14 Gauge (1.9)

| | Beam Span | | | | | | | | | | | | | | | | | |
|---|--------------|---------|--------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|--------|----------------|--------|----------------|--------|
| | 24" (609 mm) | | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | | 84" (2133 mm) | | 96" (2438 mm) | | 108" (2743 mm) | | 120" (3048 mm) | |
| | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| A | - | - | 680 | (3025) | 450 | (2001) | 340 | (1512) | - | - | - | - | - | - | - | - | - | - |
| B | - | - | 830 | (3692) | 550 | (2446) | 360 | (1601) | 210 | (934) | 150 | (667) | - | - | - | - | - | - |
| C | - | - | 1540 | (6850) | 1060 | (4715) | 800 | (3558) | 610 | (2713) | 480 | (2135) | 340 | 1512 | 250 | (1112) | - | - |
| D | - | - | 1880 | (8362) | 1280 | (5694) | 970 | (4315) | 820 | (3647) | 650 | (2891) | 550 | (2446) | 420 | (1868) | 340 | (1512) |
| E | - | - | 2110 | (9386) | 1730 | (7695) | 1460 | (5775) | 1250 | (5560) | 1090 | (4848) | 920 | (4092) | 820 | (3647) | 680 | (3025) |
| F | 4290 | (19083) | 2510 | (11165) | 1790 | (7962) | 1330 | (5916) | 980 | (4359) | 710 | (3158) | 550 | (2446) | 420 | (1868) | 320 | (1423) |
| G | 4320 | (19216) | 3000 | (13344) | 2140 | (9519) | 1600 | (7117) | 1290 | (5738) | 1040 | (4626) | 820 | (3647) | 640 | (2847) | 490 | (2179) |
| H | - | - | 3480 | (15480) | 2430 | (10809) | 1890 | (8407) | 1620 | (7206) | 1430 | (6361) | 1270 | (5649) | 1160 | (5160) | 1030 | (4581) |
| I | 5780 | (25711) | 3640 | (16191) | 2820 | (12544) | 2200 | (9786) | 1700 | (7562) | 1350 | (6005) | 1060 | (4715) | 850 | (3781) | 680 | (3025) |
| J | - | - | 3660 | (16280) | 2840 | (12633) | 2230 | (9919) | 1720 | (7651) | 1360 | (6049) | 1090 | (4848) | 874 | (3888) | 700 | (3114) |
| K | - | - | 4910 | (21841) | 3830 | (17036) | 3000 | (13344) | 2550 | (11343) | 2190 | (9741) | 1880 | (8362) | 1640 | (7295) | 1430 | (6361) |
| L | - | - | 6360 | (28290) | 4590 | (20417) | 3470 | (15435) | 2910 | (12944) | 2550 | (11343) | 2240 | (9964) | 2010 | (8941) | 1840 | (8185) |

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

BEAM LOADING

SA318-1⁵/₈" (41.3) x 3¹/₈" (79.4) x 12 Gauge (2.6)

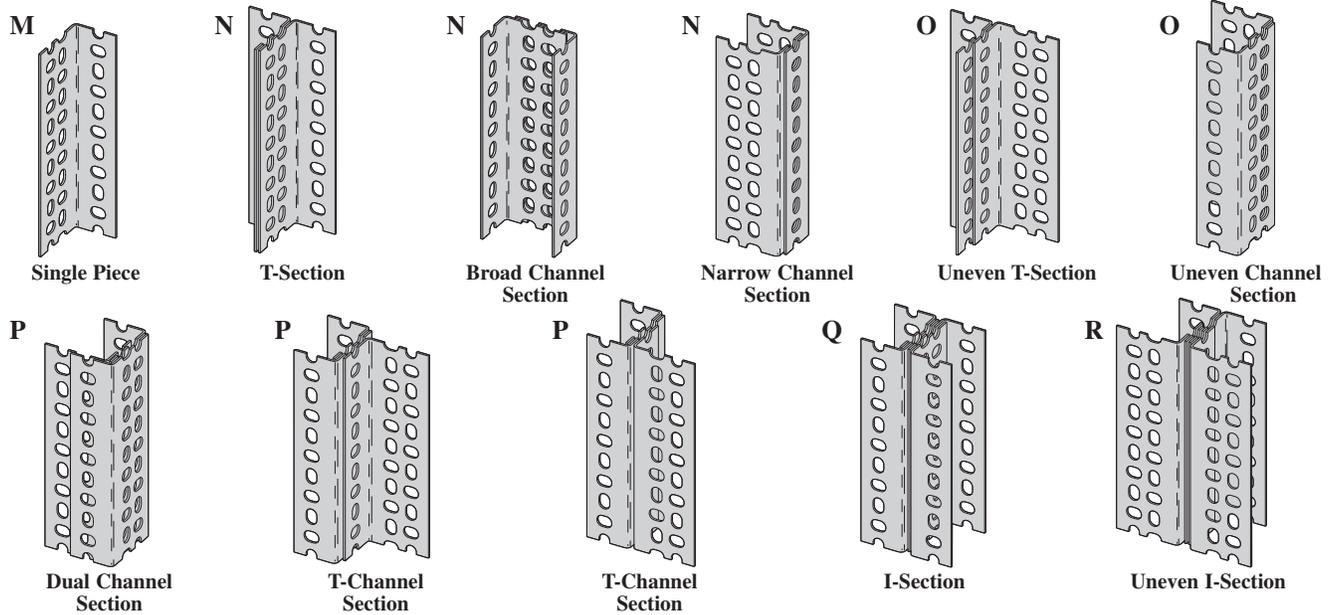
| | Beam Span | | | | | | | | | | | | | | | | | |
|---|--------------|---------|--------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|----------------|---------|----------------|---------|
| | 24" (609 mm) | | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | | 84" (2133 mm) | | 96" (2438 mm) | | 108" (2743 mm) | | 120" (3048 mm) | |
| | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| A | - | - | 1140 | (5071) | 850 | (3781) | 690 | (3069) | - | - | - | - | - | - | - | - | - | - |
| B | - | - | 1250 | (5560) | 850 | (3781) | 600 | (2669) | 400 | (1779) | - | - | - | - | - | - | - | - |
| C | 4800 | (21351) | 2750 | (12232) | 1800 | (8007) | 1280 | (5694) | 1000 | (4448) | 790 | (3514) | 610 | (2713) | - | - | - | - |
| D | - | - | 3900 | (17348) | 2690 | (11966) | 2050 | (9119) | 1700 | (7562) | 1480 | (6583) | 1280 | (5694) | 1100 | (4893) | 960 | (4270) |
| E | - | - | 4160 | (18504) | 3560 | (15835) | 3130 | (13923) | 2750 | (12232) | 2400 | (10676) | 2170 | (9652) | 1950 | (8674) | 1780 | (7918) |
| F | 8180 | (36386) | 5000 | (22241) | 3650 | (16236) | 2750 | (12232) | 2200 | (9786) | 1750 | (7784) | 1350 | (6005) | 1020 | (4537) | 700 | (3114) |
| G | 10600 | (47151) | 6050 | (26912) | 4440 | (19750) | 3330 | (14812) | 2670 | (11877) | 2120 | (9430) | 1660 | (7384) | 1210 | (5382) | 1000 | (4448) |
| H | - | - | 6100 | (27134) | 4620 | (20551) | 3670 | (16325) | 3110 | (13834) | 2680 | (11921) | 2380 | (10587) | 2100 | (9341) | 1950 | (8674) |
| I | 13700 | (60940) | 7800 | (34696) | 5900 | (26244) | 4600 | (20462) | 3800 | (16903) | 3190 | (14190) | 2630 | (11699) | 2170 | (9652) | 1810 | (8051) |
| J | - | - | 7900 | (35141) | 6300 | (28024) | 5050 | (22463) | 4070 | (18104) | 3240 | (14412) | 2630 | (11699) | 2170 | (9652) | 1810 | (8051) |
| K | - | - | 10050 | (44704) | 8000 | (35586) | 6320 | (28113) | 5350 | (23798) | 4650 | (20684) | 4040 | (17971) | 3520 | (15658) | 3120 | (13878) |
| L | - | - | 12700 | (56492) | 9550 | (42480) | 7540 | (33539) | 6540 | (29091) | 5730 | (25488) | 5030 | (22374) | 4520 | (20106) | 4000 | (17793) |

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

Reference page 210 for general fitting and standard finish specifications.

Slotted Angle Column Loading & Combinations

COLUMN SECTIONS



For greater strength required in some applications, Slotted Angle may be fastened together to create combination shapes. A number of these combinations are illustrated above. Refer to the following table for load capacities of these combinations.

COLUMN LOADING - SA158-1⁵/₈" (41.3) x 1⁵/₈" (41.3) x 14 Gauge (1.9)

| | Column Height | | | | | | | |
|---|---------------|---------|---------------|---------|---------------|---------|---------------|---------|
| | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | |
| | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| M | 1450 | (6450) | 1150 | (5115) | 950 | (4226) | 750 | (3336) |
| N | 3850 | (17125) | 3500 | (15569) | 3000 | (13344) | 2500 | (11120) |

Column Loads assume no lateral support.

COLUMN LOADING - SA276-1⁵/₈" (41.3) x 2³/₈" (60.3) x 14 Gauge (1.9)

| | Column Height | | | | | | | | | | | | | | | |
|---|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|----------------|---------|----------------|---------|
| | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | | 84" (2133 mm) | | 96" (2438 mm) | | 108" (2743 mm) | | 120" (3048 mm) | |
|  | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| M | 2280 | (10142) | 1970 | (8763) | 1520 | (6761) | 1070 | (4759) | 660 | (2936) | - | - | - | - | - | - |
| N | 4760 | (21173) | 4490 | (19972) | 3995 | (17770) | 3140 | (13967) | 2340 | (10409) | 1750 | (7784) | - | - | - | - |
| O | 4940 | (21974) | 4680 | (20817) | 4310 | (19172) | 3870 | (17214) | 3665 | (16303) | 2700 | (12010) | 2060 | (9163) | 1610 | (7161) |
| P | 7270 | (32338) | 6920 | (30781) | 6370 | (28335) | 5840 | (25977) | 4930 | (21930) | 3850 | (17125) | 2870 | (12766) | 2060 | (9163) |
| Q | 9520 | (42347) | 8970 | (39900) | 7990 | (35541) | 6280 | (27935) | 4660 | (20729) | 3500 | (15569) | - | - | - | - |
| R | 9865 | (43881) | 9330 | (41502) | 8620 | (38343) | 7715 | (34318) | 6740 | (29981) | 5365 | (23865) | 4115 | (18304) | 3210 | (14279) |

Column Loads assume no lateral support.

COLUMN LOADING - SA318-1⁵/₈" (41.3) x 3¹/₈" (79.4) x 12 Gauge (2.6)

| | Column Height | | | | | | | | | | | | | | | |
|---|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|----------------|---------|----------------|---------|
| | 36" (914 mm) | | 48" (1219 mm) | | 60" (1524 mm) | | 72" (1829 mm) | | 84" (2133 mm) | | 96" (2438 mm) | | 108" (2743 mm) | | 120" (3048 mm) | |
|  | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N | Lbs. | N |
| M | 3470 | (15435) | 2870 | (12766) | 1970 | (8763) | 1280 | (5694) | - | - | - | - | - | - | - | - |
| N | 7970 | (35452) | 7360 | (32739) | 6570 | (29225) | 5270 | (23442) | 3670 | (16325) | 2580 | (11476) | - | - | - | - |
| O | 8770 | (39011) | 8580 | (38166) | 8180 | (36386) | 7690 | (34207) | 6970 | (31004) | 6260 | (27846) | 5460 | (24287) | 4460 | (19839) |
| P | 12560 | (55869) | 11970 | (53245) | 11360 | (50532) | 10480 | (46617) | 9470 | (42124) | 8370 | (37231) | 6880 | (30604) | 5370 | (23887) |
| Q | 15940 | (70904) | 14750 | (65611) | 13160 | (58538) | 10560 | (46973) | 7370 | (32783) | 5170 | (22997) | - | - | - | - |
| R | 17550 | (78066) | 17150 | (76287) | 16360 | (72773) | 15360 | (68324) | 13970 | (62141) | 12570 | (55914) | 10970 | (48797) | 8960 | (39856) |

Column Loads assume no lateral support.

Reference page 202 for general fitting and standard finish specifications.

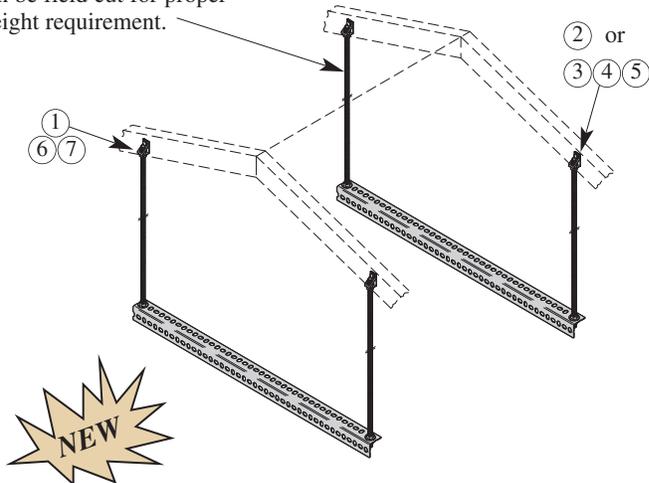
Slotted Angle Kits & Fittings

AHHK-1/4 & AHHK-3/8 AIR HANDLER HANGING KIT

- Standard finishes: ZN
- Load Capacity Per Kit: 400 Lbs. (181.4 kg)

- ⑧ Hanging rods come in 72" lengths.
Rods can be field cut for proper height requirement.

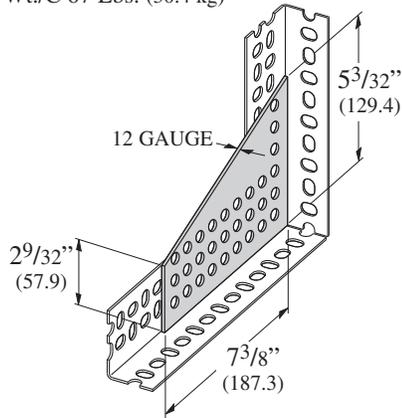
| Item # | Description | Quantity | |
|--------|-----------------------------|----------|----------|
| | | AHHK 1/4 | AHHK 3/8 |
| ① | Rod Hanger Fitting | 4 | 4 |
| ② | Lag Screw | 4 | 4 |
| ③ | Hex Head Cap Screw | 4 | 4 |
| ④ | Flat Washer (For HHCS) | 4 | 4 |
| ⑤ | Hex Nuts (For HHCS) | 4 | 4 |
| ⑥ | Hex Nuts (For Hanging Rods) | 16 | 16 |
| ⑦ | Flat Washer (See Note 1) | 16 | - |
| ⑧ | Hanging Rods (72" Long) | 4 | 4 |
| ⑨ | SA158 (36" Long) | 2 | 2 |



Note 1: Flat washers are required for 1/4"-20 hanging rods only.

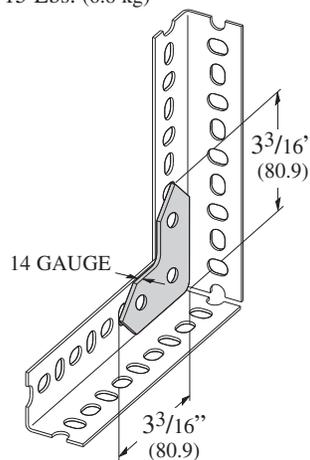
SA101 CONNECTION PLATE

- Standard finishes: ZN, GRN
- Wt./C 67 Lbs. (30.4 kg)



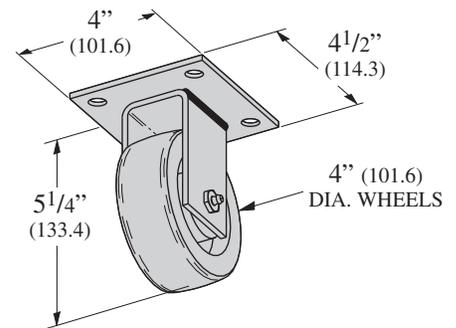
SA102 ANGLE BRACE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



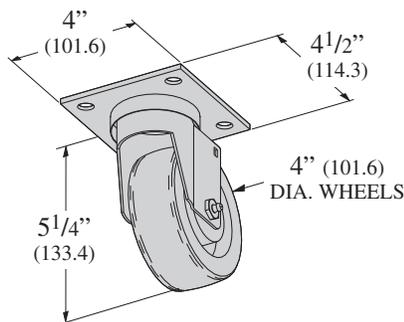
SA154 RIGID CASTER

- Safety Factor of 1.5
- 300 Lbs. (136.1 kg) maximum load capacity
- Caster material: Phenolic
- Standard finishes: ZN, GRN
- Wt./Ea. 2.0 Lbs. (.91 kg)



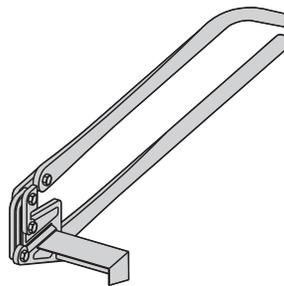
SA155 SWIVEL CASTER

- Safety Factor of 1.5
- 300 Lbs. (136.1 kg) maximum load capacity
- Caster material: Phenolic
- Standard finishes: ZN, GRN
- Wt./Ea. 2.2 Lbs. (1.0 kg)



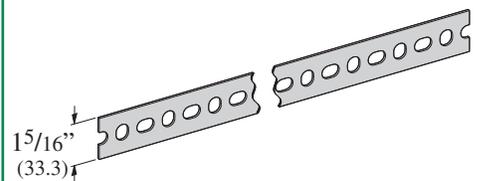
SA110 SLOTTED ANGLE CUTTER

- Standard finishes:
- Wt./Ea. 16 Lbs. (7.26 kg)



SA131 SLOTTED STRAP

- Hole pattern is identical to the hole pattern in slotted angles
- Standard length: 10' (3.05 m)
- Standard finishes: Pre-Galv. (GALV)
- Material thickness: 14 gauge (1.9)



CLEATS: To reinforce load-bearing joints, cleats can be field made by cutting 2 1/4" (57.1) long segments from the widest slotted angle available. Use SA276 for light duty cleats and SA318 for heavy duty cleats.

SPLICE PLATES: To assemble two pieces of slotted angle using a butt joint requires a 6" (152.4) splice plate for reinforcement.

Reference page 210 for general fitting and standard finish specifications.

Reference Data

METRIC CONVERSION CHART

| To Convert From | To | Multiply By | To Convert From | To | Multiply By | | | |
|-------------------------------------|-------------------------------|--|--|-------------------------------|-----------------|---------------------------|-------------------------------|------------|
| Angle | | | Length | | | | | |
| degree | radian (rad) | 0.01745329 | foot (ft) | meter (m) | 0.3048 | | | |
| radian (rad) | degree | 57.29578 | inch (in) | meter (m) | 0.0254 | | | |
| Area | | | mil | meter (m) | 0.0000254 | | | |
| | | | inch (in) | micrometer (µm) | 25400.00 | | | |
| | | | meter (m) | foot (ft) | 3.280840 | | | |
| | | | meter (m) | inch (in) | 39.37008 | | | |
| | | | meter (m) | mil | 39370.08 | | | |
| | | | micrometer (µm) | inch (in) | 0.00003937008 | | | |
| | | | Temperature | | | Volume | | |
| | | | | | | foot ³ | cubic meter (m ³) | 0.02831685 |
| inch ³ | cubic meter (m ³) | 0.00001638706 | | | | | | |
| cubic centimeter (cm ³) | cubic inch (in ³) | 0.06102374 | | | | | | |
| degree Fahrenheit | degree Celsius | $t^{\circ C} = (t^{\circ F} - 32) / 1.8$ | cubic meter (m ³) | foot ³ | 35.31466 | | | |
| degree Celsius | degree Fahrenheit | $t^{\circ F} = 1.8t^{\circ C} + 32$ | cubic meter (m ³) | inch ³ | 61023.76 | | | |
| Force | | | gallon (U.S. liquid) | cubic meter (m ³) | 0.003785412 | | | |
| | | | pounds-force (lbf) | newtons (N) | 4.448222 | Section Properties | | |
| | | | section modulus S (in ³) | S (m ³) | 0.00001638706 | | | |
| | | | moment of inertia I (in ⁴) | I (m ⁴) | 0.0000004162314 | | | |
| | | | modulus of elasticity E (psi) | E (Pa) | 6894.757 | | | |
| | | | section modulus S (m ³) | S (in ³) | 61023.74 | | | |
| | | | moment of inertia I (m ⁴) | I (in ⁴) | 2402510.0 | | | |
| | | | modulus of elasticity E (Pa) | E (psi) | 0.0001450377 | | | |

| To Convert From | To | Multiply By | Abbreviations | |
|---------------------------------|--|-----------------|-----------------------|---|
| Bending Moment or Torque | | | Defl. | = Deflection |
| lbf • ft | newton meter (N•m) | 1.355818 | S.F. | = Safety Factor |
| lbf • in | newton meter (N•m) | 0.1129848 | Ft. | = Feet |
| N•m | lbf • ft | 0.7375621 | Pre-galv. | = Pre-galvanized Steel |
| N•m | lbf • in | 8.850748 | K Factor | = Deflection Divided by load in Lbs./Ft. |
| Mass | | | o.c. | = On Center |
| ounce (avoirdupois) | kilogram (kg) | 0.02834952 | PVC | = Poly Vinyl Chloride |
| pound (avoirdupois) | kilogram (kg) | 0.4535924 | In. | = Inch |
| ton (short, 2000 lb) | kilogram (kg) | 907.1847 | psi | = Pounds per Square Inch |
| ton (long, 2240 lb) | kilogram (kg) | 1016.047 | wt./c | = Weight pre 100 pieces |
| kilogram (kg) | ounce (avoirdupois) | 35.27396 | Metric Symbols | |
| kilogram (kg) | pound (avoirdupois) | 2.204622 | m | = meter |
| kilogram (kg) | ton (short, 2000 lb) | 0.001102311 | cm | = centimeter |
| kilogram (kg) | ton (long, 2240 lb) | 0.0009842064 | mm | = millimeter |
| Mass Per Unit Length | | | µm | = micrometer |
| lb/ft | kilogram per meter (kg/m) | 1.488164 | kg | = kilogram |
| lb/in | kilogram per meter (kg/m) | 17.85797 | N | = newton |
| kg/m | lb/ft | 0.6719689 | kN | = kilonewton |
| kg/m | lb/in | 0.5599741 | Pa | = pascal |
| Mass Per Unit Volume | | | MPa | = megapascal |
| lb/ft ³ | kilogram per cubic meter (kg/m ³) | 16.01846 | | |
| lb/in ³ | kilogram per cubic meter (kg/m ³) | 27679.9 | | |
| kg/m ³ | lb/ft ³ | 0.06242797 | | |
| kg/m ³ | lb/in ³ | 0.0000361273 | | |
| lbs/ft ³ | lbs/in ³ | 1728.0 | | |
| Mass Per Unit Area | | | | |
| lb/ft ² | kilogram per square meter (kg/m ²) | 4.882428 | | |
| kg/m ² | pound per square foot (lb/ft ²) | 0.2048161 | | |
| Pressure or Stress | | | | |
| lbf/in ² (psi) | pascal (Pa) | 6894.757 | | |
| kip/in ² (ksi) | pascal (Pa) | 6894757.0 | | |
| lbf/in ² (psi) | megapascals (MPa) | 0.006894757 | | |
| pascal (Pa) | pound-force per square inch (psi) | 0.0001450377 | | |
| pascal (Pa) | kip per square inch (ksi) | 0.0000001450377 | | |
| megapascals (MPa) | lbf/in ² (psi) | 145.0377 | | |

DESIGN LOAD DATA (For typical channel-fitting connections when USED IN PAIRS).

| 90° Fittings | | | | | | | | | | | | | |
|-------------------|-------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|
| Channel Thickness | | Lbs. | | kN | | Lbs. | | kN | | Lbs. | | kN | |
| | | | | | | | | | | | | | |
| 12 ga. | (2.6) | 1500 | (6.67) | 1000 | (4.45) | 2000 | (8.90) | 1500 | (6.67) | 1500 | (6.67) | 1000 | (4.45) |
| 14 ga. | (1.9) | 1000 | (4.45) | 650 | (2.89) | 1500 | (6.67) | 1150 | (5.12) | 1000 | (4.45) | 650 | (2.89) |
| 16 ga. | (1.5) | 750 | (3.34) | 500 | (2.22) | 900 | (4.00) | 650 | (2.89) | 1000 | (4.45) | 500 | (2.22) |

Design load data includes a safety factor of 2.5 (safety factor = ratio of ultimate load to design load).

| 90° Fittings | | | | | | | | | | Flat Fittings | | | |
|-------------------|-------|------|---------|------|--------|------|---------|------|---------|---------------|--------|------|--------|
| Channel Thickness | | Lbs. | | kN | | Lbs. | | kN | | Lbs. | | kN | |
| | | | | | | | | | | | | | |
| 12 ga. | (2.6) | 2500 | (11.12) | 2000 | (8.90) | 3000 | (13.34) | 2500 | (11.12) | 1000 | (4.45) | 1000 | (4.45) |
| 14 ga. | (1.9) | 2000 | (8.90) | 1650 | (7.34) | 2000 | (8.90) | 1650 | (7.34) | 500 | (3.56) | 800 | (3.56) |
| 16 ga. | (1.5) | 1500 | (6.67) | 1250 | (5.56) | 1500 | (6.67) | 1250 | (5.56) | 600 | (2.67) | 600 | (2.67) |

General Notes for Strut-Type Channel Raceway

Guide RIUU - Cooper B-Line, Inc., Highland, IL 62249 December 11, 1998 (C)
 FLUORESCENT AND INCANDESCENT LIGHTING



File No. E29637

Suitable for not more than the number of wires of the sizes and types indicated in the following tables. Intended to enclose circuits operating at potentials not exceeding 600 volts between conductors. In all cases, the B217-20 or B217P snap-in cover is required to complete raceway closure. When using B217-24 snap-in cover, the number of wires is limited to 7 or fewer conductors no larger than #12 AWG.

B-Line's strut-type channel raceways and fittings are manufactured and tested to comply with the UL Standard for Safety for Strut-Type Channel Raceways and Fittings (UL 5B) in accordance with Article 384 of the 2002 National Electrical Code, NFPA 70.

1. Support spans for strut-type channel raceway shall not exceed 10 foot intervals.
2. No conductor larger than that for which the raceway is listed shall be installed in strut-type channel raceways. No wires under 14AWG or over 6AWG are allowed in any of B-Line's strut-type channel raceway. See tables 1, 2 and 3 below for a listing of the approved conductors for B-Line's strut-type channel raceways.
3. The number of conductors permitted in strut-type channel raceway shall not exceed the percentage fill using Table 384-22 and the applicable outside diameter of specific types and sizes of wire given in the tables in chapter 9 of the National Electrical Code. Table 384-22 lists two different percent fill areas depending on the use of internal or external joiners. Use 40% area fill with external joiners and 25% area fill for internal joiners.
4. Items in the electrical section of the B-Line Strut Systems Catalog identified by the UL symbol provide for electrical continuity. Other items require the use of a separate grounding wire.
5. If strut-type channel raceway is connected to another wiring system, the raceway must be field-tapped adjacent to the wire entry point to accept a #10-32 or larger grounding screw. A plated or stainless steel screw may be used. A sheet metal screw is not acceptable. Drill and tap the grounding wire hole before installing wires in raceway or move installed wires out of the way to avoid damage. After drilling and tapping, remove metal chips and burrs before installing screw.

TABLE 1: MAXIMUM NUMBER OF WIRES (Adjusted per NEC Table 384.22 for 40% fill)

Use this table to determine the type and number of conductors for use with B-Line's strut-type channel raceway using external joiners. This table applies for all installations except for the support and supply of electric discharge type lighting fixtures. See table 2 and 3 for further information.

| Insulation Type | Wire Size AWG. | B11 B11K06 | B12 B12K06 | B22 B22K06 | B24 B24K06 | B26 B26K06 | B32 B32K06 | B56 B56K06 |
|-------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| FEP, FEPB | 14 | 172 | 127 | 81 | 81 | 81 | 67 | 36 |
| | 12 | 126 | 92 | 59 | 59 | 59 | 49 | 26 |
| | 10 | 90 | 66 | 42 | 42 | 42 | 35 | 19 |
| | 8 | 51 | 38 | 24 | 24 | 24 | 20 | 11 |
| | 6 | 24 | 17 | 11 | 12 | 12 | 9 | 5 |
| RH, RHH, RHW | 14 | 52 | 38 | 24 | 26 | 27 | 20 | 12 |
| | 12 | 45 | 33 | 21 | 22 | 23 | 17 | 10 |
| | 10 | 37 | 27 | 17 | 18 | 19 | 14 | 8 |
| | 8 | 20 | 14 | 9 | 10 | 10 | 7 | 4 |
| | 6 | 14 | 10 | 6 | 7 | 7 | 5 | 3 |
| T, TW | 14 | 124 | 91 | 58 | 58 | 58 | 48 | 26 |
| | 12 | 95 | 70 | 45 | 45 | 45 | 37 | 20 |
| | 10 | 69 | 51 | 33 | 33 | 33 | 27 | 14 |
| | 8 | 36 | 26 | 17 | 18 | 19 | 14 | 8 |
| | 6 | 21 | 15 | 9 | 10 | 11 | 8 | 5 |
| THHN, THWN | 14 | 178 | 131 | 84 | 84 | 84 | 69 | 37 |
| | 12 | 130 | 95 | 61 | 61 | 61 | 50 | 27 |
| | 10 | 82 | 60 | 38 | 38 | 38 | 32 | 17 |
| | 8 | 46 | 34 | 21 | 22 | 22 | 17 | 10 |
| | 6 | 33 | 24 | 15 | 16 | 16 | 12 | 7 |
| THW | 14 | 82 | 61 | 39 | 39 | 39 | 32 | 17 |
| | 12 | 66 | 49 | 31 | 31 | 31 | 26 | 14 |
| | 10 | 52 | 38 | 24 | 24 | 24 | 20 | 11 |
| | 8 | 29 | 21 | 13 | 14 | 15 | 11 | 6 |
| | 6 | 21 | 15 | 10 | 10 | 11 | 8 | 5 |
| XHHW | 14 | 124 | 91 | 58 | 58 | 58 | 48 | 26 |
| | 12 | 95 | 70 | 45 | 45 | 45 | 37 | 20 |
| | 10 | 71 | 52 | 33 | 33 | 33 | 28 | 15 |
| | 8 | 37 | 27 | 17 | 19 | 19 | 14 | 8 |
| | 6 | 27 | 20 | 13 | 14 | 14 | 10 | 6 |

TABLE 2: MAXIMUM NUMBER OF WIRES

Also suitable for the number of wires in table below when installed to support and supply *electric discharge type lighting fixtures* when raceway wiring is suitable for at least 70°C **and** clearance between fixture and raceway is at least 1/8". In all cases, a snap-in cover is required to complete the raceway enclosure.

| Wire Size | Raceway Catalog Wires | | | | | | |
|--|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | B11 B11K06 | B12 B12K06 | B22 B22K06 | B24 B24K06 | B26 B26K06 | B32 B32K06 | B56 B56K06 |
| Type Insulation: FEP, FEPB, RH, RHH, RHW, RUH, THHN, THWN, THW, XHHW | | | | | | | |
| 14 | 13 | 10 | 10 | 10 | 10 | 10 | 6 |
| 12 | 13 | 10 | 10 | 10 | 10 | 10 | 6 |
| 10 | 13 | 10 | 8 | 8 | 8 | 6 | – |
| 8 | 10 | 8 | 6 | 6 | 6 | 4 | – |
| 6 | 8 | 6 | 4 | 4 | 4 | 3 | – |

When using B217-24 snap-in cover, the number of wires is limited to 7 or fewer conductors no larger than #12 AWG.

TABLE 3: MAXIMUM NUMBER OF WIRES

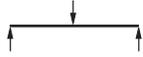
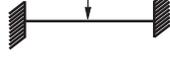
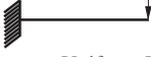
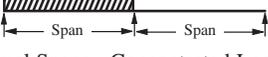
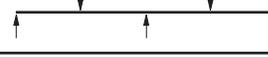
Also suitable for the number of wires in table below when installed to support and supply *electric discharge type lighting fixtures* when raceway wiring is suitable for 75°C, **or** wiring suitable for 60°C **if a minimum clearance between fixture and raceway is at least 1/2"**. In all cases, a snap-in cover is required to complete the raceway enclosure.

| Wire Size | Raceway Catalog Wires | | | | | | |
|--|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | B11 B11K06 | B12 B12K06 | B22 B22K06 | B24 B24K06 | B26 B26K06 | B32 B32K06 | B56 B56K06 |
| Type Insulation: FEP, FEPB, RH, RHH, RHW, RUH, THHN, THWN, THW, XHHW | | | | | | | |
| 14 | 10 | 10 | 10 | 10 | 10 | 10 | 4 |
| 12 | 10 | 10 | 10 | 10 | 10 | 10 | 3 |
| 10 | 8 | 5 | 5 | 5 | 5 | 5 | – |
| 8 | 6 | 4 | 4 | 4 | 4 | 4 | – |
| 6 | 4 | 4 | 4 | 4 | 4 | 4 | – |

When using B217-24 snap-in cover, the number of wires is limited to 7 or fewer conductors no larger than #12 AWG.

Reference Data

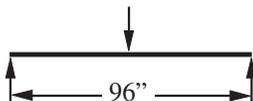
The data shown in the beam load charts for appropriate channels on page(s) 17 thru 39 is for simply supported, single span beams with a uniformly distributed load. For other loading and/or support conditions, use the appropriate factor from the chart below.

| LOAD AND SUPPORT CONDITION | Load Factor | Deflection Factor |
|--|-------------|-------------------|
| Simple Beam - Uniform Load  | 1.00 | 1.00 |
| Simple Beam - Concentrated Load at Center  | .50 | .80 |
| Simple Beam - Two Equal Concentrated Loads at 1/4 Points  | 1.00 | 1.10 |
| Beam Fixed at Both Ends - Uniform Load  | 1.50 | .30 |
| Beam Fixed at Both Ends - Concentrated Load at Center  | 1.00 | .40 |
| Cantilever Beam - Uniform Load  | .25 | 2.40 |
| Cantilever Beam - Concentrated Load at End  | .12 | 3.20 |
| Continuous Beam - Two Equal Spans - Uniform Load on One Span  | 1.30 | .92 |
| Continuous Beam - Two Equal Spans - Concentrated Load on Both Spans  | 1.00 | .42 |
| Continuous Beam - Two Equal Spans - Concentrated Load at Center of One Span  | .62 | .71 |
| Continuous Beam - Two Equal Spans - Concentrated Load at Center of Both Spans  | .67 | .48 |

EXAMPLES:

PROBLEM:

Calculate the maximum allowable load and corresponding deflection of a simply supported B22 beam with a concentrated load at midspan as shown.



SOLUTION:

From beam load chart for B22 (page 22), maximum allowable load is A and the corresponding deflection is B. Multiplying by the appropriate factors shown in the chart above.

LOAD = $\underline{A} \times \text{load factor} = \underline{\hspace{2cm}}$
 DEFLECTION = $\underline{B} \times \text{deflection factor} = \underline{\hspace{2cm}}$

PROBLEM:

Calculate the maximum allowable load and corresponding deflection of a cantilever B52 beam with a uniformly distributed load.



SOLUTION:

From beam load chart for B52 (page 33), maximum allowable load is A and the corresponding deflection is B. Multiplying by the appropriate factors shown in chart above.

LOAD = $\underline{A} \times \text{load factor} = \underline{\hspace{2cm}}$
 DEFLECTION = $\underline{B} \times \text{deflection factor} = \underline{\hspace{2cm}}$

RIGID STEEL CONDUIT (HEAVY WALL CONDUIT)

| Nominal Conduit Size | | Outside Diameter | | Nominal Inside Diameter | | Minimum Weight Per 100 Ft. (30.5m) with Couplings Attached | | Weight of Conduit and Conductors Per 100 Ft. (30.5m)* | |
|----------------------|-------|------------------|---------|-------------------------|---------|--|---------|---|----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 3/8" | (10) | 0.675 | (17.1) | 0.493 | (12.5) | 51.5 | (23.4) | 65.1 | (29.5) |
| 1/2" | (15) | 0.840 | (21.3) | 0.632 | (16.0) | 79.0 | (35.8) | 101.1 | (45.9) |
| 3/4" | (20) | 1.050 | (26.7) | 0.836 | (21.3) | 105.0 | (47.6) | 145.8 | (66.1) |
| 1" | (25) | 1.315 | (33.4) | 1.063 | (27.0) | 153.0 | (69.4) | 219.3 | (99.5) |
| 1 1/4" | (32) | 1.660 | (42.2) | 1.394 | (35.4) | 201.0 | (91.2) | 318.3 | (144.4) |
| 1 1/2" | (40) | 1.900 | (48.3) | 1.624 | (41.3) | 249.0 | (113.0) | 408.8 | (185.4) |
| 2" | (50) | 2.375 | (60.3) | 2.083 | (52.9) | 332.0 | (150.6) | 593.8 | (269.3) |
| 2 1/2" | (65) | 2.875 | (73.0) | 2.489 | (63.2) | 527.0 | (239.1) | 901.0 | (408.7) |
| 3" | (80) | 3.500 | (88.9) | 3.090 | (78.5) | 682.6 | (309.6) | 1259.0 | (571.1) |
| 3 1/2" | (90) | 4.000 | (101.6) | 3.570 | (90.7) | 831.0 | (376.9) | 1604.0 | (727.6) |
| 4" | (100) | 4.500 | (114.3) | 4.050 | (102.9) | 972.3 | (441.0) | 1967.0 | (892.2) |
| 5" | (125) | 5.563 | (141.3) | 5.073 | (128.9) | 1313.6 | (595.9) | 2876.0 | (1304.5) |
| 6" | (150) | 6.625 | (168.3) | 6.093 | (154.8) | 1745.3 | (791.7) | 4003.0 | (1815.7) |

Dimensions taken from ANSI C80.1-1977.

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

INTERMEDIATE METAL CONDUIT (IMC)

| Nominal Conduit Size | | Outside Diameter | | Nominal Inside Diameter | | Minimum Weight Per 100 Ft. (30.5m) with Couplings Attached | | Weight of Conduit and Conductors Per 100 Ft. (30.5m)* | |
|----------------------|-------|------------------|---------|-------------------------|---------|--|---------|---|---------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 1/2" | (15) | 0.815 | (20.7) | .675 | (17.1) | 60.0 | (27.2) | 82.1 | (37.2) |
| 3/4" | (20) | 1.029 | (26.1) | .879 | (22.3) | 82.0 | (37.2) | 122.8 | (55.7) |
| 1" | (25) | 1.290 | (32.7) | 1.120 | (28.4) | 116.0 | (52.6) | 182.3 | (82.7) |
| 1 1/4" | (32) | 1.638 | (41.6) | 1.468 | (37.3) | 150.0 | (68.0) | 267.3 | (121.2) |
| 1 1/2" | (40) | 1.883 | (47.7) | 1.703 | (43.3) | 182.0 | (82.5) | 341.8 | (155.0) |
| 2" | (50) | 2.360 | (59.9) | 2.170 | (55.1) | 242.0 | (109.7) | 503.8 | (228.5) |
| 2 1/2" | (65) | 2.857 | (72.5) | 2.597 | (66.0) | 428.0 | (194.1) | 775.0 | (351.5) |
| 3" | (80) | 3.476 | (88.3) | 3.216 | (81.7) | 526.0 | (238.6) | 1069.0 | (485.0) |
| 3 1/2" | (90) | 3.971 | (100.8) | 3.711 | (94.3) | 612.0 | (277.6) | 1346.0 | (610.8) |
| 4" | (100) | 4.466 | (113.4) | 4.206 | (106.8) | 682.0 | (309.4) | 1632.0 | (740.5) |

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

Rigid and Intermediate Metal Conduit shall be supported at least every 10 feet (3.05 m) and within 3 feet (914 mm) of each outlet box, junction box, cabinet, or fitting, except for straight runs of conduit connected with couplings which may be supported in accordance with NEC Article 345 and 346, provided such supports prevent transmission of stresses to termination where conduit is deflected between supports.

NEC TABLE 346-12

| Conduit Size | | Maximum Support Span | |
|--------------|----------|----------------------|--------|
| In. | mm | Feet | Meters |
| 1/2-3/4 | (15-20) | 10 | (3.05) |
| 1 | (25) | 12 | (3.66) |
| 1 1/4-1 1/2 | (32-40) | 14 | (4.27) |
| 2-2 1/2 | (50-65) | 16 | (4.88) |
| 3-6 | (80-150) | 20 | (6.10) |

Reference Data

ELECTRICAL METALLIC TUBING (EMT) — THINWALL CONDUIT

| Nominal Conduit Size | | Outside Diameter | | Inside Diameter | | Weight Per 100 Ft. (30.5m) | | Weight of Conduit and Conductors Per 100 Ft. (30.5m)* | |
|----------------------|-------|------------------|---------|-----------------|---------|----------------------------|---------|---|---------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 3/8" | (10) | 0.577 | (14.7) | 0.493 | (12.5) | 23.0 | (10.4) | 36.6 | (16.6) |
| 1/2" | (15) | 0.706 | (17.9) | 0.622 | (15.8) | 28.5 | (12.9) | 50.6 | (23.0) |
| 3/4" | (20) | 0.922 | (23.4) | 0.824 | (20.9) | 43.5 | (19.7) | 84.3 | (38.2) |
| 1" | (25) | 1.163 | (29.5) | 1.049 | (26.6) | 64.0 | (29.0) | 130.3 | (59.1) |
| 1 1/4" | (32) | 1.510 | (38.3) | 1.380 | (35.1) | 95.0 | (43.1) | 212.3 | (96.3) |
| 1 1/2" | (40) | 1.740 | (44.2) | 1.610 | (40.9) | 110.0 | (49.9) | 269.8 | (122.4) |
| 2" | (50) | 2.197 | (55.8) | 2.067 | (52.5) | 140.0 | (63.5) | 401.8 | (182.3) |
| 2 1/2" | (65) | 2.875 | (73.0) | 2.731 | (69.4) | 205.0 | (93.0) | 579.0 | (262.6) |
| 3" | (80) | 3.500 | (88.9) | 3.356 | (85.2) | 250.0 | (113.4) | 826.3 | (374.8) |
| 3 1/2" | (90) | 4.000 | (101.6) | 3.834 | (97.4) | 325.0 | (147.4) | 1098.0 | (498.0) |
| 4" | (100) | 4.500 | (114.3) | 4.334 | (110.1) | 370.0 | (167.8) | 1364.0 | (618.7) |

Dimensions taken from ANSI C80.3-1977.

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

Electrical Metallic tubing shall be supported at least every 10 feet (3.05 m) and within 3 feet (914 mm) of each outlet box, junction box, cabinet or fitting. See NEC Article 348.

RIGID ALUMINUM CONDUIT

| Nominal Conduit Size | | Outside Diameter | | Nominal Inside Diameter | | Minimum Weight Per 100 Ft. (30.5m) with Couplings Attached | | Weight of Conduit and Conductors Per 100 Ft. (30.5m)* | |
|----------------------|-------|------------------|---------|-------------------------|---------|--|---------|---|----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 1/2" | (15) | 0.840 | (21.3) | 0.632 | (16.1) | 27.4 | (12.4) | 49.5 | (22.5) |
| 3/4" | (20) | 1.050 | (26.7) | 0.836 | (21.2) | 36.4 | (16.5) | 77.2 | (35.0) |
| 1" | (25) | 1.315 | (33.4) | 1.063 | (27.0) | 53.0 | (24.0) | 119.3 | (54.1) |
| 1 1/4" | (32) | 1.660 | (42.2) | 1.394 | (35.4) | 69.6 | (31.6) | 186.9 | (84.8) |
| 1 1/2" | (40) | 1.900 | (48.3) | 1.624 | (41.2) | 82.2 | (37.3) | 242.0 | (109.8) |
| 2" | (50) | 2.375 | (60.3) | 2.083 | (52.9) | 115.7 | (52.5) | 377.5 | (171.2) |
| 2 1/2" | (65) | 2.875 | (73.0) | 2.489 | (63.2) | 182.5 | (82.8) | 556.5 | (252.4) |
| 3" | (80) | 3.500 | (88.9) | 3.090 | (78.5) | 238.9 | (108.4) | 815.2 | (369.8) |
| 3 1/2" | (90) | 4.000 | (101.6) | 3.570 | (90.7) | 287.7 | (130.5) | 1061.0 | (481.3) |
| 4" | (100) | 4.500 | (114.3) | 4.050 | (102.9) | 340.0 | (154.2) | 1334.0 | (605.1) |
| 5" | (125) | 5.563 | (141.3) | 5.073 | (128.9) | 465.4 | (211.1) | 2028.0 | (919.9) |
| 6" | (150) | 6.625 | (168.3) | 6.093 | (154.8) | 612.5 | (277.8) | 2870.0 | (1301.8) |

Dimensions taken from ANSI C80.5-1977.

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

Aluminum Rigid Conduit shall be supported at least every 10 feet (3.05 m) and within 3 feet (914 mm) of each outlet box, junction box, cabinet, or fitting, except for straight runs of conduit connected with couplings which may be supported in accordance with NEC Table 344.30 (B)(2), provided such supports prevent transmission of stresses to termination where conduit is deflected between supports.

NEC TABLE 344.30 (B)(2)

| Conduit Size | | Maximum Support Span | |
|--------------|----------|----------------------|--------|
| In. | mm | Feet | Meters |
| 1/2-3/4 | (15-20) | 10 | (3.05) |
| 1 | (25) | 12 | (3.66) |
| 1 1/4-1 1/2 | (32-40) | 14 | (4.27) |
| 2-2 1/2 | (50-65) | 16 | (4.88) |
| 3-6 | (80-150) | 20 | (6.10) |

SCHEDULE 40 PVC PLASTIC PIPE

| Nominal Pipe Size | | Outside Diameter | | Inside Diameter | | Weight of Pipe Per 100 Ft. (30.5m) | | Weight of Pipe Filled With Water Per 100 Ft. (30.5m) | |
|-------------------|-------|------------------|---------|-----------------|---------|------------------------------------|---------|--|----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 1/8" | (3) | .405 | (10.3) | .269 | (6.8) | 4.7 | (2.1) | 7.2 | (3.2) |
| 1/4" | (6) | .540 | (13.7) | .364 | (9.2) | 8.2 | (3.7) | 12.7 | (5.8) |
| 3/8" | (10) | .675 | (17.1) | .493 | (12.5) | 10.9 | (4.9) | 19.2 | (8.7) |
| 1/2" | (15) | .840 | (21.3) | .622 | (15.8) | 16.4 | (7.4) | 29.6 | (13.4) |
| 3/4" | (20) | 1.050 | (26.7) | .824 | (20.9) | 21.8 | (9.9) | 44.9 | (20.4) |
| 1" | (25) | 1.315 | (33.4) | 1.049 | (26.6) | 32.1 | (14.6) | 69.6 | (31.6) |
| 1 1/4" | (32) | 1.660 | (42.2) | 1.380 | (35.1) | 43.4 | (19.7) | 108.2 | (49.1) |
| 1 1/2" | (40) | 1.900 | (48.3) | 1.610 | (40.9) | 51.8 | (23.5) | 140.0 | (63.5) |
| 2" | (50) | 2.375 | (60.3) | 2.067 | (52.5) | 69.5 | (31.5) | 214.9 | (97.5) |
| 2 1/2" | (65) | 2.875 | (73.0) | 2.469 | (62.7) | 109.6 | (49.7) | 317.1 | (143.8) |
| 3" | (80) | 3.500 | (88.9) | 3.068 | (77.9) | 143.5 | (65.1) | 463.9 | (210.4) |
| 3 1/2" | (90) | 4.000 | (101.6) | 3.548 | (90.1) | 175.6 | (79.7) | 604.1 | (274.0) |
| 4" | (100) | 4.500 | (114.3) | 4.026 | (102.3) | 204.3 | (92.7) | 756.0 | (342.9) |
| 5" | (125) | 5.563 | (141.3) | 5.047 | (128.2) | 281.7 | (127.8) | 1148.8 | (521.1) |
| 6" | (150) | 6.625 | (168.3) | 6.065 | (154.1) | 360.9 | (163.7) | 1613.0 | (731.7) |
| 8" | (200) | 8.625 | (219.1) | 7.981 | (202.7) | 545.3 | (247.3) | 2713.5 | (1230.8) |
| 10" | (250) | 10.750 | (273.1) | 10.020 | (254.5) | 791.3 | (358.9) | 4208.9 | (1909.1) |
| 12" | (300) | 12.750 | (323.9) | 11.938 | (303.2) | 1035.2 | (469.6) | 5886.4 | (2670.0) |

1 cubic ft. of water weighs 62.41 Lbs.
 1 cubic meter of water weighs 999.972 kg.
 1 gallon (U.S.) weighs 8.335 Lbs.
 1 liter weighs .999 kg.

ALL THREADED ROD (ATR)

| Nominal Size (In) and Thread | Root Area | | Design Load (SF=5) | |
|------------------------------|------------------|-----------------|--------------------|---------|
| | In. ² | cm ² | Lbs. | kN |
| 1/4-20" | 0.027 | (0.174) | 240 | (1.07) |
| 5/16-18" | 0.045 | (0.290) | 400 | (1.78) |
| 3/8-16" | 0.068 | (0.438) | 730 | (3.24) |
| 1/2-13" | 0.126 | (0.812) | 1350 | (6.00) |
| 5/8-11" | 0.202 | (1.303) | 2160 | (9.60) |
| 3/4-10" | 0.302 | (1.948) | 3230 | (14.37) |
| 7/8-9" | 0.419 | (2.703) | 4480 | (19.93) |
| 1-8" | 0.551 | (3.561) | 5900 | (26.24) |
| 1 1/8-7" | 0.693 | (4.471) | 7450 | (33.14) |
| 1 1/4-7" | 0.889 | (5.735) | 9500 | (42.25) |
| 1 1/2-6" | 1.293 | (8.342) | 13800 | (61.38) |

Dimensions taken from ANSI B1.1-1982 Unified Inch Screw Threads. All threads are UNCR series.

Tabulated loads are based on an allowable tensile stress of 12000 psi (82.7 MPa) reduced by 25% resulting in 9000 psi (62 MPa). From ANSI/MSS SP-58, Table 3.

CLAMP SIZING CHART FOR PVC COATED RIGID CONDUIT AND CLAMPS

| Nominal Conduit Size | | Conduit Coating | | | |
|----------------------|-------|-----------------|--------------|---------------|--------------|
| | | .020 (.51mm) | | .040 (1.01mm) | |
| | | 0 | .020 (.51mm) | 0 | .020 (.51mm) |
| 1/2" | (15) | B2028 | B2002 | B2002 | B2029 |
| 3/4" | (20) | B2030 | B2030 | B2030 | B2003 |
| 1" | (25) | B2032 | B2032 | B2032 | B2033 |
| 1 1/4" | (32) | B2005 | B2005 | B2005 | B2005 |
| 1 1/2" | (40) | B2012 | B2037 | B2037 | B2037 |
| 2" | (50) | B2013 | B2041 | B2041 | B2041 |
| 2 1/2" | (65) | B2014 | B2045 | B2045 | B2045 |
| 3" | (80) | B2015 | B2050 | B2050 | B2050 |
| 3 1/2" | (90) | B2016 | B2054 | B2054 | B2054 |
| 4" | (100) | B2017 | B2058 | B2058 | B2058 |
| 5" | (125) | B2019 | B2066 | B2066 | B2066 |
| 6" | (150) | B2020 | B2115 | B2115 | B2115 |

CLAMP SIZING CHART FOR PVC COATED THINWALL (EMT) CONDUIT AND CLAMPS

| Nominal Conduit Size | | Conduit Coating | | | |
|----------------------|------|-----------------|--------------|---------------|--------------|
| | | .020 (.51mm) | | .040 (1.01mm) | |
| | | 0 | .020 (.51mm) | 0 | .020 (.51mm) |
| 3/8" | (10) | B2026 | B2026 | B2026 | B2007 |
| 1/2" | (15) | B2027 | B2027 | B2027 | B2008 |
| 3/4" | (20) | B2029 | B2029 | B2029 | B2009 |
| 1" | (25) | B2003 | B2031 | B2031 | B2031 |
| 1 1/4" | (32) | B2004 | B2034 | B2034 | B2034 |
| 1 1/2" | (40) | B2035 | B2035 | B2035 | B2036 |
| 2" | (50) | B2039 | B2039 | B2039 | B2013 |

Reference Data

Reference Data

COPPER TUBING, TYPE L

| Nominal Tubing Size | | Outside Diameter | | Inside Diameter | | Weight of Tubing Per 100 Ft. (30.5m) | | Weight of Tubing Filled With Water Per 100 Ft. (30.5m) | |
|---------------------|-------|------------------|---------|-----------------|---------|--------------------------------------|----------|--|----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 1/4" | (6) | .375 | (9.5) | .315 | (8.0) | 12.6 | (5.7) | 16.0 | (7.2) |
| 3/8" | (10) | .500 | (12.7) | .430 | (10.9) | 19.8 | (9.0) | 26.1 | (11.8) |
| 1/2" | (15) | .625 | (15.9) | .545 | (13.8) | 28.5 | (12.9) | 38.6 | (17.5) |
| 5/8" | (17) | .750 | (19.1) | .666 | (16.9) | 36.2 | (16.4) | 51.3 | (23.3) |
| 3/4" | (20) | .875 | (22.2) | .785 | (19.9) | 45.5 | (20.6) | 66.5 | (30.2) |
| 1" | (25) | 1.125 | (28.6) | 1.025 | (26.0) | 65.5 | (29.7) | 101.3 | (45.9) |
| 1 1/4" | (32) | 1.375 | (34.9) | 1.265 | (32.1) | 88.4 | (40.1) | 142.9 | (64.8) |
| 1 1/2" | (40) | 1.625 | (41.3) | 1.505 | (38.2) | 114.0 | (51.7) | 191.1 | (86.7) |
| 2" | (50) | 2.125 | (54.0) | 1.985 | (50.4) | 175.0 | (79.4) | 309.1 | (140.2) |
| 2 1/2" | (65) | 2.625 | (66.7) | 2.465 | (62.6) | 248.0 | (112.5) | 454.8 | (206.3) |
| 3" | (80) | 3.125 | (79.4) | 2.945 | (74.8) | 333.0 | (151.0) | 628.2 | (285.0) |
| 3 1/2" | (90) | 3.625 | (92.1) | 3.425 | (87.0) | 429.0 | (194.6) | 828.3 | (375.7) |
| 4" | (100) | 4.125 | (104.8) | 3.905 | (99.2) | 538.0 | (244.0) | 1057.1 | (479.5) |
| 5" | (125) | 5.125 | (130.2) | 4.875 | (123.8) | 761.0 | (345.2) | 1570.0 | (712.1) |
| 6" | (150) | 6.125 | (155.6) | 5.845 | (148.5) | 1020.0 | (462.7) | 2182.9 | (990.2) |
| 8" | (200) | 8.125 | (206.4) | 7.725 | (196.2) | 1930.0 | (875.4) | 3961.3 | (1796.8) |
| 10" | (250) | 10.125 | (257.2) | 9.625 | (244.5) | 3010.0 | (1365.3) | 6163.4 | (2795.7) |
| 12" | (300) | 12.125 | (308.0) | 11.565 | (293.8) | 4040.0 | (1832.5) | 8592.8 | (3897.6) |

COPPER TUBING, TYPE K

| Nominal Tubing Size | | Outside Diameter | | Inside Diameter | | Weight of Tubing Per 100 Ft. (30.5m) | | Weight of Tubing Filled With Water Per 100 Ft. (30.5m) | |
|---------------------|-------|------------------|---------|-----------------|---------|--------------------------------------|----------|--|----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 1/4" | (6) | .375 | (9.5) | .305 | (7.7) | 14.5 | (6.6) | 17.7 | (8.0) |
| 3/8" | (10) | .500 | (12.7) | .402 | (10.2) | 26.9 | (12.2) | 32.4 | (14.7) |
| 1/2" | (15) | .625 | (15.9) | .527 | (13.4) | 34.4 | (15.6) | 43.9 | (19.9) |
| 5/8" | (17) | .750 | (19.1) | .652 | (16.6) | 41.8 | (19.0) | 56.3 | (25.5) |
| 3/4" | (20) | .875 | (22.2) | .745 | (18.9) | 64.1 | (29.1) | 83.0 | (37.6) |
| 1" | (25) | 1.125 | (28.6) | .995 | (25.3) | 83.9 | (38.1) | 117.6 | (53.3) |
| 1 1/4" | (32) | 1.375 | (34.9) | 1.245 | (31.6) | 104.0 | (47.2) | 156.8 | (71.1) |
| 1 1/2" | (40) | 1.625 | (41.3) | 1.481 | (37.6) | 136.0 | (61.7) | 210.7 | (95.6) |
| 2" | (50) | 2.125 | (54.0) | 1.959 | (49.8) | 206.0 | (93.4) | 336.6 | (152.7) |
| 2 1/2" | (65) | 2.625 | (66.7) | 2.435 | (61.8) | 293.0 | (132.9) | 494.8 | (224.5) |
| 3" | (80) | 3.125 | (79.4) | 2.907 | (73.8) | 400.0 | (181.4) | 687.7 | (311.9) |
| 3 1/2" | (90) | 3.625 | (92.1) | 3.385 | (86.0) | 512.0 | (232.2) | 902.0 | (409.2) |
| 4" | (100) | 4.125 | (104.8) | 3.857 | (98.0) | 651.0 | (295.3) | 1157.4 | (525.0) |
| 5" | (125) | 5.125 | (130.2) | 4.805 | (122.0) | 967.0 | (438.6) | 1752.9 | (795.1) |
| 6" | (150) | 6.125 | (155.6) | 5.741 | (145.8) | 1390.0 | (630.5) | 2511.9 | (1139.4) |
| 8" | (200) | 8.125 | (206.4) | 7.583 | (192.6) | 2590.0 | (1174.8) | 4547.3 | (2062.6) |
| 10" | (250) | 10.125 | (257.2) | 9.449 | (240.0) | 4030.0 | (1828.0) | 7069.2 | (3206.5) |
| 12" | (300) | 12.125 | (308.0) | 11.315 | (287.4) | 5780.0 | (2621.8) | 10138.0 | (4598.5) |

Dimensions taken from ASTM B 88-83.

1 cubic ft. of water weighs 62.41 Lbs.

1 cubic meter of water weighs 999.972 kg.

1 gallon (U.S.) weighs 8.335 Lbs.

1 liter weighs .999 kg.

STANDARD WEIGHT SCHEDULE 40 STEEL PIPE

| Nominal Pipe Size | | Outside Diameter | | Inside Diameter | | Nominal Weight Per 100 Ft. (30.5mm) Plain End | | Weight of Pipe Filled With Water Per 100 Ft. (30.5mm) | |
|-------------------|-------|------------------|---------|-----------------|---------|---|----------|---|-----------|
| In. | mm | In. | mm | In. | mm | Lbs. | kg | Lbs. | kg |
| 3/8" | (10) | .675 | (17.1) | .493 | (12.5) | 57.0 | (25.9) | 65.3 | (29.6) |
| 1/2" | (15) | .840 | (21.3) | .622 | (15.8) | 85.0 | (38.6) | 98.2 | (44.5) |
| 3/4" | (20) | 1.050 | (26.7) | .824 | (20.9) | 113.0 | (51.3) | 136.1 | (61.7) |
| 1" | (25) | 1.315 | (33.4) | 1.049 | (26.6) | 168.0 | (76.2) | 205.5 | (93.2) |
| 1 1/4" | (32) | 1.660 | (42.2) | 1.380 | (35.1) | 227.0 | (103.0) | 291.8 | (132.4) |
| 1 1/2" | (40) | 1.900 | (48.3) | 1.610 | (40.9) | 272.0 | (123.4) | 360.2 | (163.4) |
| 2" | (50) | 2.375 | (60.3) | 2.067 | (52.5) | 365.0 | (165.6) | 510.4 | (231.5) |
| 2 1/2" | (65) | 2.875 | (73.0) | 2.469 | (62.7) | 579.0 | (262.6) | 786.5 | (356.8) |
| 3" | (80) | 3.500 | (88.9) | 3.068 | (77.9) | 758.0 | (343.8) | 1078.4 | (489.2) |
| 3 1/2" | (90) | 4.000 | (101.9) | 3.548 | (90.1) | 911.0 | (413.2) | 1339.5 | (607.6) |
| 4" | (100) | 4.500 | (114.3) | 4.026 | (102.3) | 1079.0 | (489.4) | 1630.7 | (739.7) |
| 5" | (125) | 5.563 | (141.3) | 5.047 | (128.2) | 1462.0 | (663.2) | 2329.1 | (1056.4) |
| 6" | (150) | 6.625 | (168.3) | 6.065 | (154.1) | 1897.0 | (860.5) | 3149.1 | (1428.4) |
| 8" | (200) | 8.625 | (219.1) | 7.981 | (202.7) | 2855.0 | (1295.0) | 5023.2 | (2278.5) |
| 10" | (250) | 10.750 | (273.1) | 10.020 | (254.5) | 4048.0 | (1836.1) | 7465.6 | (3386.3) |
| 12" | (300) | 12.750 | (323.9) | 12.000 | (304.8) | 4956.0 | (2248.0) | 9857.7 | (4471.4) |
| 14" | (350) | 14.000 | (355.6) | 13.250 | (336.6) | 5457.0 | (2475.3) | 11433.1 | (5185.9) |
| 16" | (400) | 16.000 | (406.4) | 15.250 | (387.4) | 6258.0 | (2838.6) | 14174.3 | (6429.4) |
| 18" | (450) | 18.000 | (457.2) | 17.250 | (438.2) | 7059.0 | (3201.9) | 17187.9 | (7796.3) |
| 20" | (500) | 20.000 | (508.0) | 19.250 | (489.0) | 7860.0 | (3565.2) | 20473.7 | (9286.7) |
| 24" | (600) | 24.000 | (609.6) | 23.250 | (590.6) | 9462.0 | (4291.9) | 27862.5 | (12638.2) |

Dimensions taken from ASTM A 53-82.

1 cubic ft. of water weighs 62.41 Lbs.

1 cubic meter of water weighs 999.972 kg.

1 gallon (U.S.) weighs 8.335 Lbs.

1 liter weighs .999 kg.

TRAPEZE HANGERS USING B-LINE STRUT OR ANGLE IRON

| Length of Trapeze Bar | NOMINAL PIPE SIZES | | | | | | | |
|-----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | 2 1/2" (65mm) or less | 3" (80mm) | 3 1/2" (90mm) | 4" (100mm) | 5" (125mm) | 6" (150mm) | 8" (200mm) | 10" (250mm) |
| 1'-6" (0.46m) | 1 1/2" x 1 1/2" x 3/16" B24SH | 1 1/2" x 1 1/2" x 3/16" B24SH | 1 1/2" x 1 1/2" x 3/16" B24SH | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH |
| 2'-0" (0.61m) | 1 1/2" x 1 1/2" x 3/16" B24SH | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH |
| 2'-6" (0.76m) | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3" x 2" x 1/4" B11SH |
| 3'-0" (0.91m) | 2" x 1 1/2" x 3/16" B22SH | 2" x 1 1/2" x 3/16" B22SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 3/16" B11SH | 3 1/2" x 2 1/2" x 1/4" B12SHA | 3 1/2" x 2 1/2" x 5/16" B12SHA |
| 4'-0" (1.22m) | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA |
| 5'-0" (1.52m) | 2 1/2" x 1 1/2" x 3/16" B12SH | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA |
| 6'-0" (1.83m) | 2 1/2" x 1 1/2" x 3/16" B12SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA |
| 7'-0" (2.13m) | 3" x 2" x 3/16" B11SH | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA | 6" x 4" x 1/4" 2-B12SHA |
| 8'-0" (2.44m) | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA | 6" x 4" x 1/4" 2-B12SHA |
| 9'-0" (2.74m) | 3" x 2" x 3/16" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 3 1/2" x 2 1/2" x 5/16" B12SHA | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA | 6" x 4" x 3/8" 2-B11SHA |
| 10'-0" (3.05m) | 3" x 2" x 1/4" B11SH | 3" x 2" x 1/4" B11SH | 3 1/2" x 2 1/2" x 5/16" B12SHA | 3 1/2" x 2 1/2" x 5/16" B12SHA | 4" x 3" x 5/16" B12SHA | 5" x 3 1/2" x 5/16" B11SHA | 6" x 4" x 1/4" 2-B12SHA | 6" x 4" x 3/8" 2-B11SHA |

REFERENCE: Table 3-14.1.6 standard for the installation of Sprinkler Systems, NFPA No. 13-1985, published by National Fire Protection Association.

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