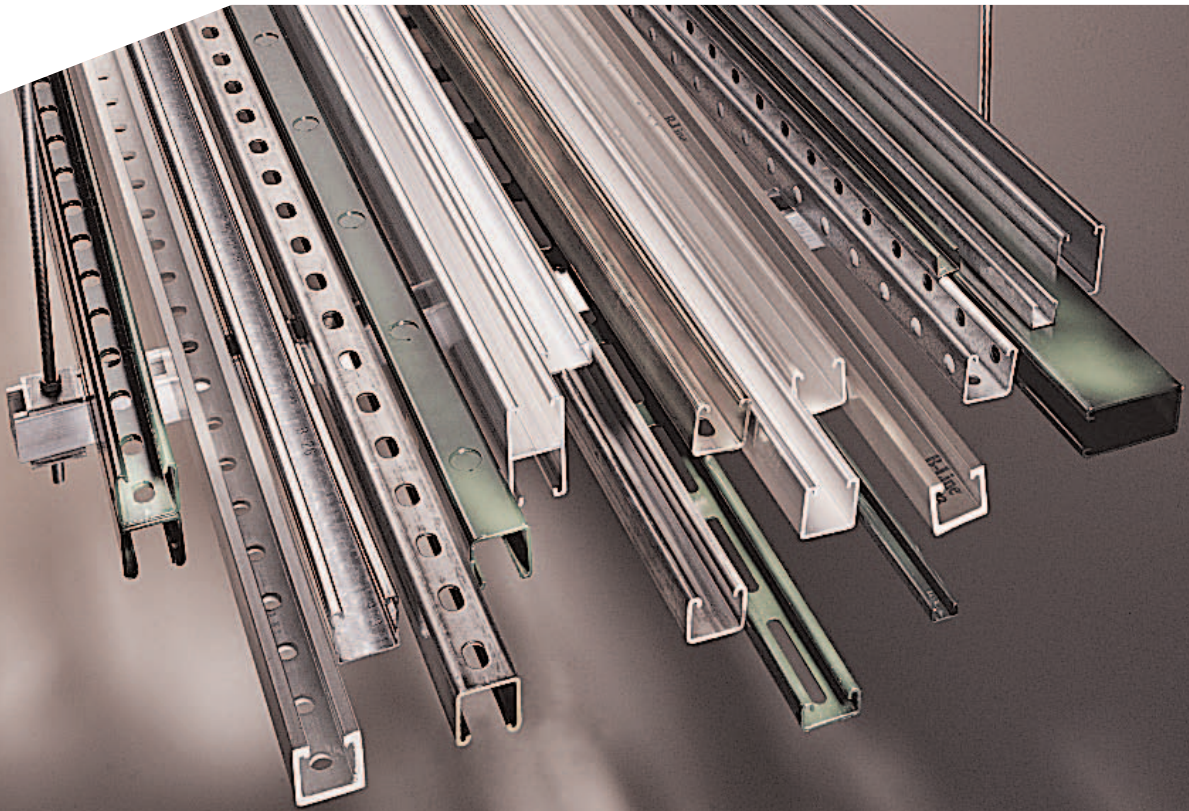




Strut Systems

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

SS-12

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 Underwriter's 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.



Cooper B-Line, Inc.
509 West Monroe Street
Highland, Illinois 62249-0326
Phone: 800-851-7415
www.cooperbline.com



SYSTEMS THAT MAKE SENSE

Introduction	2-3
---------------------	-----

Technical Data

Materials	4
Finishes	5-6
Welding	7
Corrosion	8-9
Design of Strut Systems	10-12
Recommended Specification	13

Channel & Combinations

Info. & Specifications	14
Selection Chart	15
B11 Channel	16-17
B12 Channel	18-19
B22 Channel	20-23
B24 Channel	24-25
B26 Channel	26-27
B32 Channel	28-29
B42 Channel	30-31
B52 Channel	32-33
B54 Channel	34-35
B56 Channel	36-37
Telescoping Channel	38-39
Channel Hole Patterns	40-42

Channel Nuts & Hardware

Info. & Specifications	44
Channel Nuts	
Selection Charts	45-49
Slip & Pull-out Load Charts	50-51
Other Hardware	52-58
KwikWire™ & Accessories	59-70

Strut Fittings

Info. & Specifications	72
Flat Plate Fittings	73-75
90° Angle Fittings	76-81
Angular Fittings	82-84
Braces	85
Clevis Fittings	86
U-Fittings	87-90
Z-Fittings	91-93
Wing Fittings	94-96
Post Bases	97-98
Brackets	99-105
Miscellaneous Fittings	106-111

Beam Clamps & Accessories

Info. & Specifications	112
Beam Clamps & Accessories	113-125

Pipe/Conduit Clamps & Hangers

Info. & Specifications	126
Pipe Clamps	127-133
Vibra Clamps	134-135
Armafix™ Clamps & Accessories	136
Vibra Cushions	137
Pipe Clamps	138-142
Pipe Hangers	143-144
Pipe Brackets	145
Pipe Block	146
Pipe Rollers	147-151

Dura-Blok™ Rooftop Supports

Info. & Specifications	152
Base Support	153
Base Support - Channel	153-154
Base Support - Pipe/Tubing Riser	154
Base Support Riser - Channel	155
Base Support Riser - Pipe Roller	155
Base Support - 'H' Stand	156-157
Base Support - Pipe Roller	158
Application Photos	159
Roof-Top Walkway Photos	160
Solar Application Photos	161

Electrical Accessories

Info. & Specifications	162
Selection Chart	163
Fluorescent Fixture Hangers	164-166
Electrical Accessories	167-168
Junction Boxes	169
Strut Joiners	170-171
Electrical Hardware	172
Porcelain Clamps	173-174
Maple Clamps	174-175

Aluminum & Stainless Steel Materials

Info. & Specifications	176
Aluminum	177-179
Stainless Steel	180-181

Fiberglass Materials

Info. & Specifications	182-183
Channels	184-188
Hardware	188-190
Fittings	191-199

Mini Channel & Fittings

Info. & Specifications	200
Mini Channels	201-202
Mini Channel Nuts	203
Mini Fittings	203-211

Concrete Inserts

Info. & Specifications	212-213
Continuous Inserts	214-216
Spot Inserts	217
Insert Accessories	218
Anchors	219-221

Slotted Angle

Info. & Specifications	222
Slotted Angle	
Sizes	223
Loading Charts	224-226
Slotted Angle Fittings	227

Reference Data

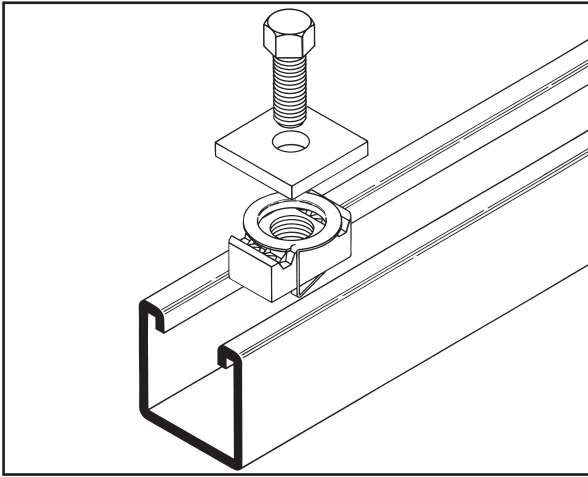
Tolco to Cooper B-Line Cross

Index

For additional information on Tolco™ brand part numbers beginning with Fig., visit www.tolco.com or www.cooperbline.com

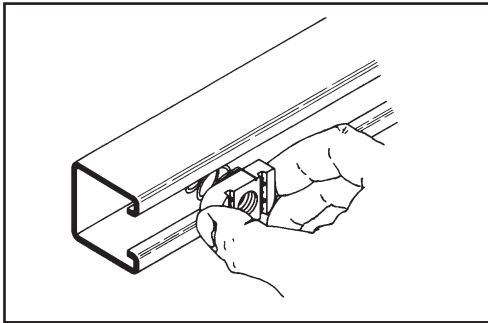
Introduction

Cooper 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.

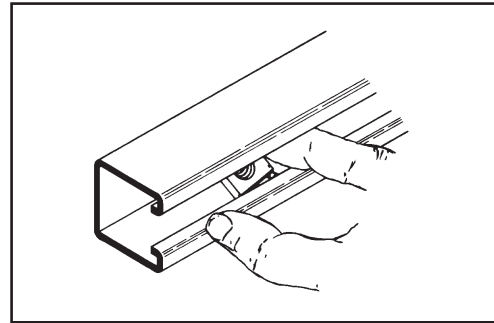


- No Welding
- No Drilling
- Use Your Imagination

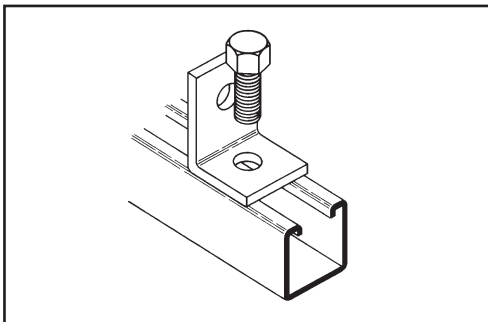
Cooper B-Line's metal framing installs quickly. There is no need for special tools. All you need is a wrench and hacksaw. Channels and parts can be taken apart for reuse as quickly as they were assembled, yet they provide the strength of welded construction. Eliminating welding and drilling produces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



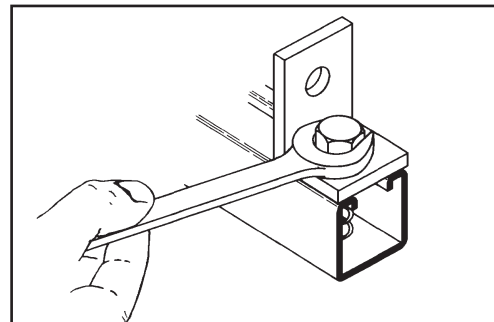
1. Tite-Grip channel nut may be inserted anywhere along continuous slot. Designed for easy insertion and self-alignment.



2. A 90° turn aligns channel nut grooves with inturned lips of the channel.



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

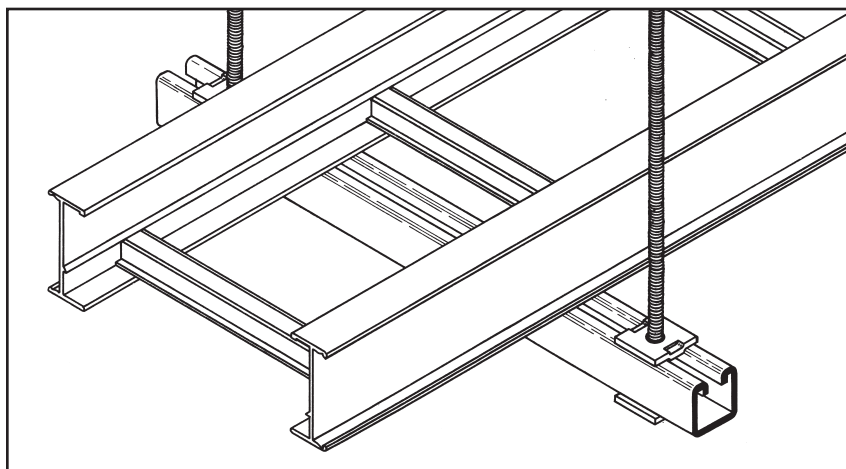
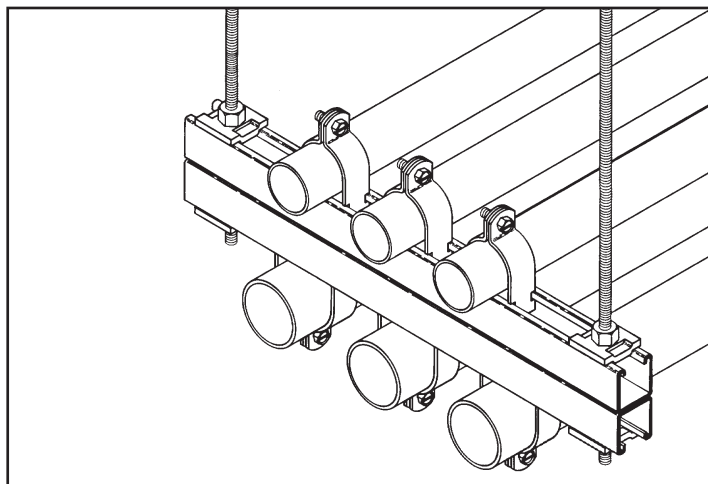


4. With the twist of a wrench, channel nut locks its teeth firmly against inturned lips.

Cooper 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

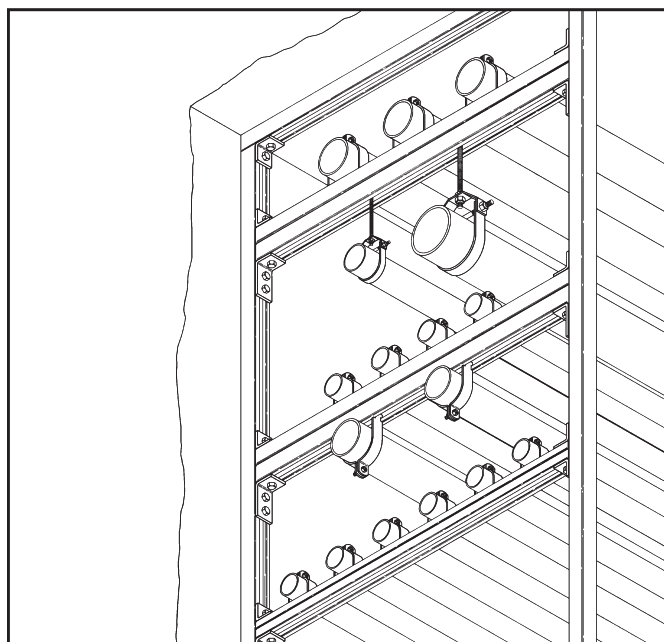


Metal Framing Mechanical Applications

- 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 Cooper B-Line.

Aluminum

Cooper 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 Cooper B-Line Systems, Inc. or the Aluminum Association.

Fiberglass

Cooper 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

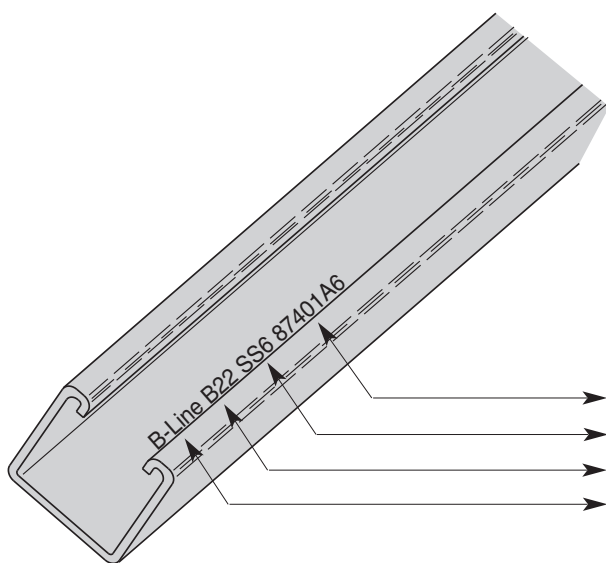
concentrated levels of Chlorine, [Cl⁻]. Please consult our fiberglass corrosion resistance charts on pg. 173 for specific chemical recommendation data.

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, Cooper B-Line advises against using fiberglass in temperatures greater than 200° F.

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

Cooper 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.



Cooper B-Line Steel Strut is stamped with:

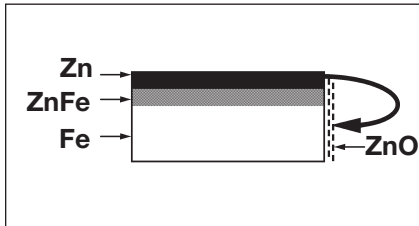
- Traceable to the steel's origin
- Material/Finish
- B-Line part number designation
- Company Name

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, Cooper 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 Cooper 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.

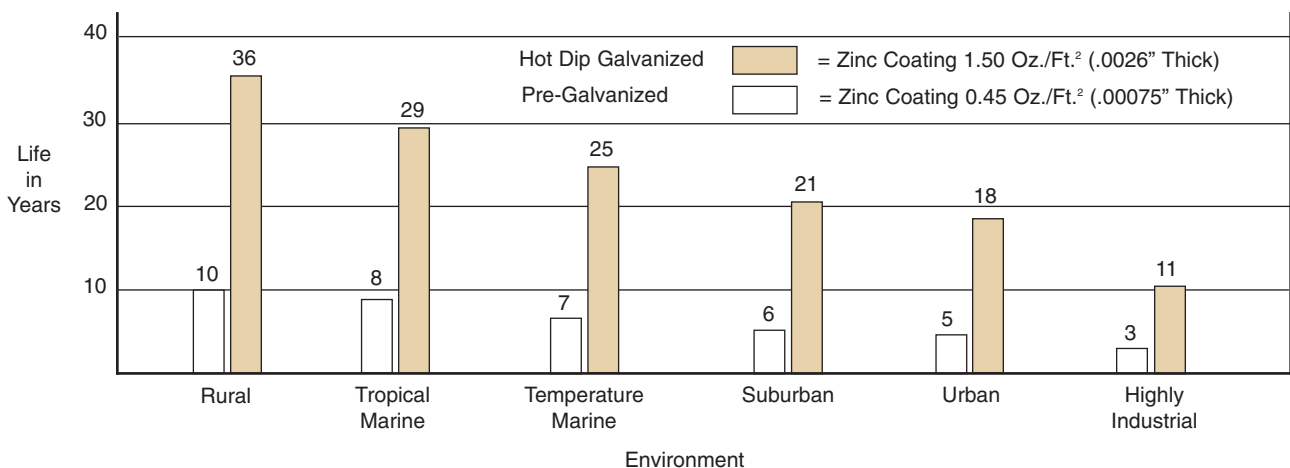
Another advantage of this method is coating thickness. Strut products that are hot dip galvanized after fabrication have a minimum thickness of 1.50 ounces per square foot on each side, or a total 3.0 ounces per square foot of steel, according to ASTM A123.

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 Cooper 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.

Anticipated Life of Zinc Coatings In Various Atmospheric Environments



Dura-Green™ and Dura-Copper™ Epoxy Coatings

Dura-Green and Dura-Copper epoxy coatings are water borne epoxy coatings applied to Cooper 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.

Cooper 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 Cooper 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 Cooper 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.

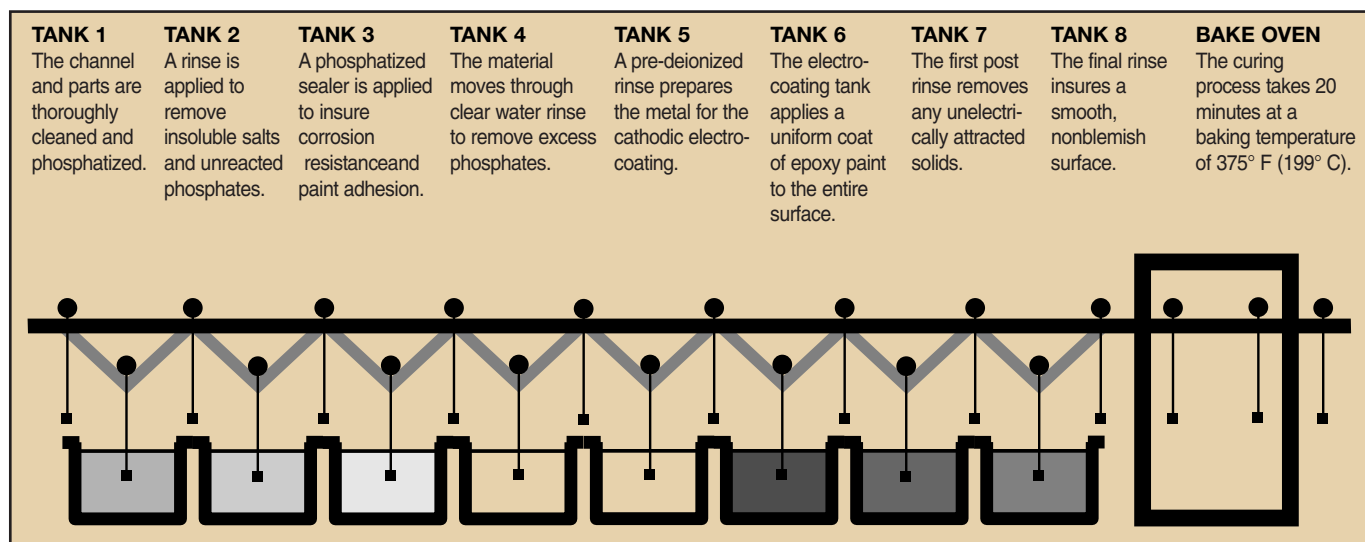
In the event of field cuts or any other damage to the coating, a liquid PVC patch, available from Cooper B-Line, must be applied to maintain the integrity of the coating. After the installation is complete, a thorough inspection should be performed to assure the absence of voids, pinholes, or cuts.

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 Cooper 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

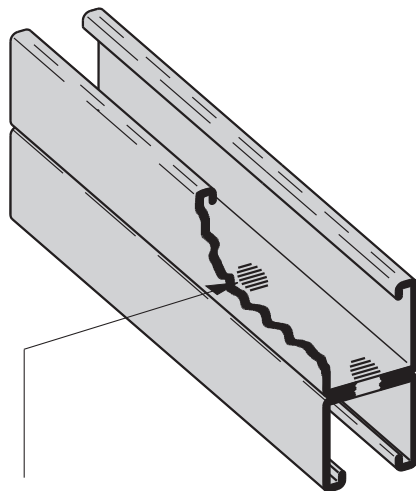
sequence, speed and duration are carefully controlled and monitored by a sophisticated electronic control system. A statistical quality control program, combining destructive and non-destructive testing, is used by Cooper B-Line to ensure high quality welds.

MIG Welding

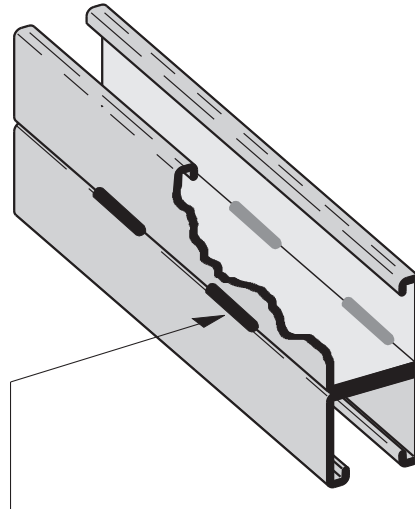
MIG welded, more properly called gas metal arc welded (GMAW) combination channels and fittings, are produced when physical dimensions or certain combinations require a weld process other than automatic spot welding. The same quality control requirements are imposed on MIG welded and spot-welded products.

Quality Assurance

Cooper B-Line's Quality Assurance Program has been developed and implemented for compliance with ISO9001:2008. Cooper B-Line also complies with various industry standards and specifications. Cooper B-Line has extensive experience in supplying metal framing components for the nuclear power generating industry, and upon request can provide products in compliance with 10CFR50 Appendix B, NQA-1 and 10CFR21. For more information on our quality capability please visit www.cooperbline.com/nuclear.



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 affect 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

GALVANIC SERIES IN SEA WATER

	Anodic End
↑	Magnesium
	Magnesium Alloys
	Zinc
	Beryllium
	Aluminum - Zinc Alloys (7000 series)
	Aluminum - Magnesium Alloys (5000 series)
	Aluminum (1000 series)
	Aluminum - Magnesium Alloys (3000 series)
	Aluminum - Magnesium - Silicon Alloys (6000 series)
	Cadmium
	Aluminum - Copper Alloys (2000 series)
	Cast Iron, Wrought Iron, Mild Steel
	Austenitic Nickel Cast Iron
	Type 410 Stainless Steel (active)
	Type 316 Stainless Steel (active)
	Type 304 Stainless Steel (active)
	Naval Brass, Yellow Brass, Red Brass
	Tin
	Copper
	Lead-Tin Solders
	Admiralty Brass, Aluminum Brass
	Manganese Bronze
	Silicon Bronze
	Tin Bronze
	Type 410 Stainless Steel (passive)
	Nickel - Silver
	Copper Nickel Alloys
	Lead
	Nickel - Aluminum Bronze
	Silver Solder
	Nickel 200
	Silver
	Type 316 Stainless Steel (passive)
	Type 304 Stainless Steel (passive)
	Incoloy 825
	Hastelloy B
	Titanium
	Hastelloy C
	Platinum
	Graphite
	Cathodic End

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

steel is now the anode and will corrode. The rate at which galvanic corrosion occurs depends on several factors:

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	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 183.

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

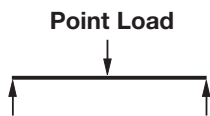
Beams

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

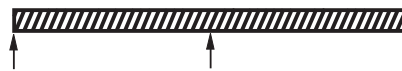
Cantilever beams are often viewed as variations of a fixed beam, but they have special characteristics of their own. One end of the channel is firmly attached to a rigid support while the other end remains completely free.

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.

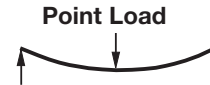


Continuous beam installations can typically support 20% more load than a simple beam of the same span with approximately half the deflection.

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. **$\frac{1}{240}$ 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 $\frac{1}{240}$ 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 **$\frac{1}{360}$ 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, 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.

Cooper 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 Cooper B-Line's Home Office.

GENERAL INFORMATION

Torque

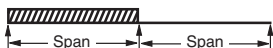
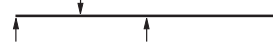
The torque values given throughout the catalog are to be used as a guide only. The relationship between the applied torque or torque wrench reading and the actual tension created in the bolt may be substantially different. For example, a dry non-lubricated bolt with a heavy plating may rate 50% as efficient 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. Cooper B-Line recommends that users of this information determine the validity of such information as applied to their own application.

Technical Data

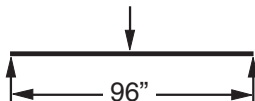
The data shown in the beam load charts for appropriate channels on page(s) 16 thru 37 is for simply supported, single span beams with a uniformly distributed load. For other loading and/or support conditions, use the appropriate factor from the chart below.

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.

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

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

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.

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

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

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, Structural Quality.

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-4.

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-4, "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 Cooper 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 structural quality 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 structural quality 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

Cooper 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 intumed lips provides the ability to make attachments at any point.

Lengths & Tolerances

All channels excluding 'SH' style
± 1/8" (3.2mm) on 10' (3.05m) and
± 3/16" (4.76mm) on 20' (6.09m)

All 'SH' channels only
± 1/4" (6.35mm) on 10' (3.05m) and
± 1/2" (12.70mm) on 20' (6.09m)

Custom lengths are available upon request.

Slots

Cooper 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 Cooper 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, Cooper 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 & 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	
GLV	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 (Steel & Stainless Steel)

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.

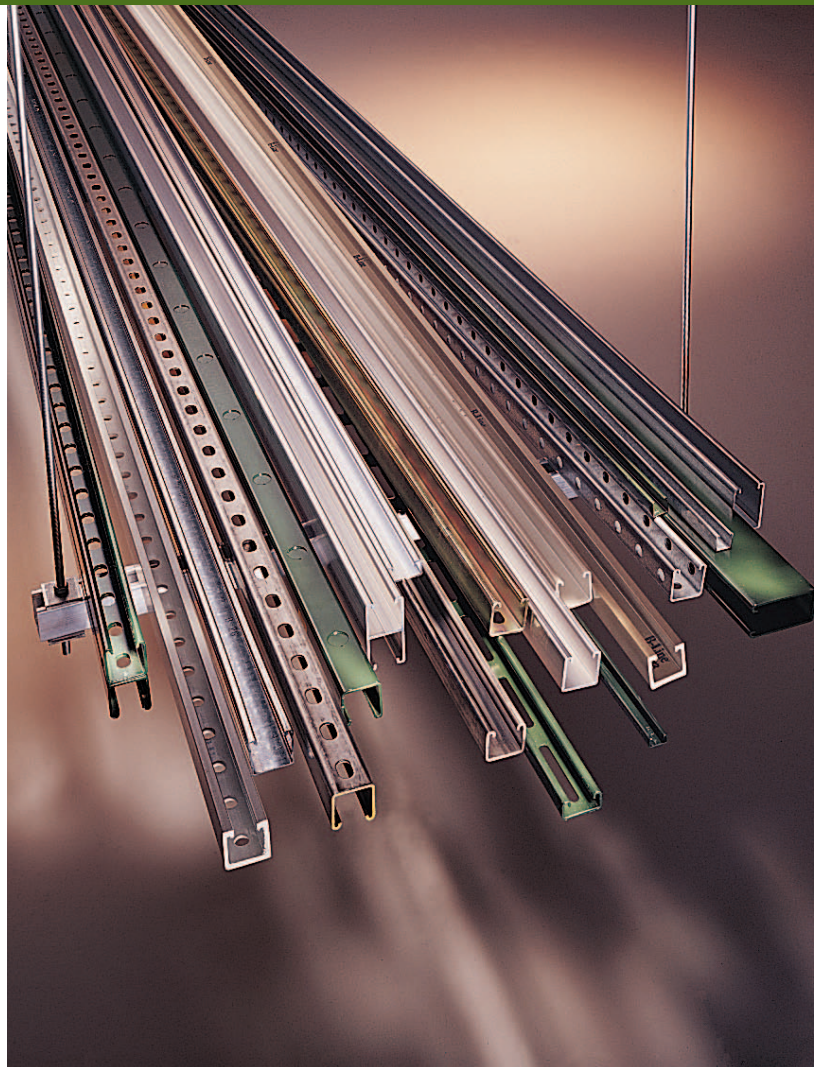
For aluminum channel loading multiple steel loading by a factor of 0.38.

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, Cooper B-Line provides the most consistent combination channels available today.

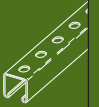
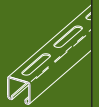
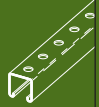
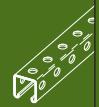
Metric

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		Stainless Steel				SH	S	H17/8	TH	KO6
					Steel	Alum.	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.	.105	—	—	<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.	—	—	—	—	—	—	—	—

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

14 Ga. = 1.9 mm

16 Ga. = 1.5 mm

18 Ga. = 1.2 mm

.105 = 2.6 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.

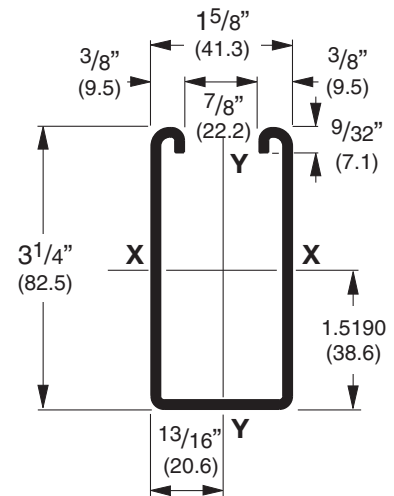
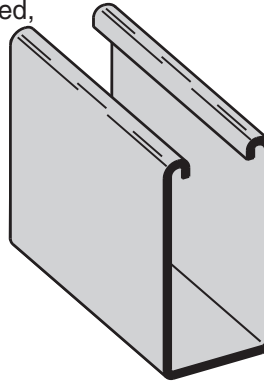
Channel Part Numbering			
Example:			
B22 SH - 120 SS4			
Channel Type	Hole Patterns	Length	Material/Finish
B11	SH (pg. 40)	120	GRN
B12	S (pg. 40)	240	GLV
B22 †	H178 (pg. 40)		HDG
B24 †	TH (pg. 41)		YZN
B26	K06 (pg. 41)		SS4
B32	SHA (pg. 41)		SS6
B42	S58 (pg. 42)		AL
B52 †	M (pg. 42)		
B54 †	H25 (pg.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

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)		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
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)	.696	(1.77)
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)	.696	(1.77)

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

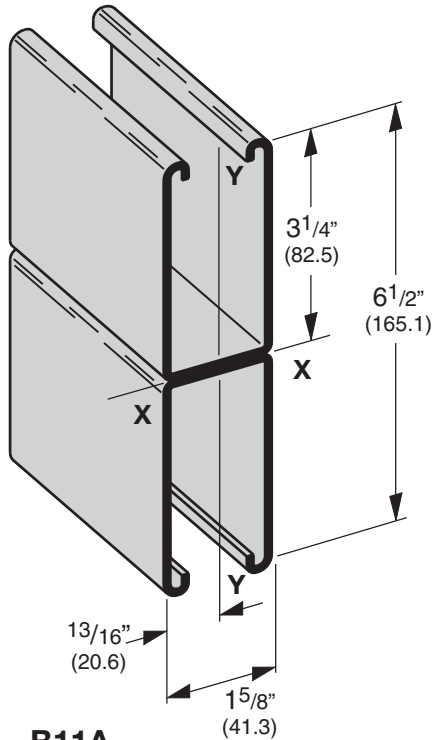
BEAM LOADING

Beam Span		Channel Style	Uniform Load and Deflection				Uniform Load @ Deflection =			
			Lbs.	N	In.	mm	1/240 Span	N	1/360 Span	N
In.	mm						Lbs.		Lbs.	
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.

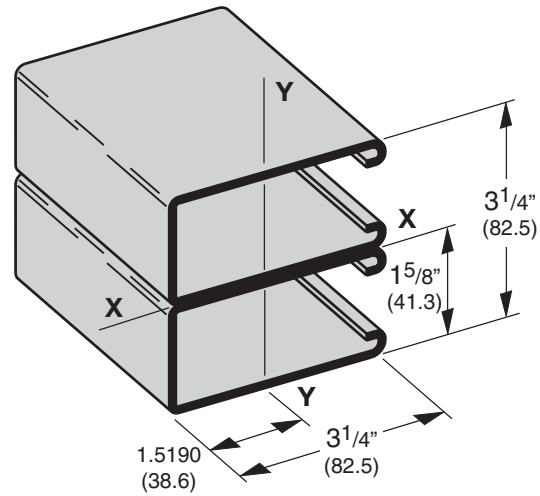
Reference page 14 for general fitting and standard finish specifications.

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		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)	—	—	—	—

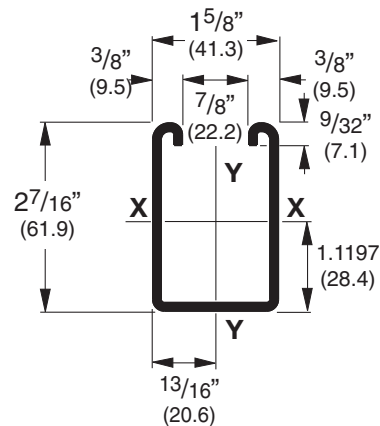
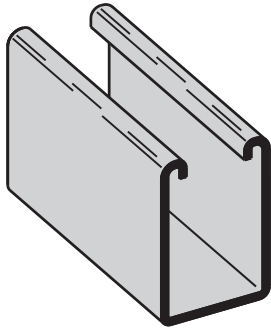
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B12 Channel & Combinations

B12

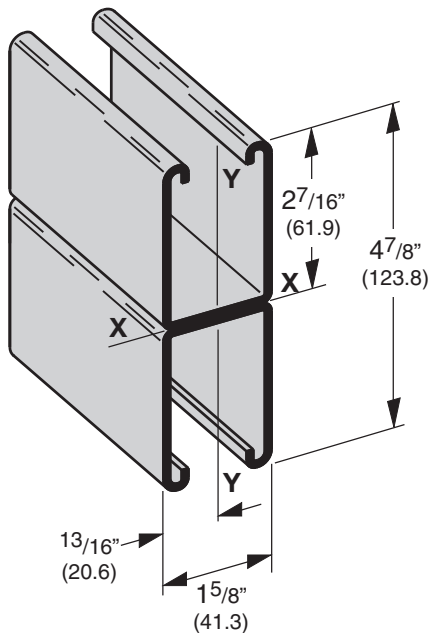
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Aluminum
- Weight: 2.47 Lbs./Ft. (3.67 kg/m)



SECTION PROPERTIES

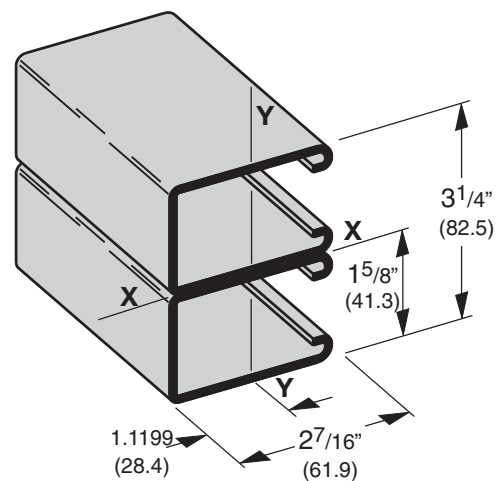
			X - X Axis						Y - Y Axis					
Channel	Weight lbs./ft. kg/m	Areas of Section sq. in. cm ²	Moment of Inertia (I) in. ⁴ cm ⁴		Section Modulus (S) in. ³ cm ³		Radius of Gyration (r) in. cm		Moment of Inertia (I) in. ⁴ cm ⁴		Section Modulus (S) in. ³ cm ³		Radius of Gyration (r) in. cm	
B12	2.484 (3.70)	.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		1/240 Span		1/360 Span	
							Lbs.	N	Lbs.	N
12	(305)	B12 B12A	3880 3880*	(17259) (17259)	.009 .001	(.23) (.02)	3880 3880*	(17259) (17259)	3880 3880*	(17259) (17259)
24	(609)	B12 B12A	3273 3880*	(14559) (17259)	.038 .008	(.96) (.20)	3273 3880*	(14559) (17259)	3273 3880*	(14559) (17259)
36	(914)	B12 B12A	2182 3880*	(9706) (17259)	.086 .028	(2.18) (.71)	2182 3880*	(9706) (17259)	2182 3880*	(9706) (17259)
48	(1219)	B12 B12A	1636 3880*	(7277) (17259)	.153 .067	(3.88) (1.70)	1636 3880*	(7277) (17259)	1421 3880*	(6321) (17259)
60	(1524)	B12 B12A	1309 3847*	(5823) (17112)	.240 .130	(6.09) (3.30)	1309 3847*	(5823) (17112)	909 3847*	(4043) (17112)
72	(1829)	B12 B12A	1091 3206	(4853) (14261)	.345 .188	(8.76) (4.77)	947 3206	(4212) (14261)	632 3206	(2811) (14261)
84	(2133)	B12 B12A	935 2748	(4159) (12224)	.470 .255	(11.94) (6.48)	696 2748	(3096) (12224)	464 2509	(2064) (11160)
96	(2438)	B12 B12A	818 2404	(3638) (10693)	.614 .334	(15.59) (8.48)	533 2404	(2371) (10693)	355 1921	(1579) (8545)
108	(2743)	B12 B12A	727 2137	(3234) (9506)	.777 .422	(19.73) (10.72)	421 2137	(1873) (9506)	281 1518	(1250) (6752)
120	(3048)	B12 B12A	655 1924	(2913) (8558)	.959 .521	(24.36) (13.23)	341 1844	(1517) (8202)	227 1229	(1010) (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 B12A	10140 20820	(45105) (92612)	4752 8023	(21138) (35688)	10247 20854	(45581) (92763)	9965 20763	(44326) (92358)	9756 20694	(43397) (92051)
24	(609)	B12 B12A	9244 20519	(41119) (91273)	4514 7956	(20079) (35390)	9639 20655	(42876) (91878)	8629 20293	(38384) (90268)	7933 20017	(35288) (89040)
36	(914)	B12 B12A	7933 20017	(35288) (89040)	4137 7844	(18402) (34892)	8711 20324	(35748) (90405)	6786 19509	(30185) (86780)	5572 18889	(24785) (84022)
48	(1219)	B12 B12A	6386 19315	(28406) (85917)	3638 7688	(16182) (34198)	7562 19861	(33637) (88346)	4785 18412	(21285) (81900)	3717 17309	(16534) (76994)
60	(1524)	B12 B12A	4785 18412	(21285) (81900)	2963 6941	(13180) (30875)	6285 19265	(27957) (85695)	3523 17002	(15671) (75628)	2806 15278	(12482) (67960)
72	(1829)	B12 B12A	3717 17309	(16534) (76994)	2197 5334	(9773) (23727)	4964 18536	(22081) (82452)	2806 15278	(12482) (67960)	2271 12795	(10102) (56915)
84	(2133)	B12 B12A	3052 16005	(13576) (71194)	1717 4176	(7637) (18576)	3994 17675	(17766) (78622)	2345 13240	(10431) (58894)	1913 9884	(8509) (43966)
96	(2438)	B12 B12A	2600 14500	(11565) (64499)	1391 3328	(6187) (14803)	3350 16682	(14901) (74205)	2019 10889	(8981) (48436)	1650 7567	(7339) (33659)
108	(2743)	B12 B12A	2271 12795	(10102) (56915)	1155 2692	(5137) (11974)	2893 15556	(12869) (69196)	1773 8610	(7886) (38299)	1446 5979	(6432) (26596)
120	(3048)	B12 B12A	2019 10889	(8981) (48436)	977 2202	(4346) (9795)	2553 14298	(11356) (63600)	1577 6974	(7015) (31022)	1279** 4843**	(5689) (21543)

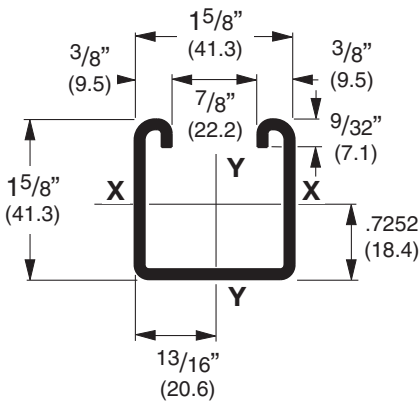
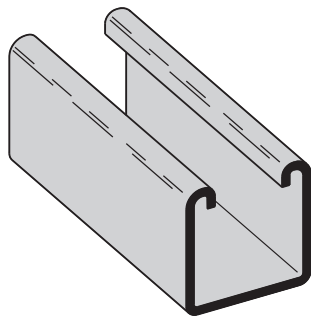
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B22 Channel

B22

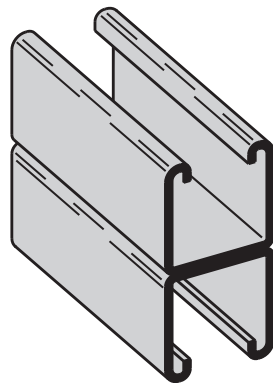
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: 1.90 Lbs./Ft. (2.83 kg/m)



SECTION PROPERTIES

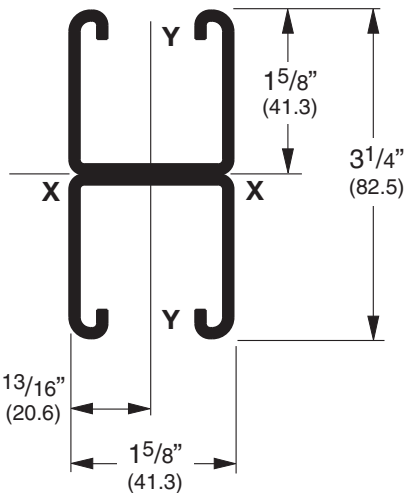
SECTION PROPERTIES					X - X Axis						Y - Y Axis					
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)	
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm 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.



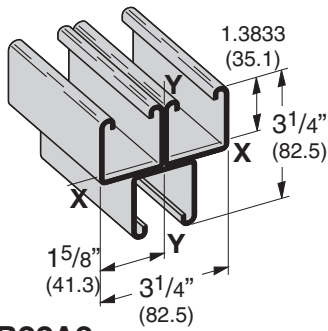
B22A

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



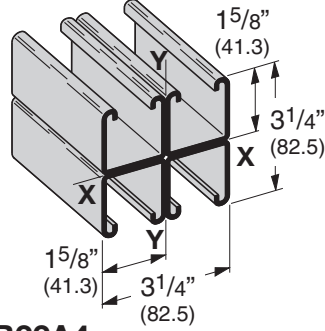
Reference page 14 for general fitting and standard finish specifications.

B22 Combinations



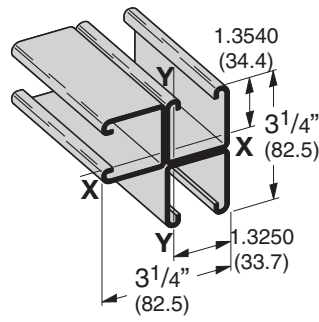
B22A3

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



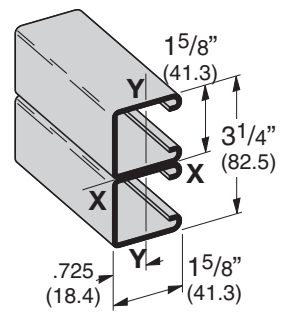
B22A4

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



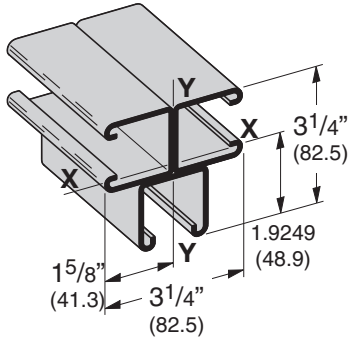
B22AD3

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



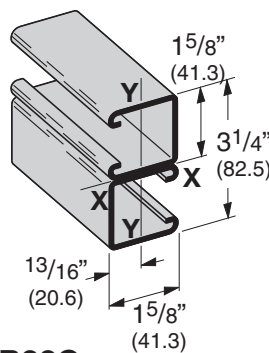
B22B

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



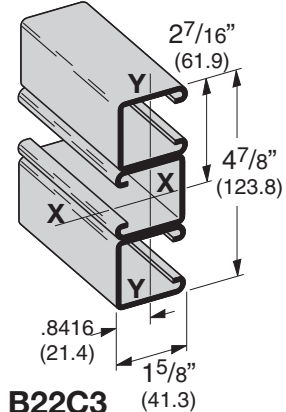
B22B3

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



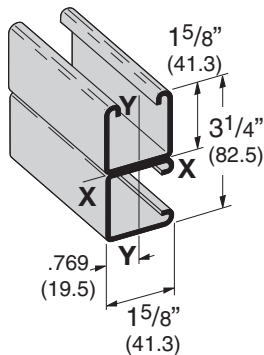
B22C

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



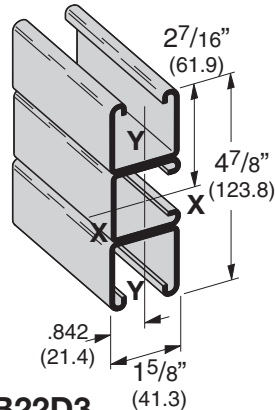
B22C3

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



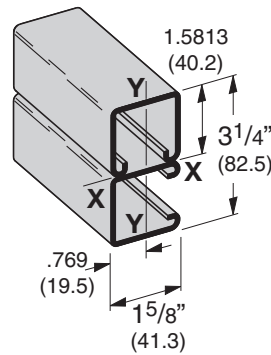
B22D

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



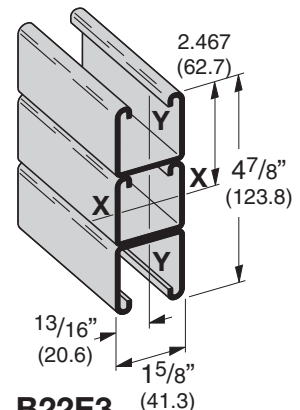
B22D3

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



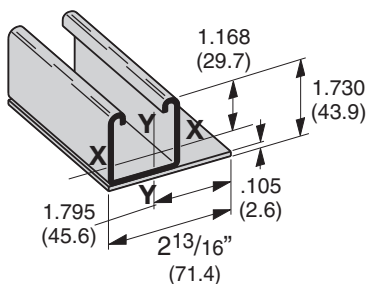
B22E

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



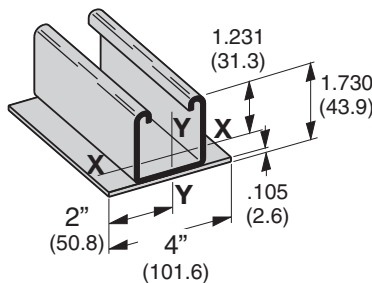
B22E3

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



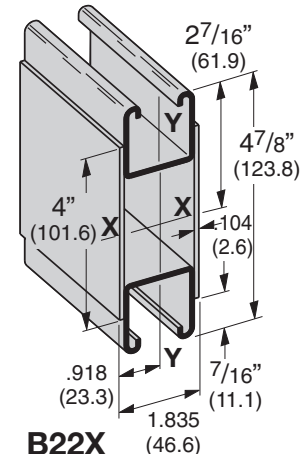
B22LPL

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 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)	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)

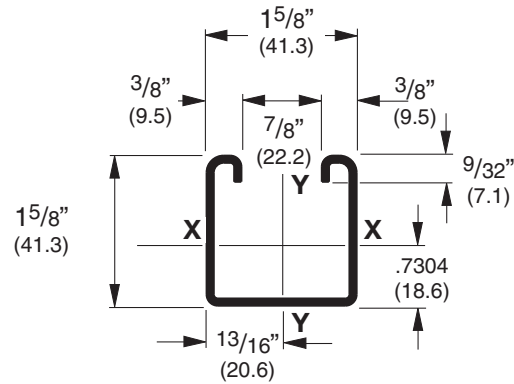
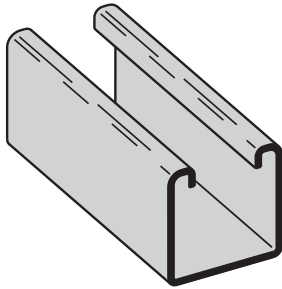
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B24 Channel & Combinations

B24

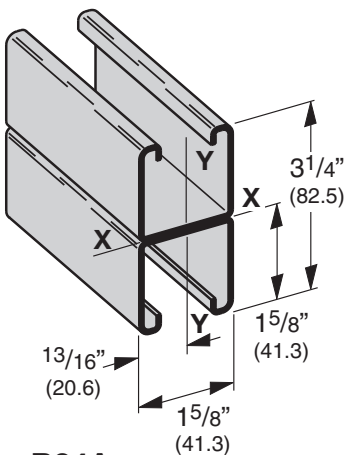
- Thickness: 14 Gauge (1.9 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: 1.40 Lbs./Ft. (2.08 kg/m)



SECTION PROPERTIES

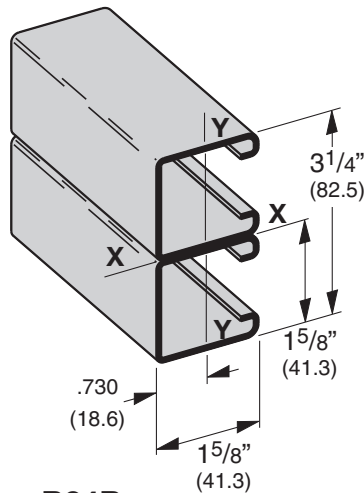
SECTION PROPERTIES					X - X Axis						Y - Y Axis					
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)	
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm 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.



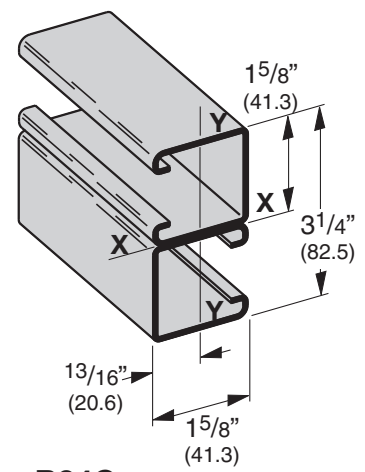
B24A

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		1/240 Span		1/360 Span	
In.	mm						Lbs.	N	Lbs.	N
12	(305)	B24 B24A	1750 1750*	(7784) (7784)	.014 .002	(.35) (.05)	1750 1750*	(7784) (7784)	1750 1750*	(7784) (7784)
24	(609)	B24 B24A	1379 1750*	(6134) (7784)	.057 .014	(1.45) (.35)	1379 1750*	(6134) (7784)	1379 1750*	(6134) (7784)
36	(914)	B24 B24A	919 1750*	(4088) (7784)	.128 .048	(3.25) (1.22)	919 1750*	(4088) (7784)	720 1750*	(3203) (7784)
48	(1219)	B24 B24A	689 1750*	(3065) (7784)	.227 .115	(5.76) (2.92)	607 1750*	(2700) (7784)	405 1750*	(1801) (7784)
60	(1524)	B24 B24A	551 1518	(2451) (6752)	.355 .195	(9.02) (4.95)	389 1518	(1730) (6752)	259 1294	(1152) (5756)
72	(1829)	B24 B24A	460 1265	(2046) (5627)	.511 .281	(12.98) (7.14)	270 1265	(1201) (5627)	180 898	(800) (3994)
84	(2133)	B24 B24A	394 1084	(1752) (4822)	.695 .383	(17.65) (9.73)	198 990	(881) (4404)	132 660	(587) (2936)
96	(2438)	B24 B24A	345 949	(1534) (4221)	.908 .500	(23.06) (12.70)	152 758	(676) (3372)	101 505	(449) (2246)
108	(2743)	B24 B24A	306 843	(1361) (3750)	1.149 .633	(29.18) (16.08)	120 599	(534) (2664)	80 399	(356) (1775)
120	(3048)	B24 B24A	276 759	(1228) (3376)	1.419 .782	(36.04) (19.86)	97 485	(431) (2157)	65 323	(289) (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	
In.	mm		Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N
12	(305)	B24 B24A	6441 13212	(28651) (58770)	3077 4988	(13687) (22188)	6509 13237	(28953) (58881)	6330 13171	(28157) (58587)	6198 13121	(27570) (58365)
24	(609)	B24 B24A	5874 12993	(26129) (57796)	2896 4924	(12882) (21903)	6124 13092	(27241) (58236)	5483 12828	(24389) (57062)	5038 12627	(22410) (56167)
36	(914)	B24 B24A	5038 12627	(22410) (56167)	2619 4819	(11650) (21436)	5535 12851	(24621) (57164)	4302 12256	(19136) (54517)	3516 11804	(15640) (52507)
48	(1219)	B24 B24A	4043 12115	(17984) (53890)	2272 4675	(10106) (20795)	4800 12512	(21351) (55656)	3008 11456	(13380) (50959)	2324 10651	(10337) (47378)
60	(1524)	B24 B24A	3008 11456	(13380) (50959)	1873 4020	(8331) (17882)	3978 12078	(17695) (53725)	2200 10427	(9786) (46381)	1740 9169	(7740) (40786)
72	(1829)	B24 B24A	2324 10651	(10337) (47378)	1562 3048	(6948) (13558)	3123 11546	(13892) (51359)	1740 9169	(7740) (40786)	1397 7358	(6214) (32730)
84	(2133)	B24 B24A	1898 9700	(8443) (43148)	1340 2362	(5960) (10506)	2502 10918	(11129) (48565)	1444 7683	(6423) (34175)	1168 5464	(5195) (24305)
96	(2438)	B24 B24A	1608 8602	(7153) (38263)	1175 1866	(5226) (8300)	2089 10194	(9292) (45345)	1236 6024	(5498) (26796)	1000 4184	(4448) (18611)
108	(2743)	B24 B24A	1397 7358	(6214) (32730)	1046 1498	(4653) (6663)	1796 9373	(7989) (41693)	1078 4760	(4795) (21173)	870** 3306	(3870) (14706)
120	(3048)	B24 B24A	1236 6024	(5498) (26796)	942 1216	(4190) (5409)	1578 8455	(7019) (37610)	953** 3856	(4239) (17152)	764** 2677**	(3398) (11908)

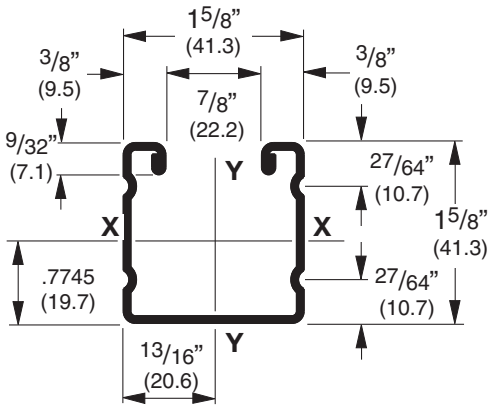
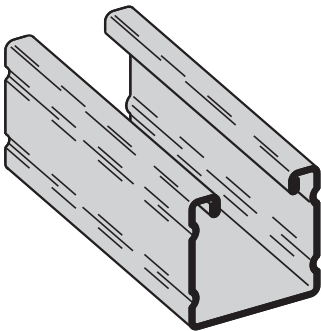
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B26 Channel & Combinations

B26

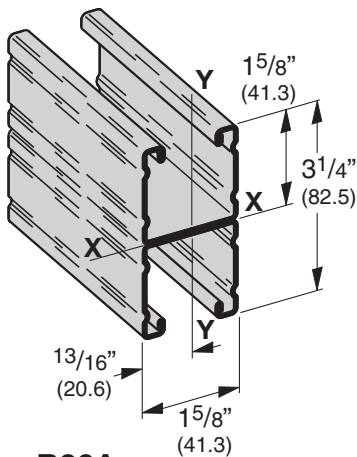
- Thickness: 16 Gauge (1.5 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized
- Weight: 1.12 Lbs./Ft. (1.66 kg/m)



SECTION PROPERTIES

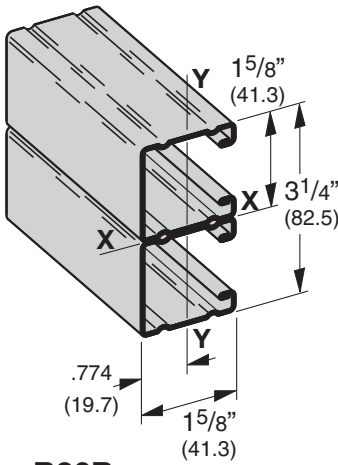
SECTION PROPERTIES					X - X Axis						Y - Y Axis					
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)	
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm 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.



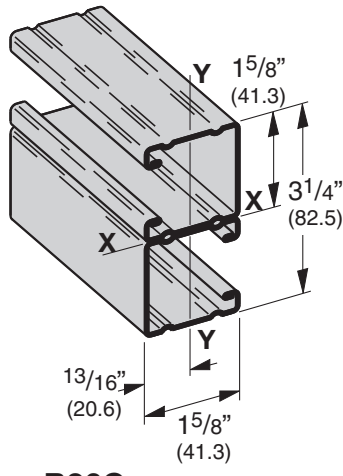
B26A

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		1/240 Span		1/360 Span	
							Lbs.	N	Lbs.	N
12	(305)	B26 B26A	1220 1220*	(5427) (5427)	.014 .001	(.35) (.02)	1220 1220*	(5427) (5427)	1220 1220*	(5427) (5427)
24	(609)	B26 B26A	1163 1220*	(5173) (5427)	.057 .012	(1.45) (.30)	1163 1220*	(5173) (5427)	1163 1220*	(5173) (5427)
36	(914)	B26 B26A	775 1220*	(3447) (5427)	.128 .040	(3.25) (1.01)	775 1220*	(3447) (5427)	603 1220*	(2682) (5427)
48	(1219)	B26 B26A	581 1220*	(2584) (5427)	.228 .096	(5.79) (2.44)	509 1220*	(2264) (5427)	339 1220*	(1508) (5427)
60	(1524)	B26 B26A	465 1220*	(2068) (5427)	.357 .188	(9.07) (4.77)	326 1220*	(1450) (5427)	217 1076	(965) (4786)
72	(1829)	B26 B26A	388 1052	(1726) (4679)	.514 .281	(13.05) (7.14)	226 1052	(1450) (4679)	151 747	(965) (3323)
84	(2133)	B26 B26A	332 902	(1477) (4012)	.699 .383	(17.75) (9.73)	166 824	(738) (3665)	111 549	(494) (2442)
96	(2438)	B26 B26A	291 789	(1294) (3509)	.913 .500	(23.19) (12.70)	127 631	(565) (2807)	85 420	(378) (1868)
108	(2743)	B26 B26A	258 702	(1147) (3122)	1.156 .633	(29.36) (16.08)	101 498	(449) (2215)	67 332	(298) (1477)
120	(3048)	B26 B26A	233 631	(1036) (2807)	1.427 .782	(36.24) (19.86)	81 404	(360) (1797)	54 269	(240) (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 B26A	4002 8151	(17802) (36257)	2216 3630	(9857) (16147)	4032 8163	(17935) (36311)	3952 8133	(17579) (36177)	3891 8109	(17308) (36070)
24	(609)	B26 B26A	3740 8051	(16636) (35812)	2109 3591	(9381) (15973)	3857 8096	(17157) (36013)	3554 7975	(15809) (35474)	3336 7883	(14838) (35065)
36	(914)	B26 B26A	3336 7883	(14839) (35065)	1941 3528	(8634) (15693)	3579 7986	(15920) (35523)	2962 7713	(13175) (34309)	2546 7505	(11325) (33384)
48	(1219)	B26 B26A	2828 7648	(12579) (34020)	1725 3441	(7613) (15306)	3217 7831	(14310) (34834)	2251 7346	(10013) (32676)	1705 6977	(7584) (31035)
60	(1524)	B26 B26A	2251 7346	(10013) (32676)	1469 3066	(6534) (13638)	2793 7631	(12424) (33944)	1603 6874	(7130) (30577)	1233 6298	(5484) (28015)
72	(1829)	B26 B26A	1705 6977	(7584) (31035)	1203 2385	(5351) (10609)	2326 7388	(10346) (32863)	1233 6298	(5484) (28015)	967 5467	(4301) (24318)
84	(2133)	B26 B26A	1358 6541	(6040) (29096)	1011 1884	(4497) (8380)	1851 7100	(8233) (31582)	1003 5616	(4461) (24981)	797 4486	(3545) (19955)
96	(2438)	B26 B26A	1129 6038	(5022) (26858)	871 1512	(3874) (6726)	1513 6767	(6730) (30101)	847 4830	(3767) (21485)	680 3463	(3025) (15404)
108	(2743)	B26 B26A	967 5467	(4301) (24318)	766 1231	(3407) (5476)	1277 6391	(5680) (28428)	734 3940	(3265) (17526)	592** 2736	(2633) (12170)
120	(3048)	B26 B26A	847 4830	(3767) (21485)	684 1015	(3042) (4515)	1105 5970	(4915) (26556)	648 3192	(2882) (14199)	523** 2216**	(2326) (9857)

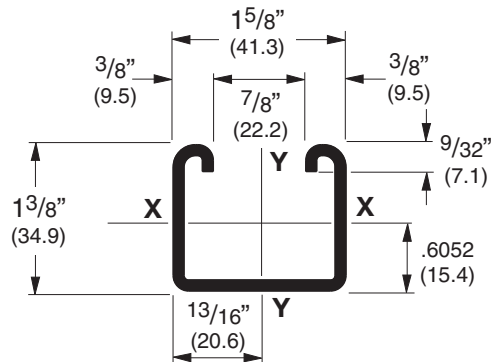
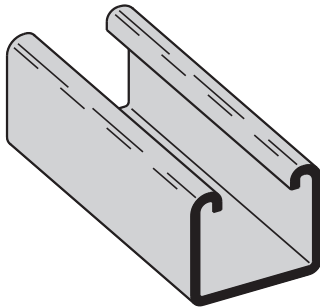
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B32 Channel & Combinations

B32

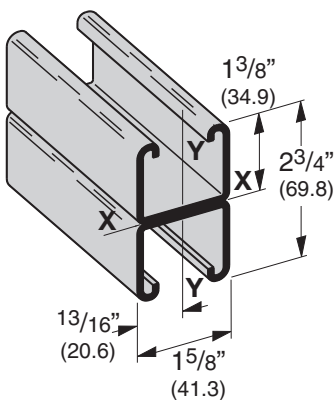
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304
- Weight: 1.70 Lbs./Ft. (2.53 kg/m)



SECTION PROPERTIES

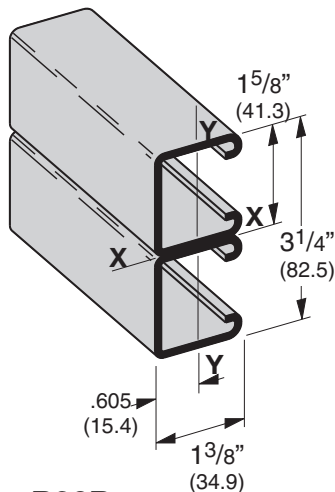
SECTION PROPERTIES					X - X Axis						Y - Y Axis					
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)	
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm 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.



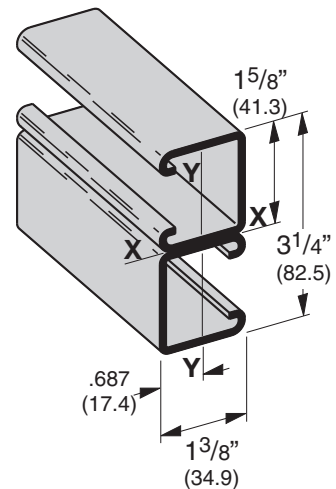
B32A

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	
In.	mm		Lbs.	N	In.	mm	Lbs.	N	Lbs.	N
12	(305)	B32 B32A	2210 2210*	(9830) (9830)	.016 .003	(.40) (.07)	2210 2210*	(9830) (9830)	2210 2210*	(9830) (9830)
24	(609)	B32 B32A	1299 2210*	(5778) (9830)	.065 .022	(1.65) (.56)	1299 2210*	(5778) (9830)	1299 2210*	(5778) (9830)
36	(914)	B32 B32A	866 2210*	(3852) (9830)	.147 .076	(3.73) (1.93)	866 2210*	(3852) (9830)	587 2210*	(2611) (9830)
48	(1219)	B32 B32A	649 1817	(2887) (8082)	.262 .148	(6.65) (3.76)	495 1817	(2202) (8082)	330 1638	(1468) (7286)
60	(1524)	B32 B32A	520 1454	(2313) (6468)	.410 .231	(10.41) (5.87)	317 1454	(1410) (6468)	211 1048	(938) (4662)
72	(1829)	B32 B32A	433 1211	(1926) (5387)	.590 .333	(14.98) (8.46)	220 1092	(978) (4857)	147 728	(654) (3238)
84	(2133)	B32 B32A	371 1038	(1650) (4617)	.803 .453	(20.39) (11.50)	162 802	(720) (3567)	108 535	(480) (2380)
96	(2438)	B32 B32A	325 909	(1445) (4043)	1.049 .591	(26.64) (15.01)	124 614	(551) (2731)	83 410	(369) (1824)
108	(2743)	B32 B32A	289 808	(1285) (3594)	1.327 .749	(33.70) (19.02)	98 485	(436) (2157)	65 324	(289) (1441)
120	(3048)	B32 B32A	260 727	(1156) (3234)	1.639 .924	(41.63) (23.47)	79 393	(351) (1748)	53 262	(236) (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	
In.	mm		Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N
12	(305)	B32 B32A	10278 21320	(45719) (94836)	4036 6557	(17953) (29167)	10432 21378	(46404) (95094)	10035 21224	(44638) (94409)	9753 21106	(43383) (93884)
24	(609)	B32 B32A	9104 20806	(40496) (92550)	3732 6431	(16601) (28606)	9600 21039	(42702) (93586)	8387 20421	(37307) (90837)	7640 19950	(33984) (88742)
36	(914)	B32 B32A	7640 19950	(33984) (88742)	3323 6228	(14781) (27703)	8479 20474	(37716) (91073)	6520 19083	(29002) (84885)	5425 18023	(24131) (80170)
48	(1219)	B32 B32A	6151 18751	(27361) (83408)	2877 5954	(12797) (26485)	7265 19682	(32316) (87550)	4778 17210	(21253) (76554)	3870 15326	(17214) (68173)
60	(1524)	B32 B32A	4778 17210	(21253) (76554)	2435 4692	(10831) (20871)	6060 18665	(26956) (83026)	3693 14801	(16427) (65838)	2994 11858	(13318) (52747)
72	(1829)	B32 B32A	3870 15326	(17214) (68173)	2089 3448	(9292) (15337)	4923 17421	(21898) (77492)	2994 11858	(13318) (52747)	2403 8316	(10689) (36991)
84	(2133)	B32 B32A	3243 13100	(14425) (58272)	1817 2609	(8082) (11605)	4114 15951	(18300) (70953)	2489 8798	(11071) (39135)	1807** 6110	(8038) (27178)
96	(2438)	B32 B32A	2774 10525	(12339) (46817)	1594 2014	(7090) (8959)	3531 14256	(15706) (63414)	1993 6736	(8865) (29963)	1384** 4678	(6156) (20809)
108	(2743)	B32 B32A	2403 8316	(10689) (36991)	1407 1592	(6258) (7081)	3083 12334	(13714) (54864)	1574** 5322	(7001) (23673)	1093** 3696**	(4862) (16440)
120	(3048)	B32 B32A	1993 6736	(8865) (29963)	1221 1289	(5431) (5734)	2723 10203	(12112) (45385)	1275** 4311	(5671) (19176)	886** 2994**	(3941) (13318)

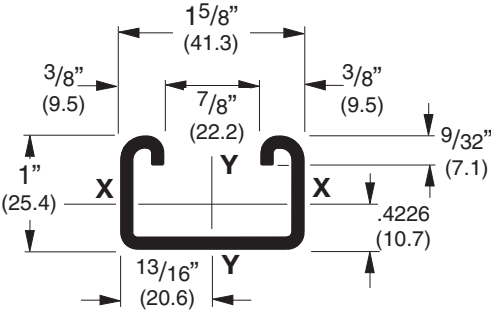
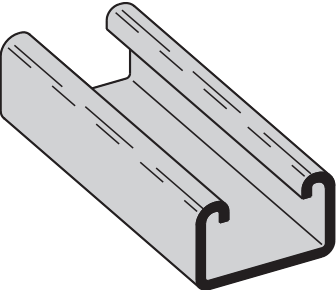
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B42 Channel & Combinations

B42

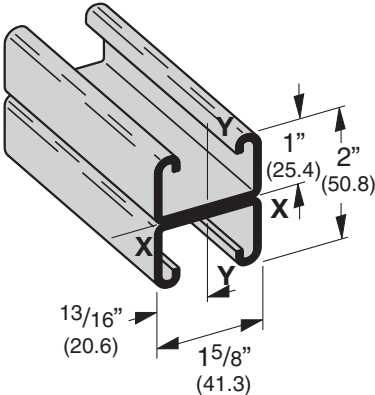
- Thickness: 12 Gauge (2.6 mm)
 - Standard lengths: 10' (3.05 m) & 20' (6.09 m)
 - Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304
 - Weight: 1.44 Lbs./Ft. (2.14 kg/m)
- Note: Also available in 14 gauge (1.9mm) material as B44*



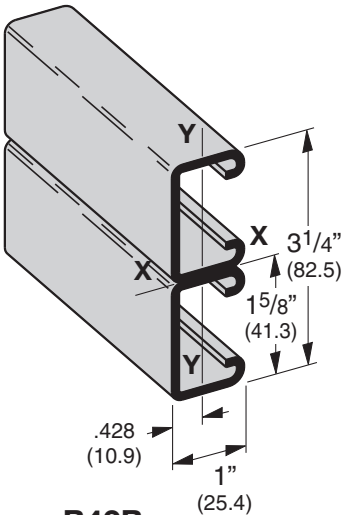
SECTION PROPERTIES

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	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		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)

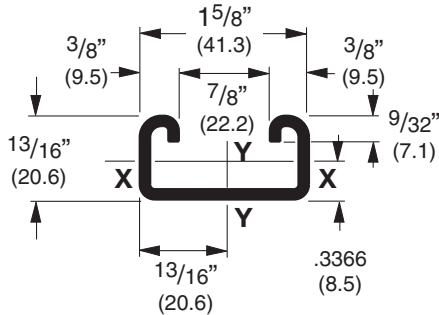
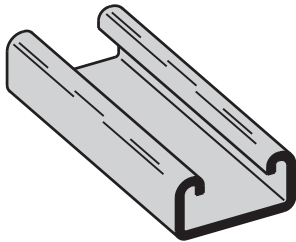
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B52 Channel & Combinations

B52

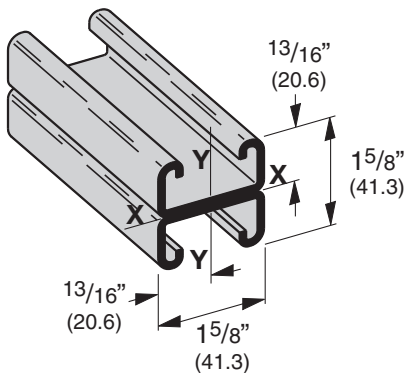
- Thickness: 12 Gauge (2.6 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized
- Weight: 1.27 Lbs./Ft. (1.89 kg/m)



SECTION PROPERTIES

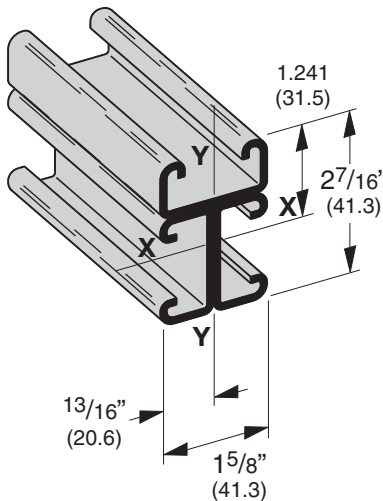
SECTION PROPERTIES						X - X Axis						Y - Y Axis					
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm ³	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.



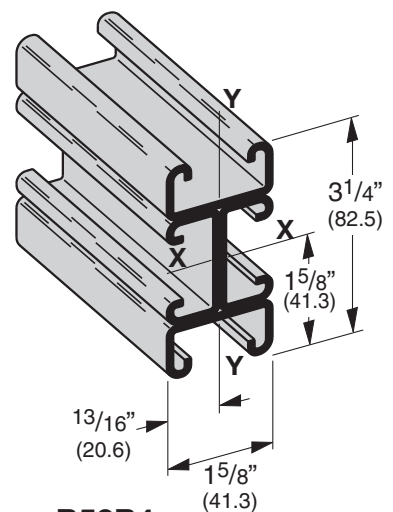
B52A

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 In. mm		Channel Style	Uniform Load and Deflection				Uniform Load @ Deflection =			
			Lbs.		N		1/240 Span		1/360 Span	
In.	mm									
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 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											
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)	— —	— —

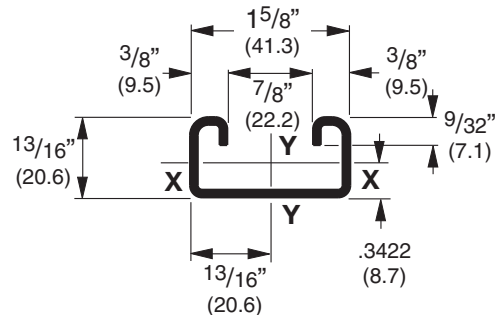
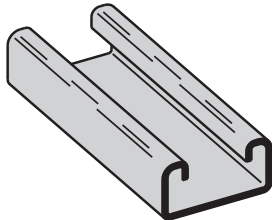
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B54 Channel & Combinations

B54

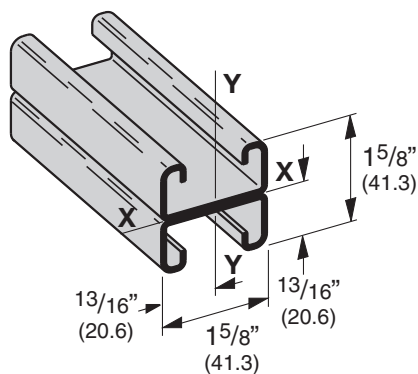
- Thickness: 14 Gauge (1.9 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized, Stainless Steel Type 304 or 316, Aluminum
- Weight: .97 Lbs./Ft. (1.44 kg/m)



SECTION PROPERTIES

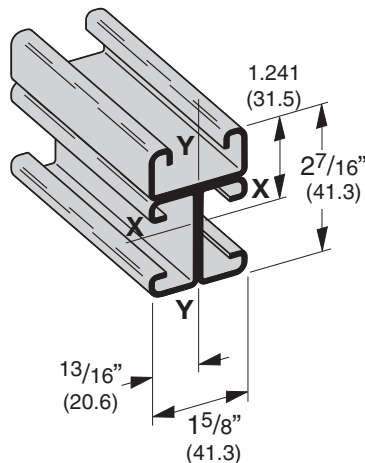
Channel	Weight		Areas of Section		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)		Moment of Inertia (I)		Section Modulus (S)		Radius of Gyration (r)	
	lbs./ft.	kg/m	sq. in.	cm ²	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm	in. ⁴	cm ⁴	in. ³	cm ³	in.	cm
B54	1.016	(1.51)	.299	(1.93)	.0263	(1.09)	.0560	(.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.



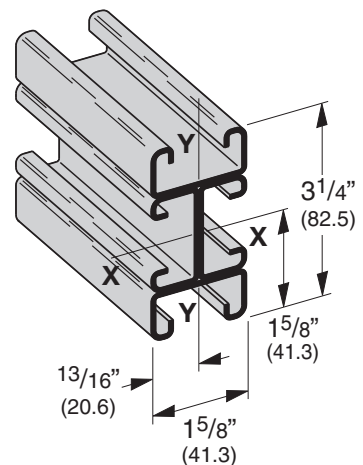
B54A

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		1/240 Span		1/360 Span	
			In.	mm	Lbs.	N	In.	mm	Lbs.	N
12	(305)	B54 B54A	870 870*	(3870) (3870)	.027 .005	(.68) (.13)	870 870*	(3870) (3870)	870 870*	(3870) (3870)
24	(609)	B54 B54A	465 870*	(2068) (3870)	.108 .043	(2.74) (1.09)	430 870*	(1913) (3870)	287 870*	(1276) (3870)
36	(914)	B54 B54A	310 832	(1379) (3701)	.243 .141	(6.17) (3.58)	191 832	(849) (3701)	127 591	(565) (2629)
48	(1219)	B54 B54A	233 624	(1036) (2775)	.432 .250	(10.97) (6.35)	108 499	(480) (2219)	72 332	(320) (1477)
60	(1524)	B54 B54A	186 499	(827) (2219)	.676 .391	(17.17) (9.93)	69 319	(307) (1419)	46 213	(204) (947)
72	(1829)	B54 B54A	155 416	(689) (1850)	.973 .563	(24.71) (14.30)	48 222	(213) (987)	32 148	(142) (658)
84	(2133)	B54 B54A	133 357	(591) (1588)	1.324 .766	(33.63) (19.45)	35 163	(155) (725)	23 109	(102) (485)
96	(2438)	B54 B54A	116 312	(516) (1388)	1.730 1.001	(43.94) (25.42)	27 125	(120) (556)	18 83	(80) (369)
108	(2743)	B54 B54A	103 277	(458) (1232)	2.189 1.267	(55.60) (32.18)	21 98	(93) (436)	14 66	(62) (293)
120	(3048)	B54 B54A	93 250	(413) (1112)	2.703 1.564	(68.65) (39.72)	17 80	(75) (356)	11 53	(49) (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 B54A	6186 12763	(27516) (56772)	2586 4060	(11503) (18060)	6284 12835	(27952) (57093)	6032 12645	(26831) (56248)	5857 12501	(26053) (55607)
24	(609)	B54 B54A	5464 12135	(24305) (53979)	2254 3857	(10026) (17157)	5763 12420	(25635) (55247)	4968 11663	(22099) (51879)	4300 11087	(19127) (49317)
36	(914)	B54 B54A	4300 11087	(19127) (49317)	1816 3549	(8078) (15787)	5043 11728	(22432) (52169)	3076 10026	(13683) (44598)	2136 8729	(9501) (38828)
48	(1219)	B54 B54A	2703 9620	(12023) (42792)	1341 3169	(5965) (14096)	3920 10759	(17437) (47858)	1730 7734	(7695) (34402)	1201 5571	(5342) (24781)
60	(1524)	B54 B54A	1730 7734	(7695) (34402)	995 2745	(4426) (12210)	2621 9514	(11659) (42320)	1107** 5134	(4924) (22837)	769** 3566	(3420) (15862)
72	(1829)	B54 B54A	1201 5571	(5342) (24781)	763 2291	(3394) (10191)	1820 7992	(8096) (35550)	769** 3566	(3420) (15862)	534** 2476	(2375) (11014)
84	(2133)	B54 B54A	883** 4093	(3928) (18206)	603 1913	(2682) (8509)	1337 6200	(5947) (27579)	565** 2620	(2513) (11654)	— 1819**	— (8091)
96	(2438)	B54 B54A	676** 3134	(3007) (13941)	487 1616	(2166) (7188)	1024** 4747	(4555) (21116)	— 2006**	— (8923)	— 1393**	— (6196)
108	(2743)	B54 B54A	534** 2476	(2375) (11014)	401 1380	(1784) (6138)	809** 3751	(3598) (16685)	— 1585**	— (7050)	— 1100**	— (4893)
120	(3048)	B54 B54A	— 2006**	— (8923)	336 1190	(1494) (5293)	655** 3038	(2913) (13513)	— 1284**	— (5711)	— —	— —

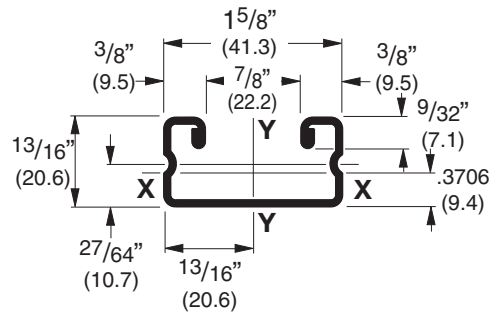
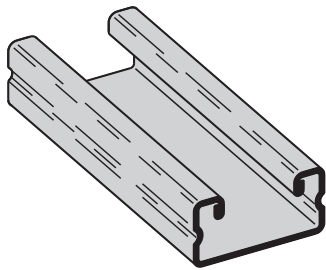
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

B56 Channel & Combinations

B56

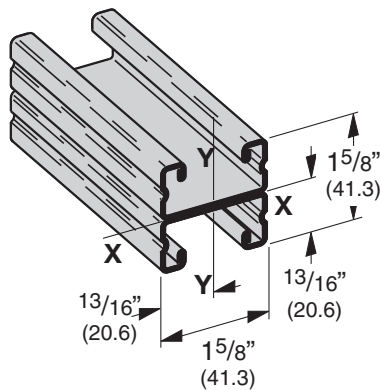
- Thickness: 16 Gauge (1.5 mm)
- Standard lengths: 10' (3.05 m) & 20' (6.09 m)
- Standard finishes: Plain, Dura-Green, Pre-Galvanized, Hot-Dipped Galvanized
- Weight: .85 Lbs./Ft. (1.26 kg/m)



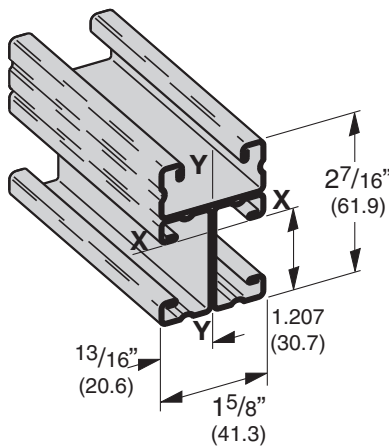
SECTION PROPERTIES

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	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)

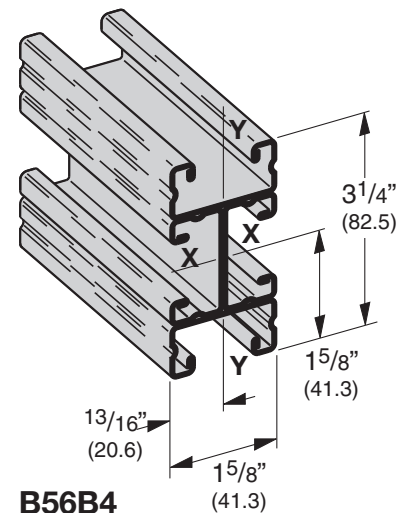
Calculations of section properties are based on metal thicknesses as determined by the AISI Cold-Formed Steel Design Manual.



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 B56A	610 610*	(2713) (2713)	.027 .004	(.68) (.10)	610 610*	(2713) (2713)	610 610*	(2713) (2713)
24	(609)	B56 B56A	405 610*	(1801) (2713)	.109 .035	(2.77) (.89)	372 610*	(1655) (2713)	248 610*	(1103) (2713)
36	(914)	B56 B56A	270 610*	(1201) (2713)	.245 .121	(6.22) (3.07)	165 610*	(734) (2713)	110 502	(489) (2233)
48	(1219)	B56 B56A	202 530	(898) (2357)	.435 .250	(11.05) (6.35)	93 423	(413) (1881)	62 282	(276) (1699)
60	(1524)	B56 B56A	162 424	(720) (1886)	.680 .391	(17.27) (9.93)	59 271	(262) (1205)	40 181	(178) (805)
72	(1829)	B56 B56A	135 353	(600) (1570)	.980 .563	(24.89) (14.30)	41 188	(182) (836)	28 125	(124) (556)
84	(2133)	B56 B56A	116 303	(516) (1348)	1.334 .766	(33.88) (19.45)	30 138	(133) (614)	20 92	(89) (409)
96	(2438)	B56 B56A	101 265	(449) (1179)	1.742 1.001	(44.24) (25.42)	23 106	(102) (471)	15 71	(67) (316)
108	(2743)	B56 B56A	90 236	(400) (1050)	2.205 1.267	(56.01) (32.18)	18 84	(80) (373)	12 56	(53) (249)
120	(3048)	B56 B56A	81 212	(360) (943)	2.722 1.564	(69.14) (39.72)	15 68	(67) (302)	10 45	(44) (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 B56A	4968 10237	(22099) (45536)	2182 3365	(9706) (14968)	5044 10291	(22437) (45776)	4845 10148	(21551) (45140)	4702 10039	(20915) (44655)
24	(609)	B56 B56A	4367 9762	(19425) (43423)	1903 3202	(8465) (14243)	4624 9977	(20568) (44380)	3985 9405	(17726) (41835)	3572 8969	(15889) (39896)
36	(914)	B56 B56A	3572 8969	(15889) (39896)	1557 2955	(6926) (13144)	4034 9454	(17944) (42053)	2658 8167	(11823) (36328)	1845 7186	(8207) (31965)
48	(1219)	B56 B56A	2335 7860	(10386) (34963)	1164 2649	(5178) (11783)	3290 8722	(14634) (38797)	1495 6434	(6650) (28620)	1038 4731	(4617) (21044)
60	(1524)	B56 B56A	1495 6434	(6650) (28620)	862 2307	(3834) (10262)	2264 7780	(10071) (34607)	957 4360	(4257) (19394)	664** 3028	(2953) (13469)
72	(1829)	B56 B56A	1038 4731	(4617) (21044)	661 1937	(2940) (8616)	1572 6629	(6992) (29487)	664** 3028	(2953) (13469)	461** 2103	(2050) (9354)
84	(2133)	B56 B56A	763** 3476	(3394) (15462)	522 1619	(2322) (7201)	1155 5269	(5137) (23437)	488** 2224	(2171) (9893)	— 1545**	— (6872)
96	(2438)	B56 B56A	584** 2661	(2598) (11837)	422 1368	(1877) (6085)	884** 4031	(3932) (17931)	— 1703**	— (7575)	— 1183**	— (5262)
108	(2743)	B56 B56A	461** 2103	(2050) (9354)	348 1169	(1548) (5200)	699** 3185	(3109) (14167)	— 1346**	— (5987)	— 934**	— (4154)
120	(3048)	B56 B56A	— 1703**	— (7575)	291 1008	(1294) (4484)	566** 2580	(2417) (11476)	— 1090**	— (4848)	— —	— —

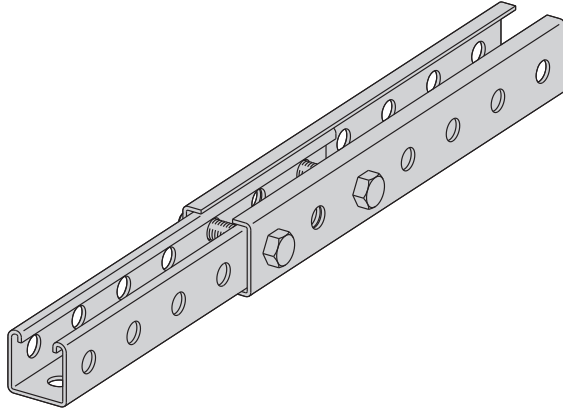
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 14 for general fitting and standard finish specifications.

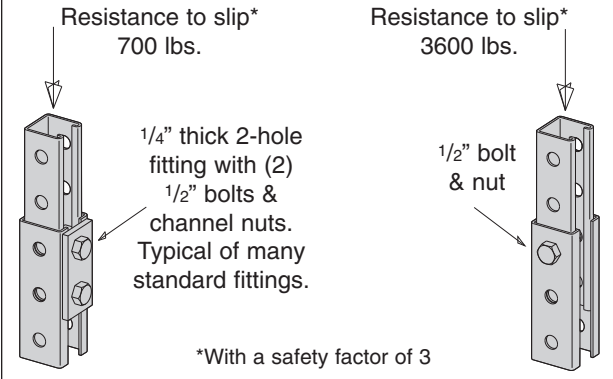
Telescoping Channel

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

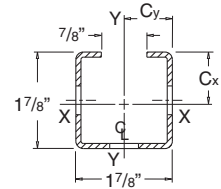


BTS22TH TELESCOPING STRUT

Fits over all 15/8" x 15/8" channels 9/16" holes on 17/8" 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.

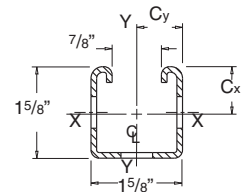


B22TH THREE HOLE STRUT

9/16" holes on 17/8" 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

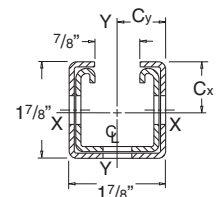
Section properties are based on nominal metal thickness, and overall dimensions.



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.

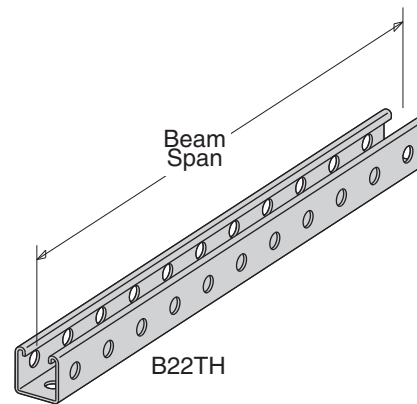


Reference page 14 for general fitting and standard finish specifications.

BEAM LOADING DATA

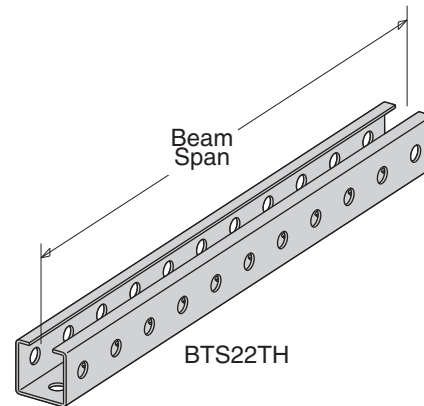
B22TH

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



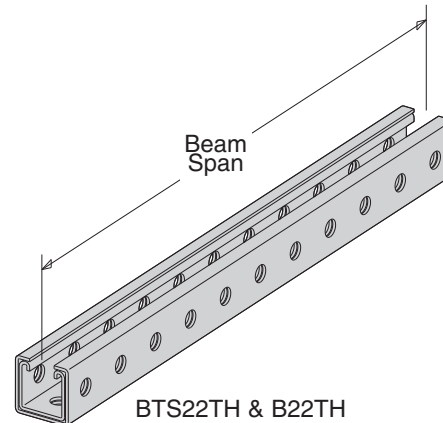
BTS22TH

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.

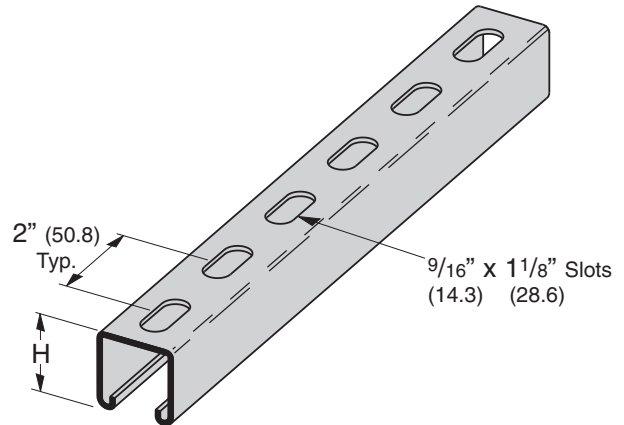
Reference page 14 for general fitting and standard finish specifications.

Channel Hole Patterns

B11SH THRU B56SH SH TYPE CHANNEL

• For beam loads use 90% of Channel Loading Chart

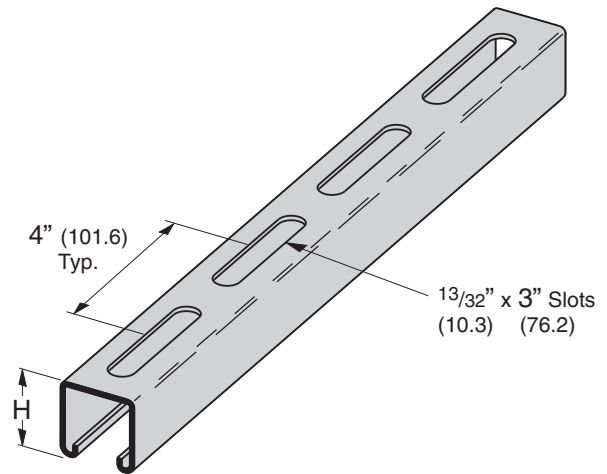
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B11SH	12 Ga.	(2.6)	3 ¹ / ₄ "	(82.5)	2.97	(4.42)
B12SH	12 Ga.	(2.6)	2 ⁷ / ₁₆ "	(61.9)	2.39	(3.55)
B22SH	12 Ga.	(2.6)	1 ⁵ / ₈ "	(41.3)	1.82	(2.71)
B24SH	14 Ga.	(1.9)	1 ⁵ / ₈ "	(41.3)	1.34	(1.99)
B26SH	16 Ga.	(1.5)	1 ⁵ / ₈ "	(41.3)	1.07	(1.59)
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

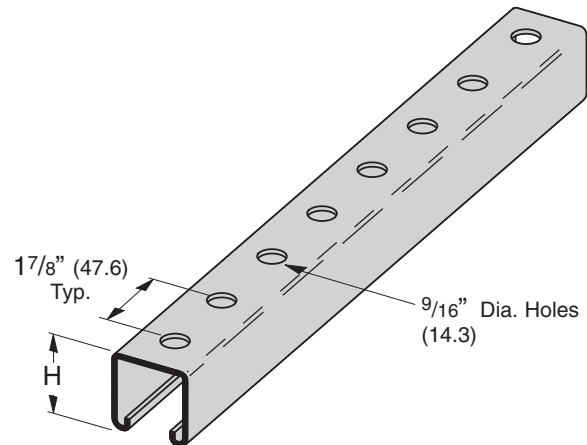
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B11S	12 Ga.	(2.6)	3 ¹ / ₄ "	(82.5)	2.94	(4.37)
B12S	12 Ga.	(2.6)	2 ⁷ / ₁₆ "	(61.9)	2.36	(3.51)
B22S	12 Ga.	(2.6)	1 ⁵ / ₈ "	(41.3)	1.79	(2.66)
B24S	14 Ga.	(1.9)	1 ⁵ / ₈ "	(41.3)	1.32	(1.96)
B26S	16 Ga.	(1.5)	1 ⁵ / ₈ "	(41.3)	1.06	(1.58)
B32S	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	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)	2 ⁷ / 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)

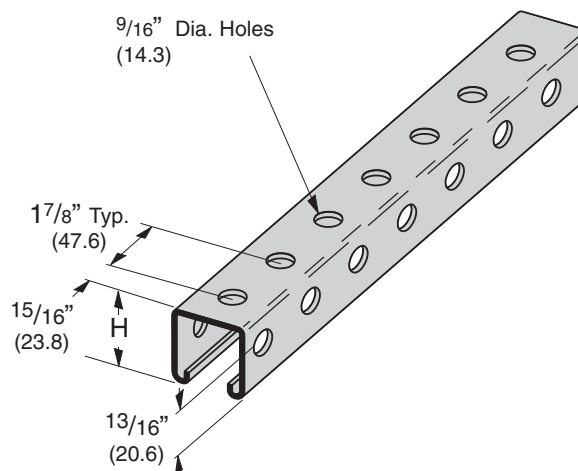


Reference page 14 for general fitting and standard finish specifications.

B22TH (TH TYPE CHANNEL)

• For beam loads use 90% of Channel Loading Chart

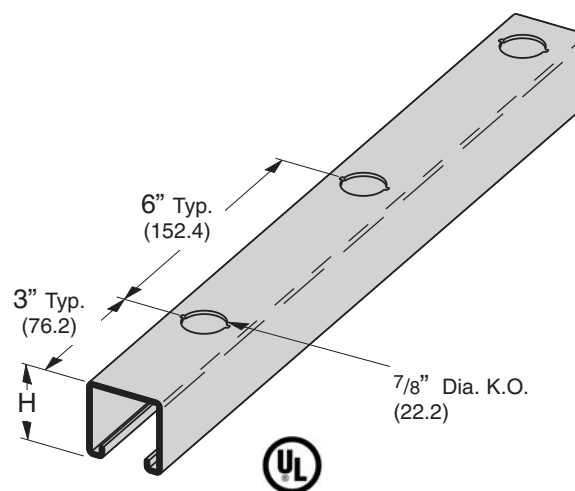
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B22TH	12 Ga.	(2.6)	1 ⁵ / ₈ "	(41.3)	1.76	(2.62)



B11KO6 THRU B56KO6 (KO6 TYPE KNOCKOUT CHANNEL)

• For beam loads use 90% of Channel Loading Chart

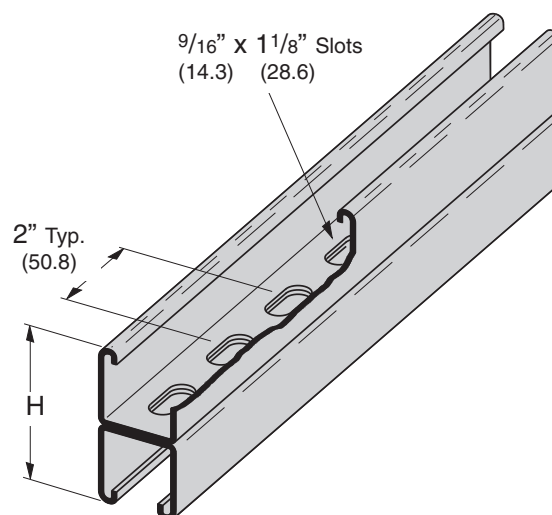
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B11KO6	12 Ga.	(2.6)	3 ¹ / ₄ "	(82.5)	3.05	(4.54)
B12KO6	12 Ga.	(2.6)	2 ⁷ / ₁₆ "	(61.9)	2.47	(3.67)
B22KO6	12 Ga.	(2.6)	1 ⁵ / ₈ "	(41.3)	1.90	(2.83)
B24KO6	14 Ga.	(1.9)	1 ⁵ / ₈ "	(41.3)	1.40	(2.08)
B26KO6	16 Ga.	(1.5)	1 ⁵ / ₈ "	(41.3)	1.12	(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	Lbs./Ft.	kg/m
B22SHA	12 Ga.	(2.6)	3 ¹ / ₄ "	(82.5)	3.64	(5.42)



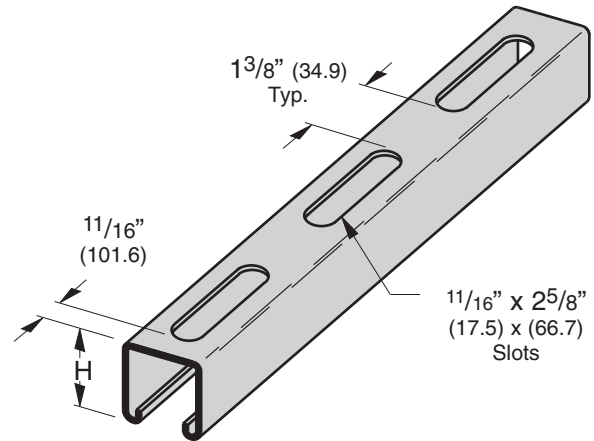
Reference page 14 for general fitting and standard finish specifications.

Channel Hole Patterns

B11S58 THRU B56S58 S58 TYPE CHANNEL

• For beam loads use 90% of Channel Loading Chart

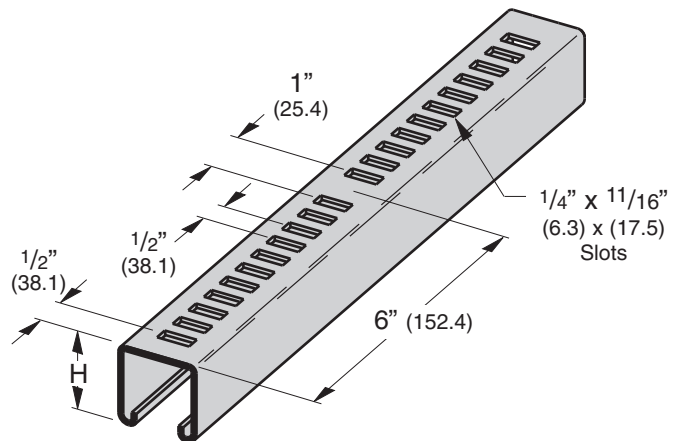
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B11S58	12 Ga.	(2.6)	3 1/4"	(82.5)	2.94	(4.37)
B12S58	12 Ga.	(2.6)	2 7/16"	(61.9)	2.36	(3.51)
B22S58	12 Ga.	(2.6)	1 5/8"	(41.3)	1.79	(2.66)
B24S58	14 Ga.	(1.9)	1 5/8"	(41.3)	1.32	(1.96)
B26S58	16 Ga.	(1.5)	1 5/8"	(41.3)	1.06	(1.58)
B32S58	12 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

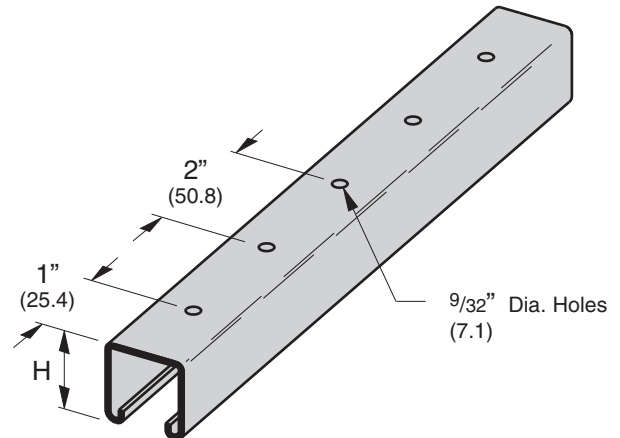
Part No.	Thickness		Height H		Weight	
			In.	mm	Lbs./Ft.	kg/m
B22M	12 Ga.	(2.6)	1 5/8"	(41.3)	1.79	(2.66)
B24M	14 Ga.	(1.9)	1 5/8"	(41.3)	1.32	(1.96)
B32M	12 Ga.	(2.6)	1 3/8"	(34.9)	1.59	(2.36)
B42M	12 Ga.	(2.6)	1"	(25.4)	1.33	(1.98)
B44M	14 Ga.	(1.9)	1"	(25.4)	0.98	(1.46)
B52M	12 Ga.	(2.6)	1 3/16"	(20.6)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



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)



Reference page 14 for general fitting and standard finish specifications.

Channel Nuts & Hardware

Channel Nuts

Cooper 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 F593
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:

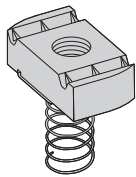
N 7 25 (*) WO

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
TN = Twirl Nut	B11	22 = #10-24	$\frac{3}{4}$ = $\frac{3}{4}$ "	** = Twirl Nuts or nuts with springs have blank suffix
SN = Stud Nut	B12	27 = #10-32	1 = 1"	
STN = Stud Twirl Nut	2 = Medium Channels	24 = $\frac{1}{4}$ -20	$1\frac{1}{4}$ = $1\frac{1}{4}$ "	
NW = Combo Nut Washer	B22	23 = $\frac{5}{16}$ -18	$1\frac{1}{2}$ = $1\frac{1}{2}$ "	
	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			

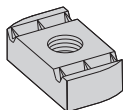
METRIC CHANNEL NUTS

Numbering Example: BMS 6 M

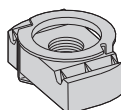
Nut Type	Metric Thread Size	Suffix
BMS = Spring Nut	3 = M3.5	S = Short Spring
BMS-D = Spring Nut ($\frac{1}{2}$ " thick)	4 = M4	M = Medium Spring
BMT = Twirl Nut	5 = M5	L = Long Spring
BMT-D = Twirl Nut ($\frac{1}{2}$ " thick)	6 = M6	* = Twirl Nuts and nuts without springs have blank suffix
BMM = Spring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



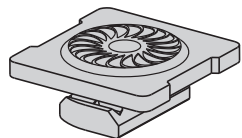
SPRING NUT



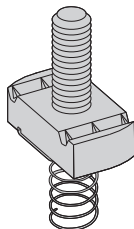
NUT WITHOUT SPRING



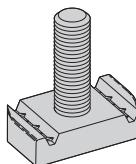
TWIRL-NUT™



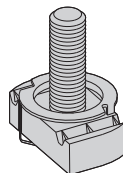
COMBO NUT WASHER



STUD NUT WITH SPRING

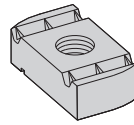


STUD NUT WITHOUT SPRING



TWIRL STUD NUT

Reference page 44 for general fitting and standard finish specifications.



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

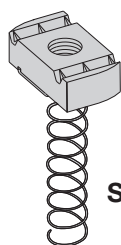
NUT WITHOUT SPRING

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)

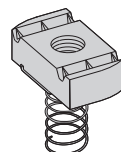
Note: For mini channel nut information see page 203.

Reference page 44 for general fitting and standard finish specifications.

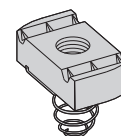
Note: See page 50 for resistance to slip & page 51 for pull-out strength.



700 Series



200 Series



500 Series

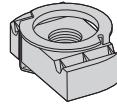
SPRING NUT

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 203.

Reference page 44 for general fitting and standard finish specifications.

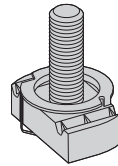
Channel Nuts



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	1/4"	(6.3)	6.9	(3.13)
	BMT-8	M8 x 1.25	1/4"	(6.3)	6.7	(3.04)
	BMT-10	M10 x 1.5	3/8"	(9.5)	9.6	(4.35)
	BMT-12	M12 x 1.75	3/8"	(9.5)	9.2	(4.17)
	BMT-D-12	M12 x 1.75	1/2"	(12.7)	12.2	(5.53)



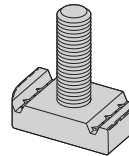
Note: See page 50 for resistance to slip & page 51 for pull-out strength.

TWIRL STUD NUT

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		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)

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



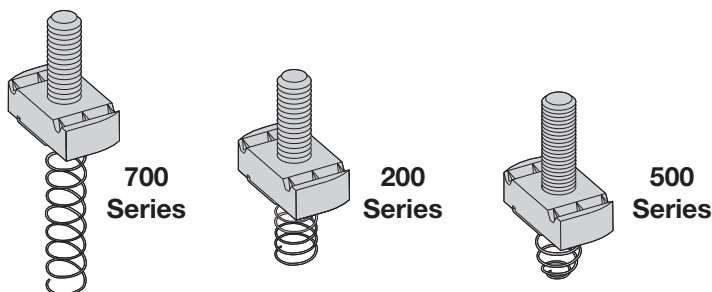
STUD NUT WITHOUT SPRING

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		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)

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 WITH SPRING

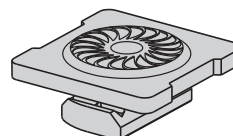
Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C	
					Lbs.	kg
SN724-*	1/4-20	B11 & B12	1/4"	(6.3)	8.1	(3.66)
SN224-*	1/4-20	B22, B24, B26, B32	1/4"	(6.3)	8.1	(3.66)
SN524-*	1/4-20	B42, B52, B54, B56	1/4"	(6.3)	8.1	(3.66)
SN728-*	3/8-16	B11 & B12	3/8"	(9.5)	12.9	(5.85)
SN228-*	3/8-16	B22, 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
- To lock combo nut washer in place a nex nut (sold separately) is required

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

Patent Number
7,604,444



COMBO NUT WASHER

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		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)
NWM6	M6	All Channel Sizes	1/4"	(6.3)	16.6	(7.50)
NWM8	M8	All Channel Sizes	3/8"	(9.5)	15.4	(7.00)
NWM10	M10	All Channel Sizes	1/4"	(6.3)	18.9	(8.57)
NWM12	M12	All Channel Sizes	3/8"	(9.5)	17.7	(8.00)

Reference page 44 for general fitting and standard finish specifications.

Channel Nuts

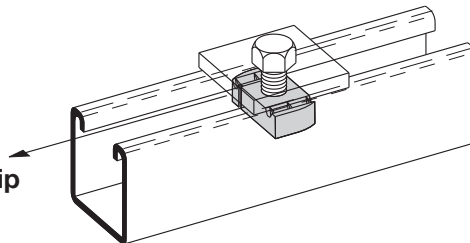
RESISTANCE TO SLIP

- 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*, 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*, 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, BMT-6	300	1330	300	1330	300	1330
M8 x 1.25	BMS-8, BMS-8L, BMS-8M, BMS-8S, BMT-8	450	2000	450	2000	450	2000
M10 x 1.50	BMS-10, BMS-10L, BMS-10M, BMS-10S, 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)

Resistance to Slip
of Channel Nut



Note: For mini channel nut information see page 203.

Reference page 44 for general fitting and standard finish specifications.

PULL-OUT STRENGTH

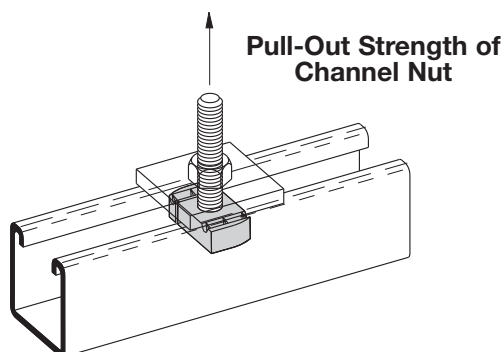
- With Safety Factor of 3
- Maximum pullout strength for B11 & B12 channels is limited to 1500 lbs. (6670 N).

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*, 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*, 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, BMT-6	450	2000	450	2000	450	2000
M8 x 1.25	BMS-8, BMS-8L, BMS-8M, BMS-8S, BMT-8	750	3330	750	3330	750	3330
M10 x 1.50	BMS-10, BMS-10L, BMS-10M, BMS-10S, 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 203.

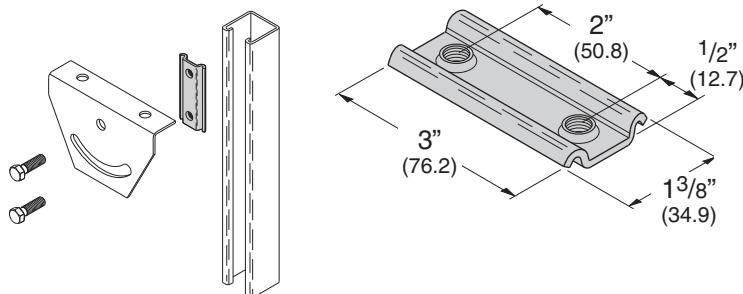


Reference page 44 for general fitting and standard finish specifications.

DCN 3/8

DOUBLE CONVEYOR NUT

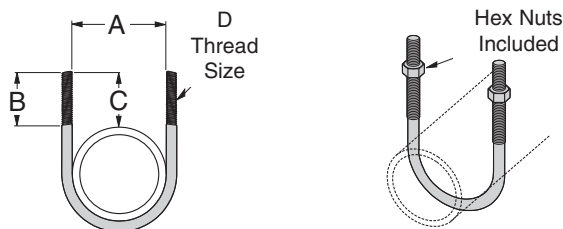
- Recommended torque - 19 ft./Lbs.
- Allowable slip loading - 700 Lbs.(3.11kN)
- Safety Factor of 3
- Material: ASTM 1011SS Gr. 33
- Finish: Electrodeposited zinc ASTM B633 SC1
- Strut ordered separately



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

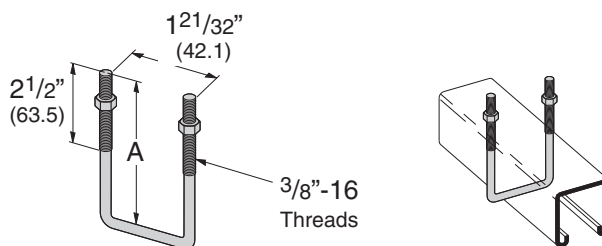


Part No.	A		B		C		D	Design Load		Wt./C	
	Lbs.	kN	Lbs.	kN	Lbs.	kN		Lbs.	kN	Lbs.	kg
B501-1/2	15/16"	(23.8)	13/4"	(44.4)	1 1/2"	(38.1)	5/16"-18	600	(2.67)	12	(5.4)
B501-3/4	1 1/8"	(28.6)	13/4"	(44.4)	1 5/8"	(41.3)	5/16"-18	600	(2.67)	13	(5.9)
B501-1	1 3/8"	(29.9)	1 7/8"	(47.6)	1 5/8"	(41.3)	5/16"-18	900	(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

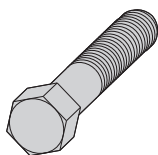


Part No.	A		Channel Size	Wt./C	
	Lbs.	kg		Lbs.	kg
B500-3-3/8	3 3/8"	(85.7)	1 5/8" x 1 5/8"	25	(11.3)
B500-5	5"	(127.0)	3 1/4" x 1 5/8"	33	(14.9)

Reference page 44 for general fitting and standard finish specifications.

HHCS HEX HEAD CAP SCREWS

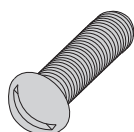
- Standard finish: Zinc-Plated, Stainless Steel



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

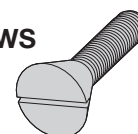
- Standard finish: Zinc-Plated



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

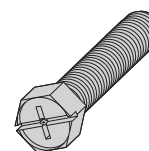
- Standard finish: Zinc-Plated



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

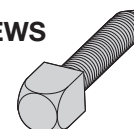
- Standard finish: Zinc-Plated, Stainless Steel



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

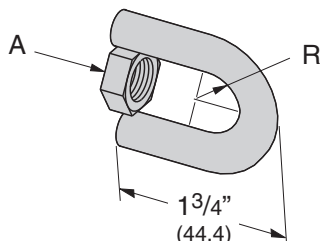


Part No.	Wt./C	
	Lbs.	kg
3/8" x 1 1/2" CNPSS	4.7	(2.13)
3/8" x 2" CNPSS	6.0	(2.72)
1/2" x 1 1/2" CNPSS	9.2	(4.17)
1/2" x 2" CNPSS	11.4	(5.17)
1/2" x 2 1/2" CNPSS	13.7	(6.21)
5/8" x 2" CNPSS	19.0	(8.62)
5/8" x 2 1/2" CNPSS	22.6	(10.25)

Reference page 44 for general fitting and standard finish specifications.

B446A SWIVEL HANGER (FEMALE ONLY)

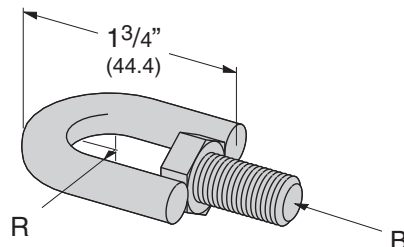
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446A- ⁵ / ₈	⁵ / ₈ \"-11 HN	15/32\" (11.9)	34	(15.4)
B446A- ³ / ₄	³ / ₄ \"-10 HN	9/16\" (14.3)	45	(20.4)

B446B SWIVEL HANGER (MALE ONLY)

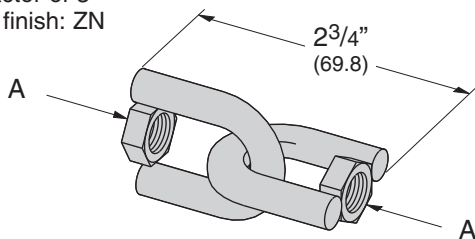
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446B- ⁵ / ₈	⁵ / ₈ \"-11 HHCS	15/32\" (11.9)	42	(19.0)
B446B- ³ / ₄	³ / ₄ \"-10 HHCS	9/16\" (14.3)	60	(27.2)

B446C SWIVEL HANGER (FEMALE-FEMALE)

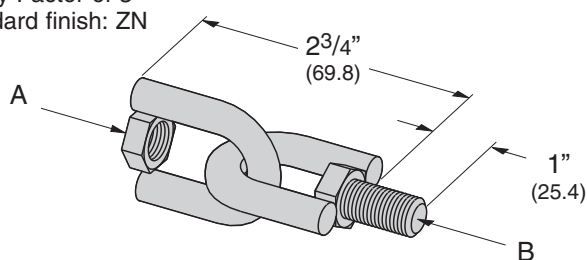
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446C- ⁵ / ₈	⁵ / ₈ \"-11 HN	68	(30.8)
B446C- ³ / ₄	³ / ₄ \"-10 HN	90	(40.8)

B446 SWIVEL HANGER (FEMALE-MALE)

- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 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)
B446- ⁵ / ₈	⁵ / ₈ \"-11 HN	⁵ / ₈ \"-11 HHCS	78	(35.4)
B446- ³ / ₄	³ / ₄ \"-10 HN	³ / ₄ \"-10 HHCS	112	(50.8)

Reference page 44 for general fitting and standard finish specifications.

B617 SHOULDER BOLT

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

3/8"-16 Thread Size

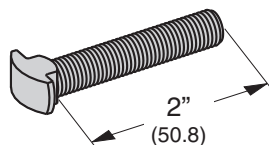
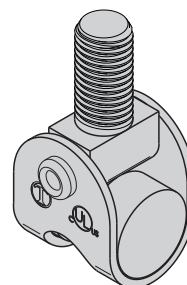


Fig. 75 SWIVEL ATTACHMENT

- Standard finish: ZN
- Sized for 3/8"-16 threaded rods
- UL Listed to support up to 4" Pipe per NFPA 13
- Wt./C 13 Lbs. (5.9 kg)



HN HEX NUTS

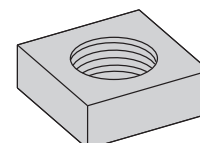
- Standard finish: Zinc-Plated, Stainless Steel



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

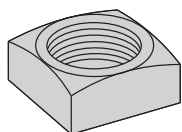
- For use with B755 Beam Clamp
- Standard finish: Zinc-Plated



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.

Buzznut™

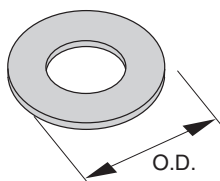
- Can be installed at any desired position on the ATR, eliminating the need to thread hex nuts up along ATR.
- Loading Safety Factor of 3.
- Torque: 6 ft./lbs (8 Nm)
- Available in Zinc Plated or 316 stainless steel.



Part No.	Thread Size	Loading		Wt./C	
		Lbs.	kN	Lbs.	kg
SLWN1/4	1/4-20	240	(1.07)	14.4	(6.5)
SLWN3/8	3/8-16	730	(3.24)	15.4	(7.0)
SLWN1/2	1/2-13	1350	(6.00)	18.8	(8.5)
SLWN5/8	5/8-11	2100	(9.33)	25.4	(11.5)
SLWNM6	M6	200	(0.90)	14.1	(6.4)
SLWNM8	M8	380	(1.70)	16.3	(7.4)
SLWNM10	M10	584	(2.60)	17.2	(7.8)
SLWNM12	M12	840	(3.70)	18.9	(8.6)

FW FLAT WASHERS

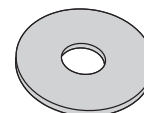
- Standard finish: Zinc-Plated, Stainless Steel



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

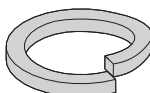
- Standard finish: Zinc-Plated



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)

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)

Reference page 44 for general fitting and standard finish specifications.

SC228 HANGER ROD STIFFENER

- For $\frac{3}{8}$ " thru $\frac{5}{8}$ " ATR
- Strut ordered separately
- Standard finish: ZN
- Wt./C 21 Lbs. (9.5 kg)

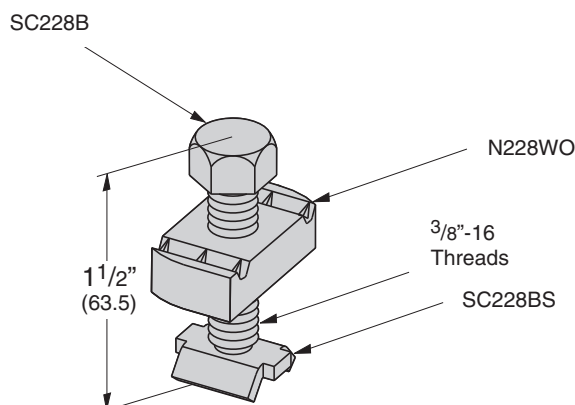
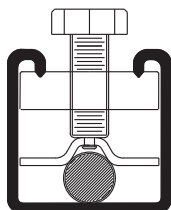


Fig. 98 ROD STIFFENER

- For $\frac{3}{8}$ " thru $\frac{7}{8}$ " ATR
- Use with 12 ga. strut only, ordered separately
- Secres channel to hanger rod for vertical seismic bracing
- Standard finish: ZN
- Wt./C 11 Lbs. (5.0 kg)

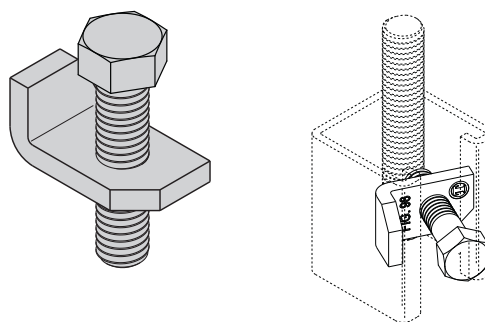
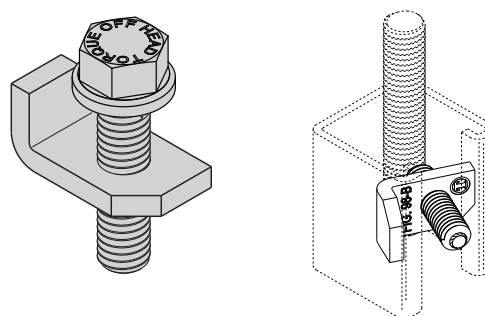


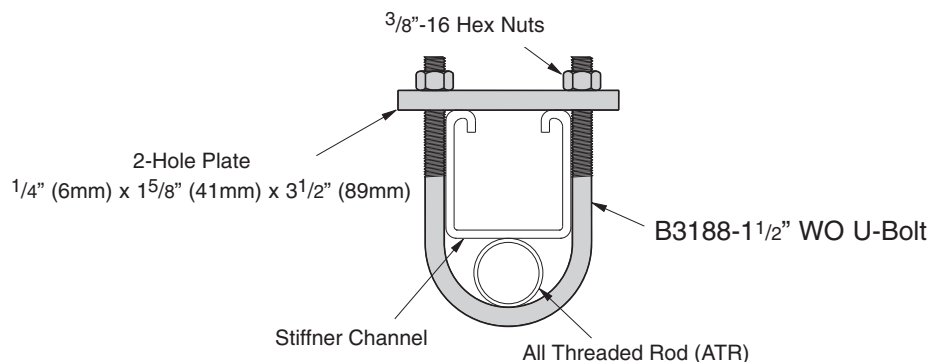
Fig. 98B ROD STIFFENER w/BREAK-OFF BOLT HEAD

- For $\frac{3}{8}$ " thru $\frac{7}{8}$ " ATR
- Use with 12 ga. strut only, ordered separately
- Secres channel to hanger rod for vertical seismic bracing
- Uses a snap-off bolt head
- Standard finish: ZN
- Wt./C 13 Lbs. (5.9 kg)



SC-UB HANGER ROD STIFFENER

- For $\frac{3}{4}$ " thru $\frac{7}{8}$ " ATR
- Strut ordered separately
- Includes: (1) B3188-1 1/2" WO U-Bolt
- (2) $\frac{3}{8}$ "-16 Hex Nuts
- (1) 2-Hole Plate
- Standard finish: ZN
- Wt./C 50 Lbs. (22.7 kg)



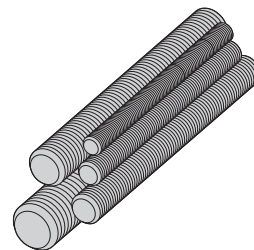
Reference page 44 for general fitting and standard finish specifications.

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

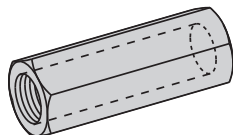
Part No. & Size	Threads Per Inch	Recommended Load		Wt./C Ft. (3048.0 cm)	
		Lbs.	kN	Lbs.	kg
ATR 1/4"	20	240	(1.07)	12	(5.44)
ATR 5/16"	18	400	(1.78)	19	(8.62)
ATR 3/8"	16	730	(3.24)	29	(13.15)
ATR 1/2"	13	1350	(6.00)	53	(24.04)
ATR 5/8"	11	2160	(9.60)	89	(40.37)
ATR 3/4"	10	3230	(14.37)	123	(55.79)
ATR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



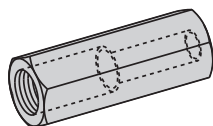
B655 ROD COUPLING

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	730	(3.24)	1 1/4"	(31.7)	6.6	(2.99)
B656-5/8 x 1/2	5/8"-11 & 1/2"-13	1350	(6.00)	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™ Clamps

Part No.	For Use With Wire Rope Diameters	Box Qty.
BKC100	1/16" & 3/32"	100
BKC200	1/8" & 3/16"	50

See table below for KwikWire™ Clamp Working Loads

KwikWire™ Clamp Working Loads*

Clamp Part No.	Wire Rope Dia.	Lbs. Safety Factor 5
BKC100	1/16"	0-75
BKC100	3/32"	25-150
BKC200	1/8"	25-250
BKC200	3/16"	50-640

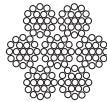
*Working loads shown are for hanging vertically.

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%



7 x 7



7 x 19



KwikWire™ Wire Rope (Uncoated Galvanized Wire)

Part No.	Rope Dia.		Working Load		Spool
	in.	mm	Lbs.	kg	
BKW063 ⁽¹⁾	1/16"	(1.6)	96	(43.5)	500 ft.
BKW094 ⁽¹⁾	3/32"	(2.3)	184	(83.4)	500 ft.
BKW125 ⁽¹⁾	1/8"	(3.2)	340	(154.2)	500 ft.
BKW188 ⁽²⁾	3/16"	(4.8)	840	(381.0)	250 ft.

(1) Wire Rope Construction Type 7 x 7
(2) Wire Rope Construction Type 7 x 19

Instructions for installing the wire rope in the clamp - No tools are required.



1
Pass the wire rope through the KwikWire™ Clamp



2
Loop wire rope through/around support



3
Pass wire rope back through KwikWire™ Clamp



4
Push wire rope through clamp leaving 2" to 3" tail, then apply tension on wire rope



5
To adjust, remove tension and pull wire rope slightly to disengage teeth, slide adjustment pin in direction shown by arrow to release wire rope.



KwikPak™ Wire Rope & Clamps KwikPak

Part No.	For Use With Wire Rope Diameters	Box Qty.
BKP10063	BKC100 (100 pcs.) 1/16"Ø Wire Rope (500 ft.)	1
BKP10094	BKC100 (100 pcs.) 3/32"Ø Wire Rope (500 ft.)	1
BKP20125	BKC200 (50 pcs.) 1/8"Ø Wire Rope (500 ft.)	1
BKP20188	BKC200 (50 pcs.) 3/16"Ø Wire Rope (250 ft.)	1

KwikPak™ makes handling KwikWire™ a breeze!

- KwikPaks include KwikWire clamps and a spool of wire rope.
- KwikPaks are shipped in a specially designed dispenser box to ease field cutting of wire.

KwikWire™ System Recommendations:

- Do not exceed the safe working load of the products
- KwikWire™ Clamp load ratings are guaranteed only when used in combination with 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
- Do not apply lubricant
- Keep product clean and free of dirt
- Do not use clamp 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



KwikWire™ Cable Cutter

Part No.	Box Qty.
BKCC	1

- Wire rope cutter for cutting all wire rope sizes

**** Danger:** Never use cutters on energized circuits, wire, or cable.



- KwikWire hanger combines the versatility of a bolt with an adjustable wire rope solution.
- Can be quickly installed in existing anchors or metal brackets with a nut.
- ARS, ARC, and ARW anchors are ideal for use with KwikWire Hangers.
- Ideal for supporting light fixtures, wire basket cable tray, HVAC ducts, and sign/banner supports.
- Allows for tool-less adjustment of wire rope.



Part No.	Thread Size	Wire Rope Dia.		Loading* SF5	
		in.	mm	Lbs.	kg
BKF100-4	1/4"-20	1/16"	(1.6)	45	(20.4)
		3/32"	(2.3)	90	(40.8)
BKF100-6	3/8"-16	1/16"	(1.6)	45	(20.4)
		3/32"	(2.3)	90	(40.8)

KwikWire™ Hanger installation



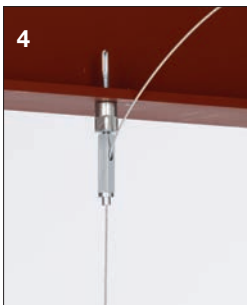
1
Screw KwikWire Hanger into installed hanger support (ARS anchor pictured)



2
Push cable wire up through the bottom of KwikWire Hanger



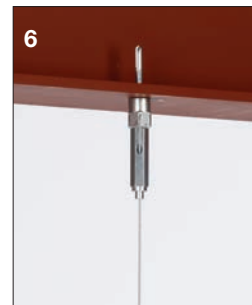
3
Continue pushing through until 1/4" minimum is extending out the side of the KwikWire Hanger



4
To adjust up - pull or push more cable wire through KwikWire Hanger



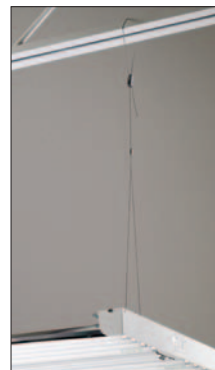
5
To adjust down - push up on bottom of KwikWire Hanger and allow cable wire to feed down



6
When hanging the cable wire is complete, cut off any excess cable wire if desired

KwikWire Accessory Features

- Reduces on the job installation time
- Can be installed quickly without drilling into existing structure
- Increases versatility in the field
- KwikWire accessory system reduces inventory and shipping costs
- No more sawing, filing, or fixing nuts
- Designed for use with cable tray, lighting, and HVAC
- Eliminates the need for all threaded rod
- Cost effective solution for jack chain
- “Y” style accessories require 50% less drilling



KwikWire Accessory Numbering System

Product Line	Assembly Configuration	Leg Termination	Leg Length	Wire Rope Diameter	Straight Length	Assembly or Kit
BK = KwikWire	Blank = Single Leg Y = 2 Legs 3 = 3 Legs	A = Angle Bracket w/Pin H = Hook L = Loop T = Toggle W = Fuse Cut B25 = Bolt w/ 1/4"-20 Thread B38 = Bolt w/ 3/8"-16 Thread BM6 = Bolt w/ M6 Thread BM8 = Bolt w/ M8 Thread BM10 = Bolt w/ M10 Thread	Blank = See Straight Length 18 = 18" Leg 30 = 30" Leg	063 = 1/16" 094 = 3/32"	Blank = Loop w/ Plastic Tube 18 = 18" 30 = 30" 40 = 40" 80 = 80" 120 = 120" 180 = 180" 240 = 240" 360 = 360"	Blank = Assembly Only K = Kit (Assembly & BKC100 Clamp)

Examples

BKYT18-094-120K

BK **Y** **T** **18** - **094** - **120** **K**

Cooper B-Line KwikWire Accessory

2 legs - toggle leg termination - 18" legs - 3/32" diameter wire - 120" straight length - kit with clamp

BKL-063-120K

BK **L** - **063** - **120** **K**

Cooper B-Line KwikWire Accessory

single leg - looped leg termination - 1/16" diameter wire - 120" straight length - kit with clamp

*Custom assemblies are available as shown by the red dot ● on pages 63 - 70.
Lead time on custom assemblies is 2 to 3 weeks depending on quantities.*



Loop Termination

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKL-063-40	1/16"	(1.6)	40"	(1016)
● BKL-063-80	1/16"	(1.6)	80"	(2032)
● BKL-063-120	1/16"	(1.6)	120"	(3048)
● BKL-063-180	1/16"	(1.6)	180"	(4572)
● BKL-063-240	1/16"	(1.6)	240"	(6096)
● BKL-063-360	1/16"	(1.6)	360"	(9144)
● BKL-094-40	3/32"	(2.3)	40"	(1016)
● BKL-094-80	3/32"	(2.3)	80"	(2032)
● BKL-094-120	3/32"	(2.3)	120"	(3048)
● BKL-094-180	3/32"	(2.3)	180"	(4572)
● BKL-094-240	3/32"	(2.3)	240"	(6096)
● BKL-094-360	3/32"	(2.3)	360"	(9144)



Box Quantity - 20

5 bags containing 4 pieces per bag



Loop Termination Kits

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKL-063-40K	1/16"	(1.6)	40"	(1016)
● BKL-063-80K	1/16"	(1.6)	80"	(2032)
● BKL-063-120K	1/16"	(1.6)	120"	(3048)
● BKL-063-180K	1/16"	(1.6)	180"	(4572)
● BKL-063-240K	1/16"	(1.6)	240"	(6096)
● BKL-063-360K	1/16"	(1.6)	360"	(9144)
● BKL-094-40K	3/32"	(2.3)	40"	(1016)
● BKL-094-80K	3/32"	(2.3)	80"	(2032)
● BKL-094-120K	3/32"	(2.3)	120"	(3048)
● BKL-094-180K	3/32"	(2.3)	180"	(4572)
● BKL-094-240K	3/32"	(2.3)	240"	(6096)
● BKL-094-360K	3/32"	(2.3)	360"	(9144)



Box Quantity - 20

5 bags containing 4 pieces per bag

Channel Nuts & Hardware

- Available as a wire rope with loop termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".

● = Stock item, lead time 2 - 3 working days

● = Non-stock item, lead time 10 - 15 working days



Single Style Hook Termination



Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKH-094-40	3/32"	(2.3)	40"	(1016)
● BKH-094-80	3/32"	(2.3)	80"	(2032)
● BKH-094-120	3/32"	(2.3)	120"	(3048)
● BKH-094-180	3/32"	(2.3)	180"	(4572)
● BKH-094-240	3/32"	(2.3)	240"	(6096)
● BKH-094-360	3/32"	(2.3)	360"	(9144)



Single Style Hook Termination Kits



Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKH-094-40K	3/32"	(2.3)	40"	(1016)
● BKH-094-80K	3/32"	(2.3)	80"	(2032)
● BKH-094-120K	3/32"	(2.3)	120"	(3048)
● BKH-094-180K	3/32"	(2.3)	180"	(4572)
● BKH-094-240K	3/32"	(2.3)	240"	(6096)
● BKH-094-360K	3/32"	(2.3)	360"	(9144)



'Y' Style Hook Termination With Loop



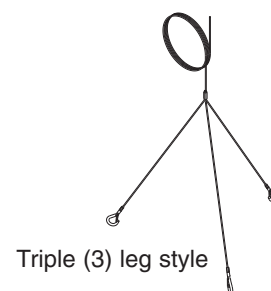
Box Quantity - 10

5 bags containing 2 pieces per bag

- Hook designed to accept up to 3/8" diameter wire.
- Available as a wire rope with hook termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".
- Available in single, double (Y), and triple (3) leg styles

● = Stock item, lead time 2 - 3 working days

● = Non-stock item, lead time 10 - 15 working days





KwikWire™ 'Y' Style Hook Termination

Part No.	Leg Length		Wire Rope Dia.		Length	
	in.	mm	in.	mm	in.	mm
● BKYH18-094-40	18"	(457)	3/32"	(2.3)	40"	(1016)
● BKYH18-094-80	18"	(457)	3/32"	(2.3)	80"	(2032)
● BKYH18-094-120	18"	(457)	3/32"	(2.3)	120"	(3048)
● BKYH18-094-180	18"	(457)	3/32"	(2.3)	180"	(4572)
● BKYH18-094-240	18"	(457)	3/32"	(2.3)	240"	(6096)
● BKYH18-094-360	18"	(457)	3/32"	(2.3)	360"	(9144)
● BKYH30-094-40	30"	(762)	3/32"	(2.3)	40"	(1016)
● BKYH30-094-80	30"	(762)	3/32"	(2.3)	80"	(2032)
● BKYH30-094-120	30"	(762)	3/32"	(2.3)	120"	(3048)
● BKYH30-094-180	30"	(762)	3/32"	(2.3)	180"	(4572)
● BKYH30-094-240	30"	(762)	3/32"	(2.3)	240"	(6096)
● BKYH30-094-360	30"	(762)	3/32"	(2.3)	360"	(9144)



Box Quantity - 10
5 bags containing 2 pieces per bag



KwikWire™ 'Y' Style Hook Termination Kits

Part No.	Leg Length		Wire Rope Dia.		Length	
	in.	mm	in.	mm	in.	mm
● BKYH18-094-40K	18"	(457)	3/32"	(2.3)	40"	(1016)
● BKYH18-094-80K	18"	(457)	3/32"	(2.3)	80"	(2032)
● BKYH18-094-120K	18"	(457)	3/32"	(2.3)	120"	(3048)
● BKYH18-094-180K	18"	(457)	3/32"	(2.3)	180"	(4572)
● BKYH18-094-240K	18"	(457)	3/32"	(2.3)	240"	(6096)
● BKYH18-094-360K	18"	(457)	3/32"	(2.3)	360"	(9144)
● BKYH30-094-40K	30"	(762)	3/32"	(2.3)	40"	(1016)
● BKYH30-094-80K	30"	(762)	3/32"	(2.3)	80"	(2032)
● BKYH30-094-120K	30"	(762)	3/32"	(2.3)	120"	(3048)
● BKYH30-094-180K	30"	(762)	3/32"	(2.3)	180"	(4572)
● BKYH30-094-240K	30"	(762)	3/32"	(2.3)	240"	(6096)
● BKYH30-094-360K	30"	(762)	3/32"	(2.3)	360"	(9144)



Channel Nuts & Hardware

Box Quantity - 10
5 bags containing 2 pieces per bag

- Hook designed to accept up to 3/8" diameter wire.
- Available as a wire rope with loop termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".

● = Stock item, lead time 2 - 3 working days

● = Non-stock item, lead time 10 - 15 working days



Single Style Toggle Termination



Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKT-063-40	1/16"	(1.6)	40"	(1016)
● BKT-063-80	1/16"	(1.6)	80"	(2032)
● BKT-063-120	1/16"	(1.6)	120"	(3048)
● BKT-063-180	1/16"	(1.6)	180"	(4572)
● BKT-063-240	1/16"	(1.6)	240"	(6096)
● BKT-063-360	1/16"	(1.6)	360"	(9144)



Single Style Toggle Termination Kits



Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKT-063-40K	1/16"	(1.6)	40"	(1016)
● BKT-063-80K	1/16"	(1.6)	80"	(2032)
● BKT-063-120K	1/16"	(1.6)	120"	(3048)
● BKT-063-180K	1/16"	(1.6)	180"	(4572)
● BKT-063-240K	1/16"	(1.6)	240"	(6096)
● BKT-063-360K	1/16"	(1.6)	360"	(9144)



'Y' Style Toggle Termination With Loop



Box Quantity - 10

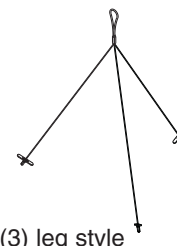
5 bags containing 2 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKYT12-063	1/16"	(1.6)	12"	(305)
● BKYT18-063	1/16"	(1.6)	18"	(457)
● BKYT30-063	1/16"	(1.6)	30"	(762)

- Available as a wire rope with toggle termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".
- Available in single, double (Y), and triple (3) leg styles
- All triple (3) leg styles are non-stock, consult Cooper B-Line for lead times

● = Stock item, lead time 2 - 3 working days

● = Non-stock item, lead time 10 - 15 working days



Triple (3) leg style



KwikWire™ 'Y' Style Toggle Termination

Part No.	Leg Length		Wire Rope Dia.		Length	
	in.	mm	in.	mm	in.	mm
● BKYT12-063-40	12"	(305)	1/16"	(1.6)	40"	(1016)
● BKYT12-063-80	12"	(305)	1/16"	(1.6)	80"	(2032)
● BKYT12-063-120	12"	(305)	1/16"	(1.6)	120"	(3048)
● BKYT12-063-180	12"	(305)	1/16"	(1.6)	180"	(4572)
● BKYT12-063-240	12"	(305)	1/16"	(1.6)	240"	(6096)
● BKYT12-063-360	12"	(305)	1/16"	(1.6)	360"	(9144)
● BKYT18-063-40	18"	(457)	1/16"	(1.6)	40"	(1016)
● BKYT18-063-80	18"	(457)	1/16"	(1.6)	80"	(2032)
● BKYT18-063-120	18"	(457)	1/16"	(1.6)	120"	(3048)
● BKYT18-063-180	18"	(457)	1/16"	(1.6)	180"	(4572)
● BKYT18-063-240	18"	(457)	1/16"	(1.6)	240"	(6096)
● BKYT18-063-360	18"	(457)	1/16"	(1.6)	360"	(9144)
● BKYT30-063-40	30"	(762)	1/16"	(1.6)	40"	(1016)
● BKYT30-063-80	30"	(762)	1/16"	(1.6)	80"	(2032)
● BKYT30-063-120	30"	(762)	1/16"	(1.6)	120"	(3048)
● BKYT30-063-180	30"	(762)	1/16"	(1.6)	180"	(4572)
● BKYT30-063-240	30"	(762)	1/16"	(1.6)	240"	(6096)
● BKYT30-063-360	30"	(762)	1/16"	(1.6)	360"	(9144)



Box Quantity - 10
5 bags containing 2 pieces per bag



KwikWire™ 'Y' Style Toggle Termination Kits

Part No.	Leg Length		Wire Rope Dia.		Length	
	in.	mm	in.	mm	in.	mm
● BKYT12-063-40K	12"	(305)	1/16"	(1.6)	40"	(1016)
● BKYT12-063-80K	12"	(305)	1/16"	(1.6)	80"	(2032)
● BKYT12-063-120K	12"	(305)	1/16"	(1.6)	120"	(3048)
● BKYT12-063-180K	12"	(305)	1/16"	(1.6)	180"	(4572)
● BKYT12-063-240K	12"	(305)	1/16"	(1.6)	240"	(6096)
● BKYT12-063-360K	12"	(305)	1/16"	(1.6)	360"	(9144)
● BKYT18-063-40K	18"	(457)	1/16"	(1.6)	40"	(1016)
● BKYT18-063-80K	18"	(457)	1/16"	(1.6)	80"	(2032)
● BKYT18-063-120K	18"	(457)	1/16"	(1.6)	120"	(3048)
● BKYT18-063-180K	18"	(457)	1/16"	(1.6)	180"	(4572)
● BKYT18-063-240K	18"	(457)	1/16"	(1.6)	240"	(6096)
● BKYT18-063-360K	18"	(457)	1/16"	(1.6)	360"	(9144)
● BKYT30-063-40K	30"	(762)	1/16"	(1.6)	40"	(1016)
● BKYT30-063-80K	30"	(762)	1/16"	(1.6)	80"	(2032)
● BKYT30-063-120K	30"	(762)	1/16"	(1.6)	120"	(3048)
● BKYT30-063-180K	30"	(762)	1/16"	(1.6)	180"	(4572)
● BKYT30-063-240K	30"	(762)	1/16"	(1.6)	240"	(6096)
● BKYT30-063-360K	30"	(762)	1/16"	(1.6)	360"	(9144)



Box Quantity - 10
5 bags containing 2 pieces per bag

Channel Nuts & Hardware

- Available as a wire rope with loop termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".

● = Stock item, lead time 2 - 3 working days

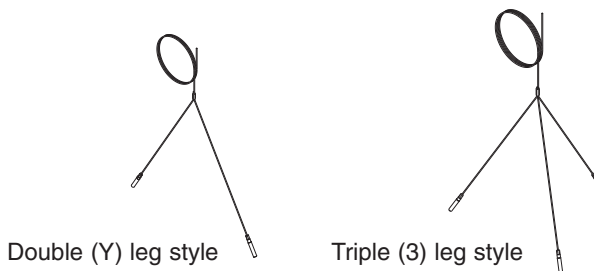
● = Non-stock item, lead time 10 - 15 working days



Box Quantity - 20
5 bags containing 4 pieces per bag

Part No.	Thread Size	Wire Rope Dia.		Length	
		in.	mm	in.	mm
● BKB25-063-40	1/4"-20	1/16"	(1.6)	40"	(1016)
● BKB25-063-80	1/4"-20	1/16"	(1.6)	80"	(2032)
● BKB25-063-120	1/4"-20	1/16"	(1.6)	120"	(3048)
● BKB25-063-180	1/4"-20	1/16"	(1.6)	180"	(4572)
● BKB25-063-240	1/4"-20	1/16"	(1.6)	240"	(6096)
● BKB25-063-360	1/4"-20	1/16"	(1.6)	360"	(9144)
● BKB38-094-40	3/8"-16	3/32"	(2.3)	40"	(1016)
● BKB38-094-80	3/8"-16	3/32"	(2.3)	80"	(2032)
● BKB38-094-120	3/8"-16	3/32"	(2.3)	120"	(3048)
● BKB38-094-180	3/8"-16	3/32"	(2.3)	180"	(4572)
● BKB38-094-240	3/8"-16	3/32"	(2.3)	240"	(6096)
● BKB38-094-360	3/8"-16	3/32"	(2.3)	360"	(9144)

- Ideal for use with ARS, ARC, ADI, ACPW, or ACPD anchors.
- Available as a wire rope with bolt termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".
- Available in single, double (Y), and triple leg (3) styles
- All (Y) and triple (3) styles are non-stock, consult Cooper B-Line for lead times



● = Stock item, lead time 2 - 3 working days ● = Non-stock item, lead time 10 - 15 working days



KwikWire™ Bolt Termination Kits

Part No.	Thread Size	Wire Rope Dia.		Length	
		in.	mm	in.	mm
● BKB25-063-40K	1/4"-20	1/16"	(1.6)	40"	(1016)
● BKB25-063-80K	1/4"-20	1/16"	(1.6)	80"	(2032)
● BKB25-063-120K	1/4"-20	1/16"	(1.6)	120"	(3048)
● BKB25-063-180K	1/4"-20	1/16"	(1.6)	180"	(4572)
● BKB25-063-240K	1/4"-20	1/16"	(1.6)	240"	(6096)
● BKB25-063-360K	1/4"-20	1/16"	(1.6)	360"	(9144)
● BKB38-094-40K	3/8"-16	3/32"	(2.3)	40"	(1016)
● BKB38-094-80K	3/8"-16	3/32"	(2.3)	80"	(2032)
● BKB38-094-120K	3/8"-16	3/32"	(2.3)	120"	(3048)
● BKB38-094-180K	3/8"-16	3/32"	(2.3)	180"	(4572)
● BKB38-094-240K	3/8"-16	3/32"	(2.3)	240"	(6096)
● BKB38-094-360K	3/8"-16	3/32"	(2.3)	360"	(9144)



Box Quantity - 20

5 bags containing 4 pieces per bag

- Ideal for use with ARS, ARC, ADI, ACPW, or ACPD anchors.
- Available as a wire rope with bolt termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".
- Available in single, double (Y), and triple (3) styles
- All double (Y) and triple (3) styles are non-stock, consult Cooper B-Line for lead times



Double (Y) leg style



Triple (3) leg style

● = Stock item, lead time 2 - 3 working days

● = Non-stock item, lead time 10 - 15 working days



Angle Bracket Termination



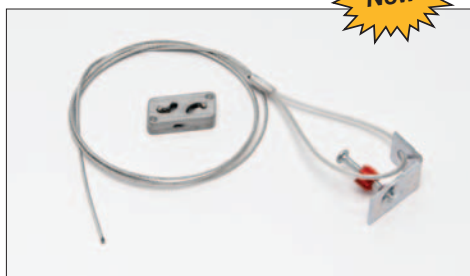
Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKA-063-40	1/16"	(1.6)	40"	(1016)
● BKA-063-80	1/16"	(1.6)	80"	(2032)
● BKA-063-120	1/16"	(1.6)	120"	(3048)
● BKA-063-180	1/16"	(1.6)	180"	(4572)
● BKA-063-240	1/16"	(1.6)	240"	(6096)
● BKA-063-360	1/16"	(1.6)	360"	(9144)



Angle Bracket Termination Kits



Box Quantity - 20

5 bags containing 4 pieces per bag

Part No.	Wire Rope Dia.		Length	
	in.	mm	in.	mm
● BKA-063-40K	1/16"	(1.6)	40"	(1016)
● BKA-063-80K	1/16"	(1.6)	80"	(2032)
● BKA-063-120K	1/16"	(1.6)	120"	(3048)
● BKA-063-180K	1/16"	(1.6)	180"	(4572)
● BKA-063-240K	1/16"	(1.6)	240"	(6096)
● BKA-063-360K	1/16"	(1.6)	360"	(9144)

- Available as a wire rope with angle bracket termination only or as a ready-to-use kit with a BKC100 clamp.
- Available in lengths of 40", 80", 120", 180", 240", and 360".

● = Stock item, lead time 2 - 3 working days

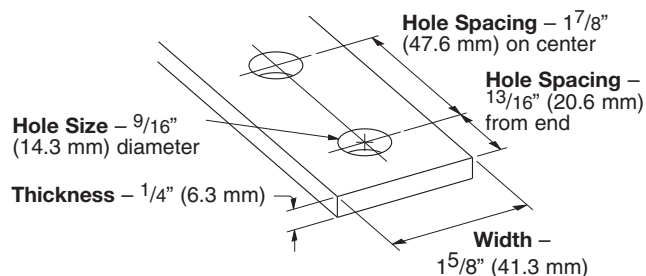
● = Non-stock item, lead time 10 - 15 working days

Fittings

This section offers a full selection of fittings and accessories to complete Cooper 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 or ASTM A653
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 $\frac{1}{2}$ "-13 x $\frac{7}{8}$ " hex head cap screws and $\frac{1}{2}$ "-13 (N225 or TN225) channel nuts for the rated results.

Recommended Bolt Torque

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

See chart on page 112 for setscrew torque.

Hardware

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

Pre-Assembled Fittings

Some fittings are available with hex head cap screws and channel nuts pre-assembled. These fittings and finishes will be flagged using the following symbol.



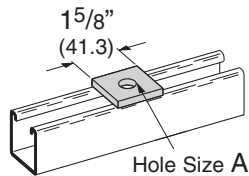
Metric

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

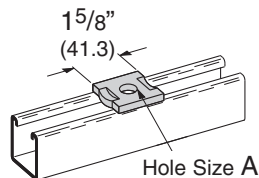


SQUARE WASHER

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



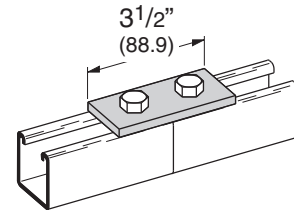
NO TWIST SQUARE WASHER

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

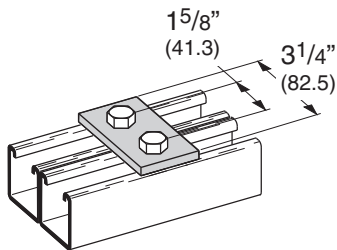
- Standard finishes: ZN, GRN
- Wt./C 37 Lbs. (16.8 kg)



B340

TWO HOLE SPLICE PLATE

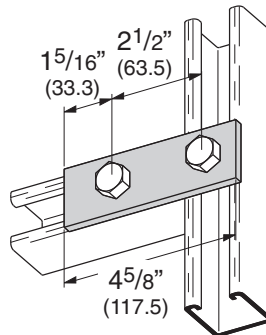
- Standard finishes: ZN, GRN
- Wt./C 34 Lbs. (15.4 kg)



B528

TWO HOLE SPLICE PLATE

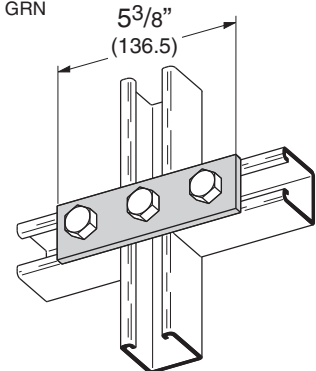
- Standard finishes: ZN, GRN
- Wt./C 50 Lbs. (22.7 kg)



B141

THREE HOLE SPLICE PLATE

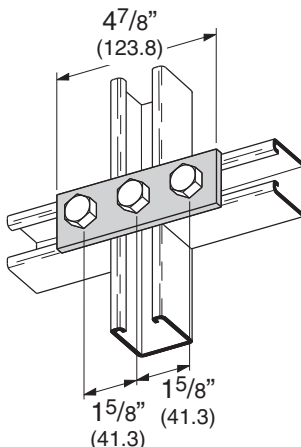
- Standard finishes: ZN, GRN
- Wt./C 55 Lbs. (24.9 kg)



B557

THREE HOLE SPLICE PLATE

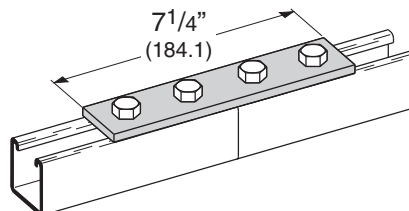
- Standard finishes: ZN, GRN
- Wt./C 50 Lbs. (22.7 kg)



B341

FOUR HOLE SPLICE PLATE

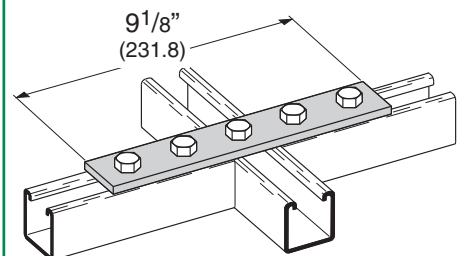
- Standard finishes: ZN, GRN, HDG
- Wt./C 76 Lbs. (34.5 kg)



B342

FIVE HOLE SPLICE PLATE

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



Reference page 72 for general fitting and standard finish specifications.

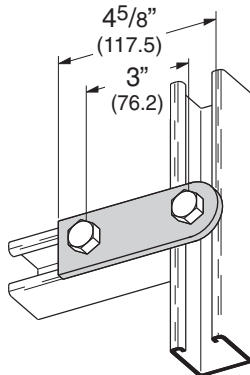


Preamsembled fitting.

Flat Plate Fittings

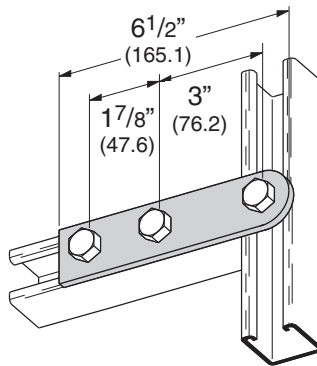
B138 TWO HOLE SWIVEL PLATE

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



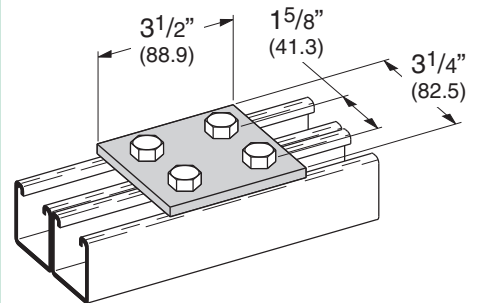
B139 THREE HOLE SWIVEL PLATE

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



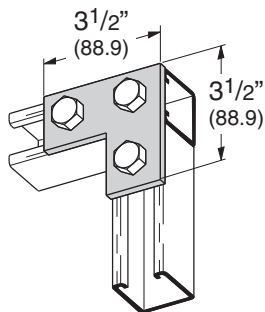
B504 FOUR HOLE SPLICE PLATE

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



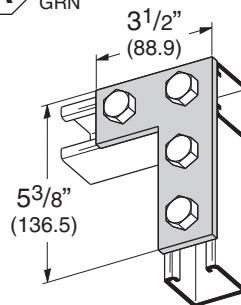
B140 THREE HOLE CORNER PLATE

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



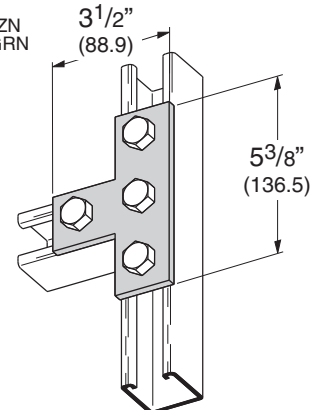
B143 FOUR HOLE CORNER PLATE

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



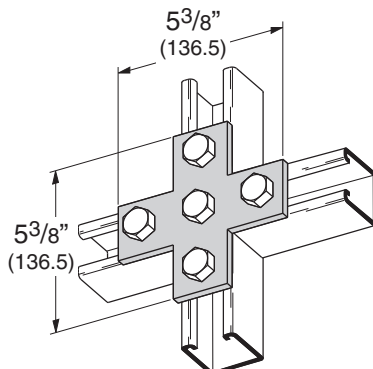
B133 FOUR HOLE TEE PLATE

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



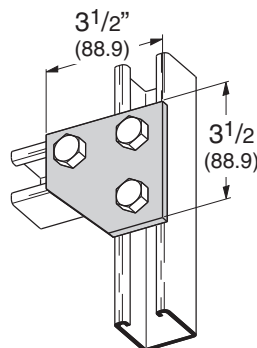
B132 FIVE HOLE CROSS PLATE

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



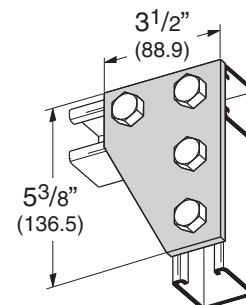
B135 THREE HOLE CORNER GUSSET PLATE

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



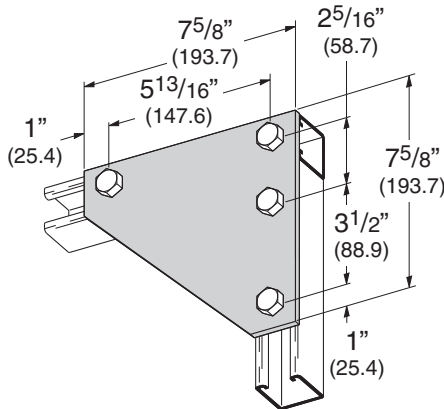
B142 FOUR HOLE CORNER GUSSET PLATE

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



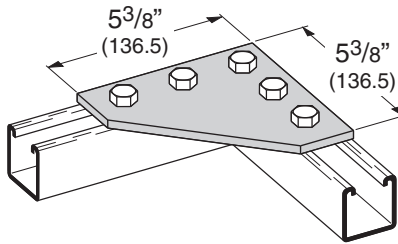
B137 FOUR HOLE CORNER GUSSET PLATE

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



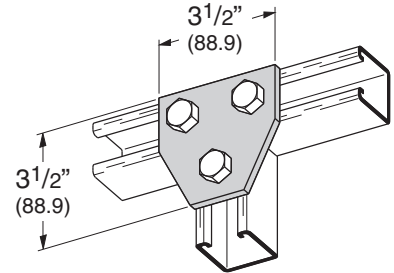
B556 FIVE HOLE CORNER GUSSET PLATE

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



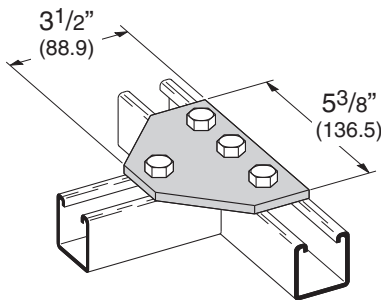
B337 THREE HOLE TEE GUSSET PLATE

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



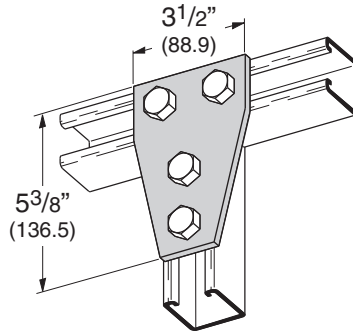
B432 FOUR HOLE TEE GUSSET PLATE

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



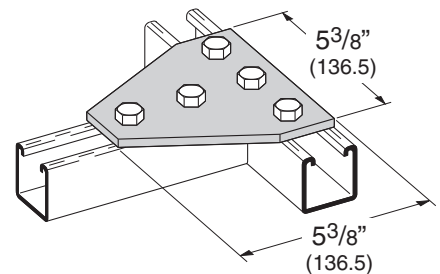
B136 FOUR HOLE TEE GUSSET PLATE

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



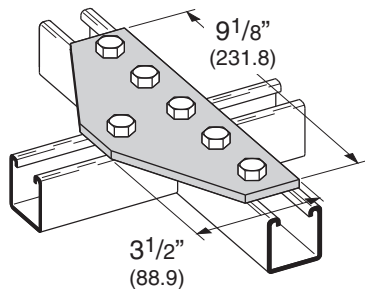
B532 FIVE HOLE TEE GUSSET PLATE

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



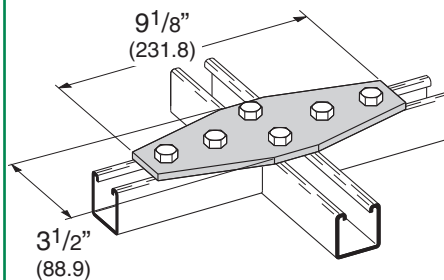
B339 SIX HOLE TEE GUSSET PLATE

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



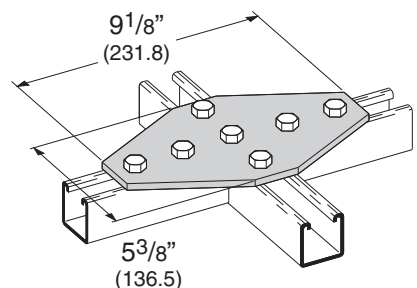
B568 SIX HOLE CROSS GUSSET PLATE

- 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)

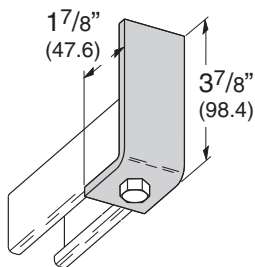


Reference page 72 for general fitting and standard finish specifications.

90° Angle Fittings

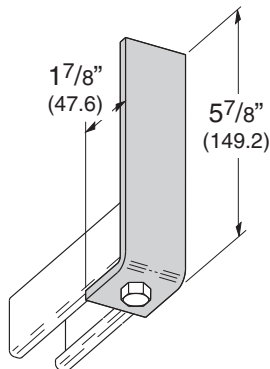
B420-378 ONE HOLE CORNER ANGLE

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



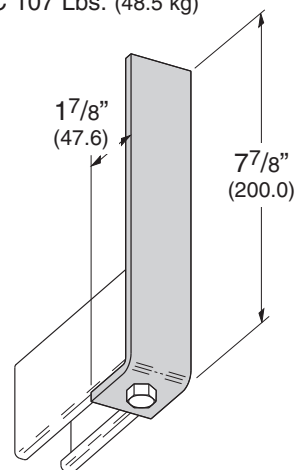
B420-578 ONE HOLE CORNER ANGLE

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



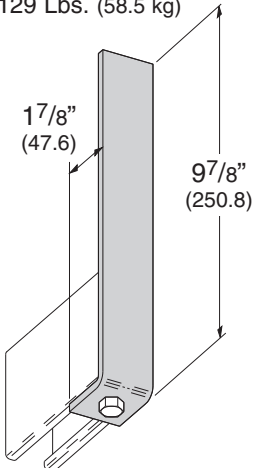
B420-778 ONE HOLE CORNER ANGLE

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



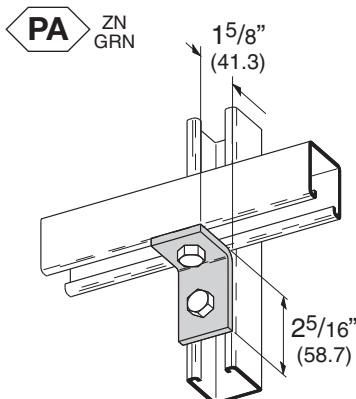
B420-978 ONE HOLE CORNER ANGLE

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



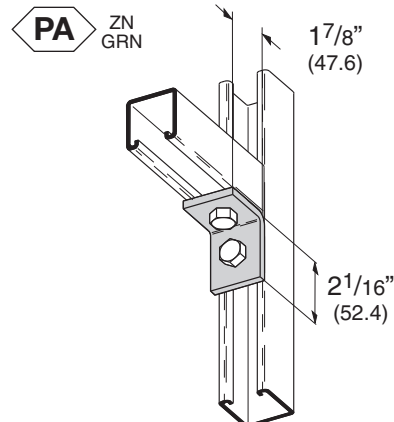
B101 TWO HOLE CORNER ANGLE

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



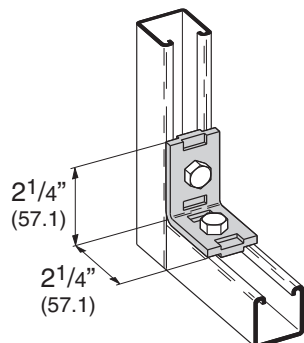
B230 TWO HOLE CORNER ANGLE

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



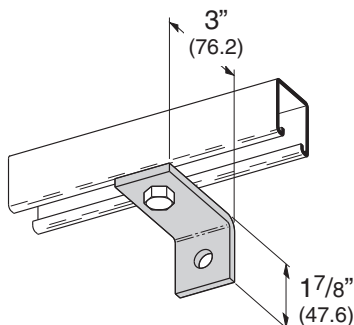
B231 TWO HOLE "NO-TWIST" CORNER ANGLE

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



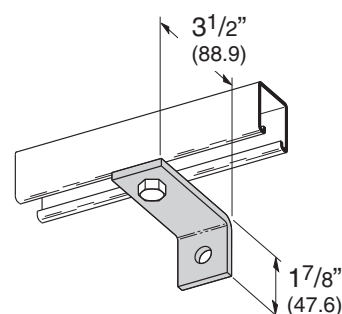
B359 TWO HOLE CORNER ANGLE

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



B360 TWO HOLE CORNER ANGLE

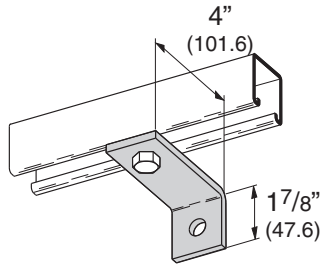
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



Preassembled fitting. Reference page 72 for general fitting and standard finish specifications.

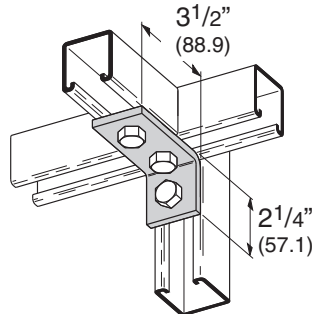
B361 TWO HOLE CORNER ANGLE

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



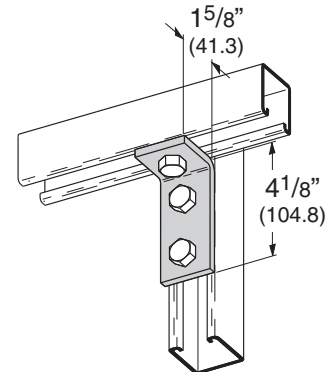
B102 THREE HOLE CORNER ANGLE

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



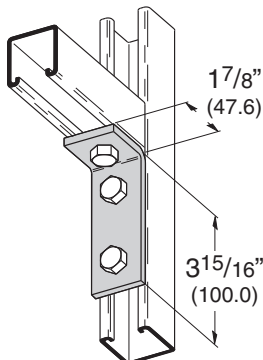
B103 THREE HOLE CORNER ANGLE

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



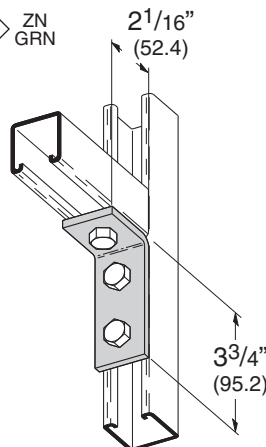
B232 THREE HOLE CORNER ANGLE

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



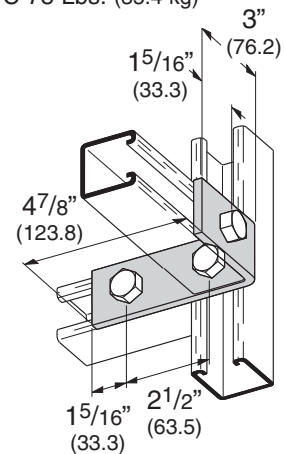
B374 THREE HOLE CORNER ANGLE

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



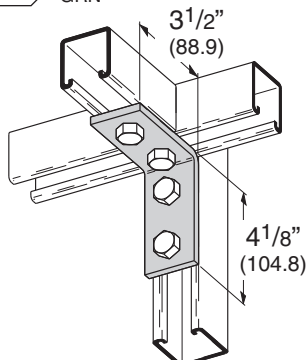
B529 THREE HOLE CORNER ANGLE

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



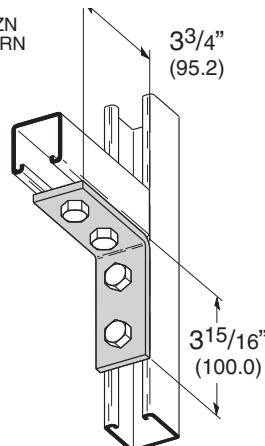
B104 FOUR HOLE CORNER ANGLE

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



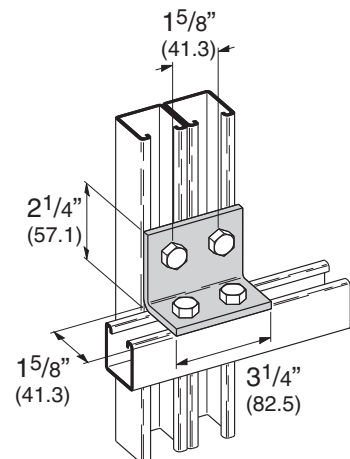
B115 FOUR HOLE CORNER ANGLE

- 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)



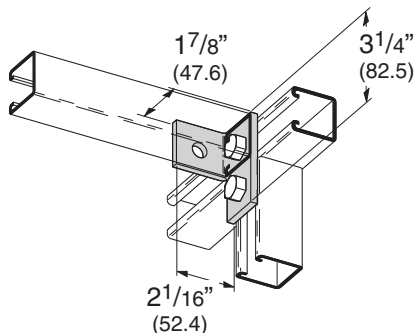
Preassembled fitting.

Reference page 72 for general fitting and standard finish specifications.

90° Angle Fittings

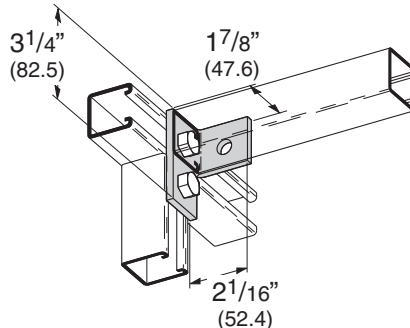
B235R THREE HOLE (RIGHT HAND) OFFSET BENT ANGLE

- 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)



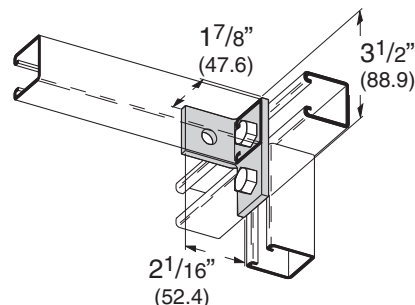
B235L THREE HOLE (LEFT HAND) OFFSET BENT ANGLE

- 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)



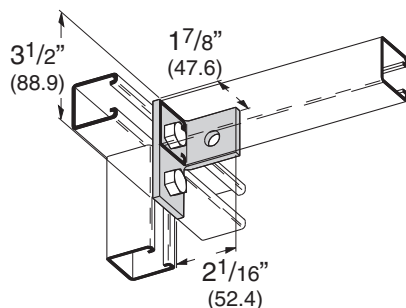
B236R THREE HOLE (RIGHT HAND) OFFSET BENT ANGLE

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



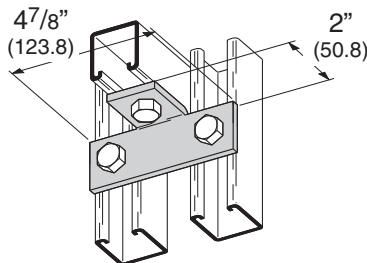
B236L THREE HOLE (LEFT HAND) OFFSET BENT ANGLE

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



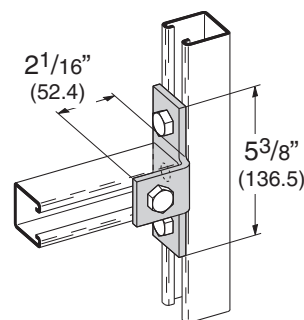
B237 THREE HOLE OFFSET BENT TEE

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



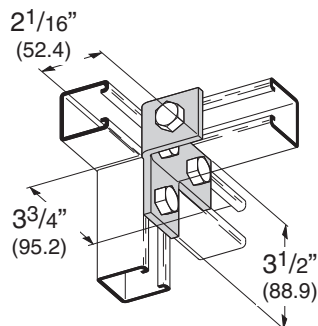
B357 FOUR HOLE OFFSET BENT TEE

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



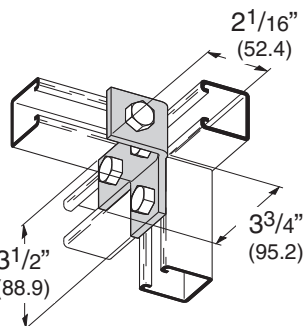
B238R FOUR HOLE (RIGHT HAND) OFFSET BENT TEE

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



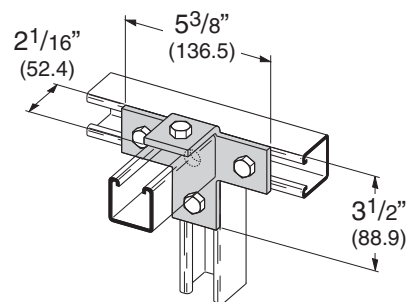
B238L FOUR HOLE (LEFT HAND) OFFSET BENT TEE

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



B239 FIVE HOLE OFFSET BENT TEE

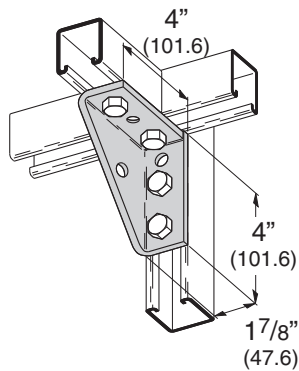
- Standard finishes: ZN, GRN
- Wt./C 96 Lbs. (43.5 kg)



Reference page 72 for general fitting and standard finish specifications.

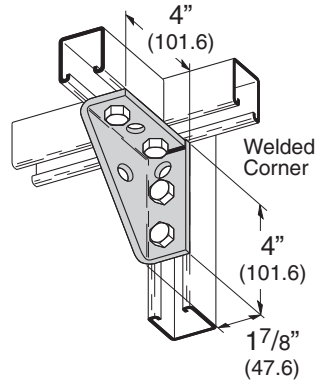
B844 UNIVERSAL SHELF BRACKET

- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 132 Lbs. (59.9 kg)



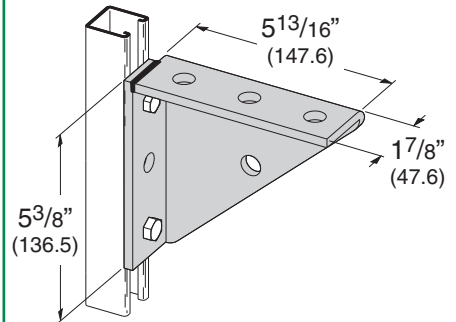
B844W UNIVERSAL SHELF BRACKET- WELDED

- Standard finishes: ZN, GRN
- Wt./C 134 Lbs. (60.8 kg)



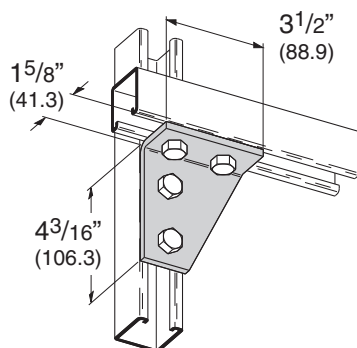
B888W UNIVERSAL SHELF BRACKET- WELDED

- Standard finishes: ZN, GRN
- Wt./C 197 Lbs. (89.4 kg)



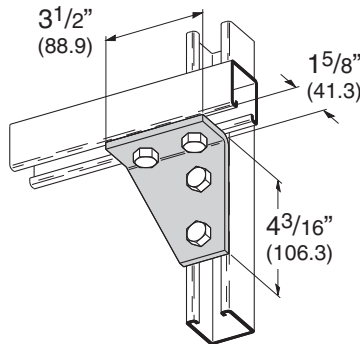
B234R FOUR HOLE (RIGHT HAND) CORNER GUSSET

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



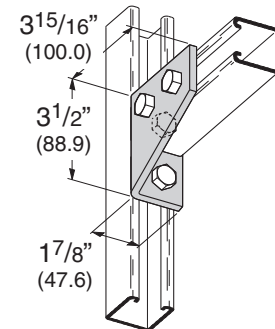
B234L FOUR HOLE (LEFT HAND) CORNER GUSSET

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



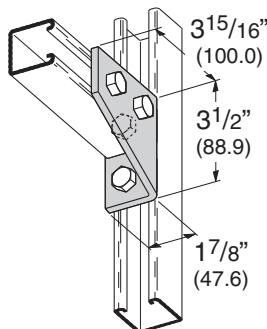
B134R FOUR HOLE (RIGHT HAND) CORNER GUSSET

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



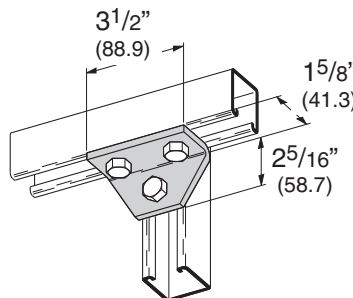
B134L FOUR HOLE (LEFT HAND) CORNER GUSSET

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



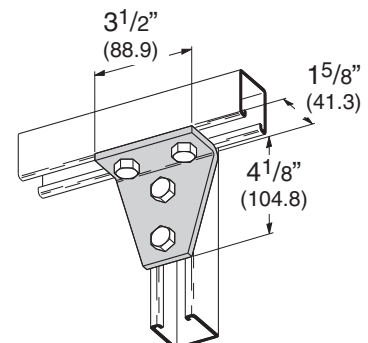
B125 THREE HOLE GUSSETTED SHELF ANGLE

- 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)

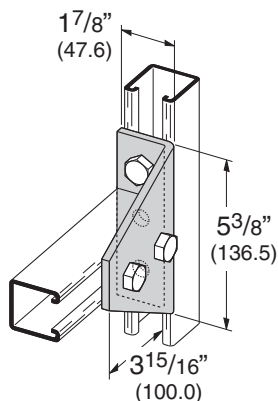


Reference page 72 for general fitting and standard finish specifications.

90° Angle Fittings

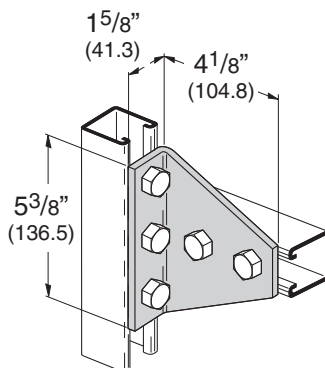
B485 FOUR HOLE GUSSETED SHELF ANGLE

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



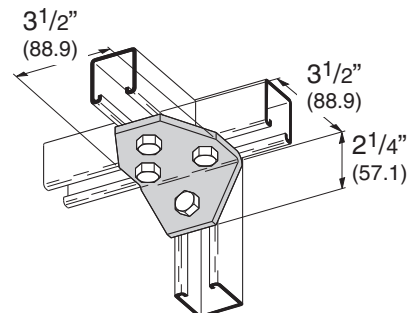
B533 FIVE HOLE GUSSETED SHELF ANGLE

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



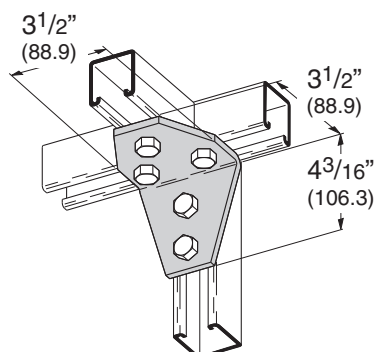
B126 FOUR HOLE GUSSETED THREE WAY SHELF ANGLE

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



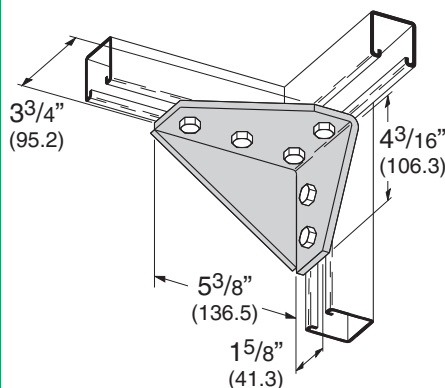
B127 FIVE HOLE GUSSETED THREE WAY SHELF ANGLE

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



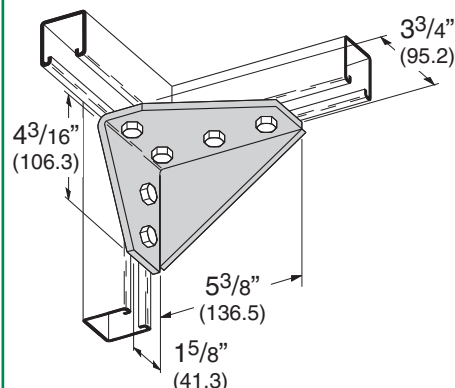
B503R SIX HOLE (RIGHT HAND) GUSSETED CORNER CONNECTION

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



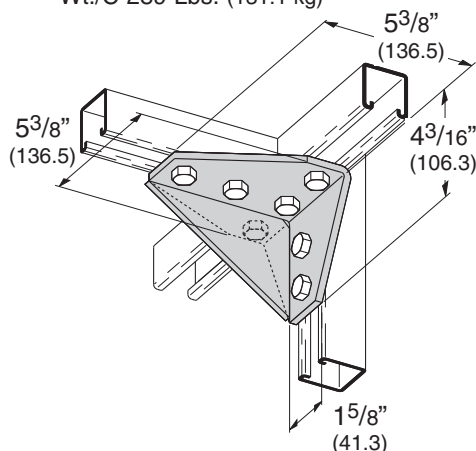
B503L SIX HOLE (LEFT HAND) GUSSETED CORNER CONNECTION

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



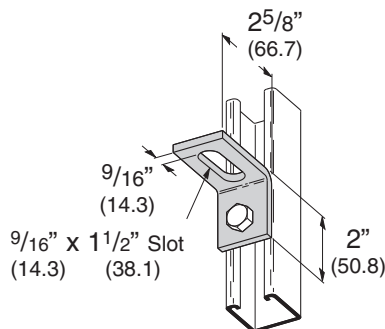
B663 SEVEN HOLE GUSSETED CORNER CONNECTION

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



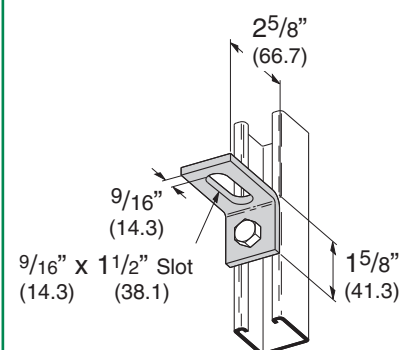
B371 TWO HOLE ADJUSTABLE CORNER ANGLE

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



B372 TWO HOLE ADJUSTABLE CORNER ANGLE

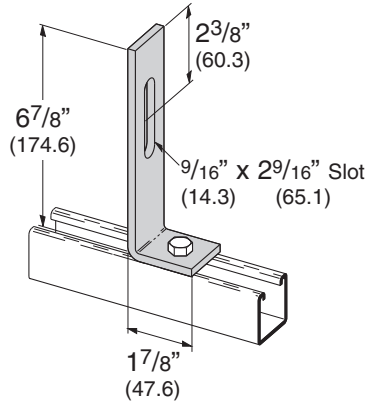
- Standard finishes: ZN, GRN
- Wt./C 38 Lbs. (17.2 kg)



Reference page 72 for general fitting and standard finish specifications.

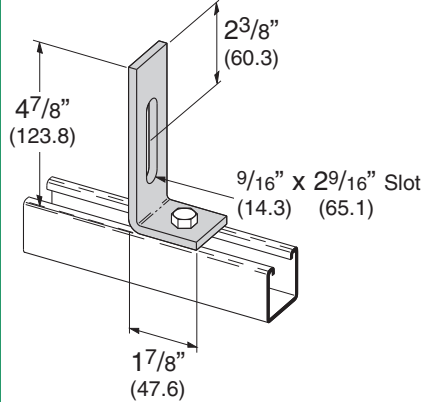
B496 TWO HOLE ADJUSTABLE CORNER ANGLE

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



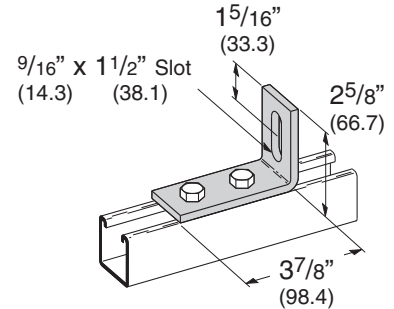
B496-1 TWO HOLE ADJUSTABLE CORNER ANGLE

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



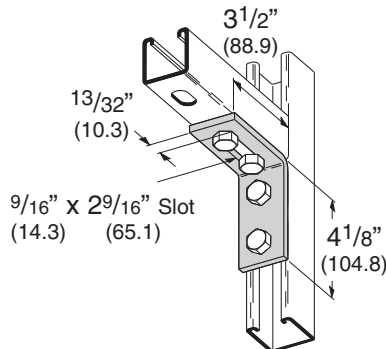
B371-2 THREE HOLE ADJUSTABLE CORNER ANGLE

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



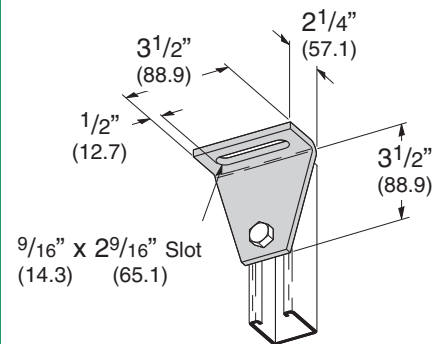
B104SH THREE HOLE ADJUSTABLE CORNER ANGLE

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



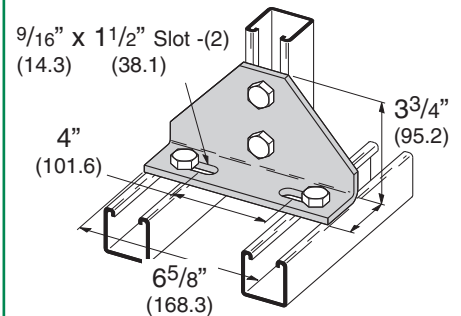
B461 TWO HOLE ADJUSTABLE CORNER ANGLE

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



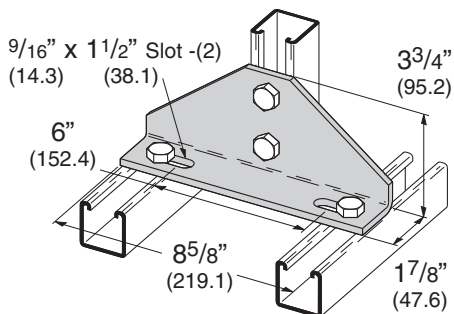
B112 FOUR HOLE ADJUSTABLE CORNER ANGLE

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



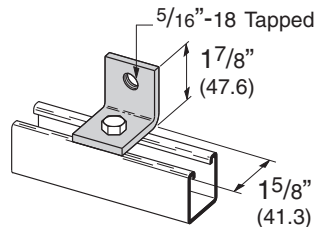
B113 FOUR HOLE ADJUSTABLE CORNER ANGLE

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



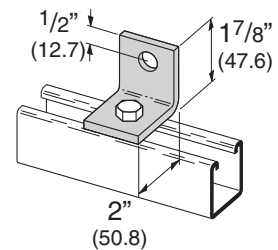
B109S TWO HOLE TAPPED CORNER ANGLE

- 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)



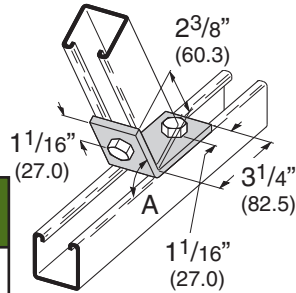
Reference page 72 for general fitting and standard finish specifications.

Angular Fittings

B147-B152 TWO HOLE OPEN ANGLE

- Standard finishes: ZN, GRN

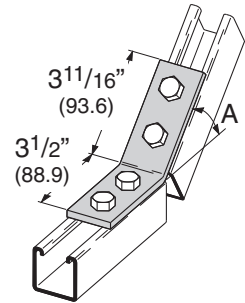
Part No.	A	Wt./C	
		Lbs.	kg
B147	82 $\frac{1}{2}$ °	63	(28.6)
B148	75°		
B149	67 $\frac{1}{2}$ °		
B150	60°		
B151	52 $\frac{1}{2}$ °		
B152	37 $\frac{1}{2}$ °		



B243-B253 FOUR HOLE OPEN ANGLE

- Standard finishes: ZN, GRN

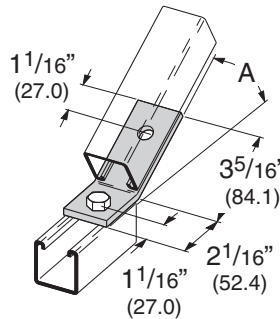
Part No.	A	Wt./C	
		Lbs.	kg
B243	71 $\frac{1}{2}$ °	77	(34.9)
B244	15°		
B245	22 $\frac{1}{2}$ °		
B246	30°		
B247	37 $\frac{1}{2}$ °		
B248	45°		
B249	52 $\frac{1}{2}$ °		
B250	60°		
B251	67 $\frac{1}{2}$ °		
B252	75°		
B253	82 $\frac{1}{2}$ °		



B162-B165 TWO HOLE OPEN ANGLE

- Standard finishes: ZN, GRN

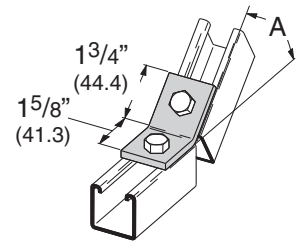
Part No.	A	Wt./C	
		Lbs.	kg
B162	30°	59	(26.7)
B163	22 $\frac{1}{2}$ °		
B164	15°		
B165	7 $\frac{1}{2}$ °		



B322-B332 TWO HOLE OPEN SHORT ANGLE

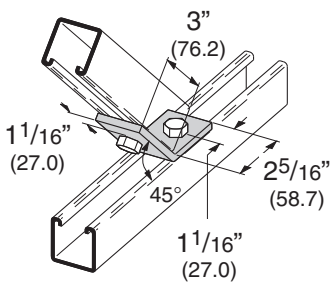
- Standard finishes: ZN, GRN

Part No.	A	Wt./C	
		Lbs.	kg
B322	71 $\frac{1}{2}$ °	35	(15.9)
B323	15°		
B324	22 $\frac{1}{2}$ °		
B325	30°		
B326	37 $\frac{1}{2}$ °		
B327	45°		
B328	52 $\frac{1}{2}$ °		
B329	60°		
B330	67 $\frac{1}{2}$ °		
B331	75°		
B332	82 $\frac{1}{2}$ °		



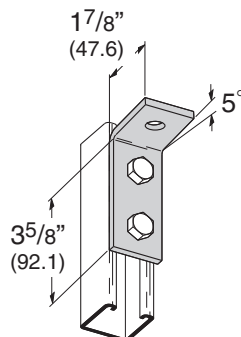
B154 TWO HOLE OPEN ANGLE

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



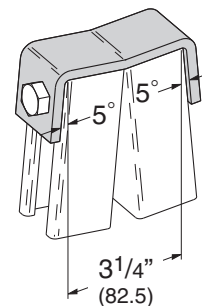
B522 THREE HOLE 95° OPEN ANGLE FITTING

- 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)

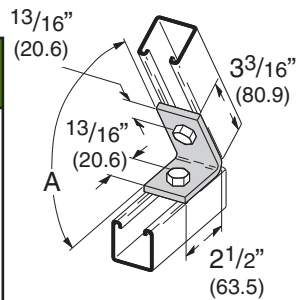


Reference page 72 for general fitting and standard finish specifications.

B156 - B161 TWO HOLE CLOSED ANGLE

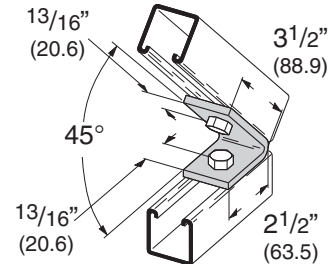
- Standard finishes: ZN, GRN

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

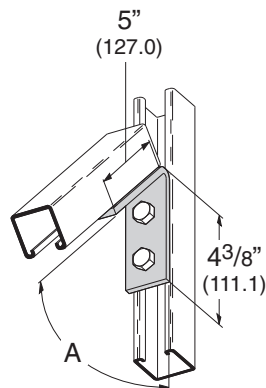
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 63 Lbs. (28.6 kg)



B363 - B369 FOUR HOLE CLOSED ANGLE

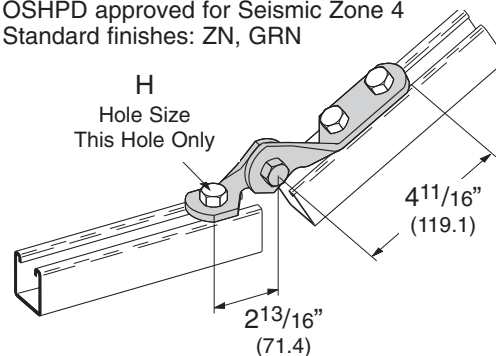
- Standard finishes: ZN, GRN

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 $\frac{1}{2}$ °		



B335-2 SERIES THREE HOLE ADJUSTABLE HINGE

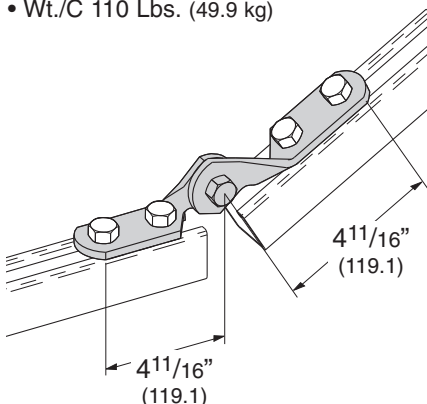
- OSHPD approved for Seismic Zone 4
- Standard finishes: ZN, GRN



Part No. & Size	Hole Size H	Wt./C	
		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)

B335 FOUR HOLE ADJUSTABLE HINGE

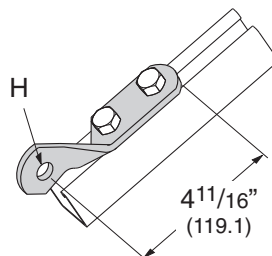
- Standard finishes: ZN, GRN
- Wt./C 110 Lbs. (49.9 kg)



B335V TWO HOLE HALF HINGE

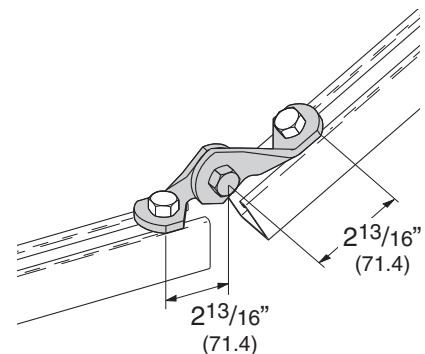
- Standard finishes: ZN, GRN

Part No. & Size	Hole Size H	Wt./C	
		Lbs.	kg
B335V-1/2	9/16" (14.3)	53	(24.1)
B335V-5/8	11/16" (17.4)	54	(24.5)
B335V-3/4	13/16" (20.6)	55	(24.9)



B335-1 TWO HOLE ADJUSTABLE HINGE

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



Reference page 72 for general fitting and standard finish specifications.

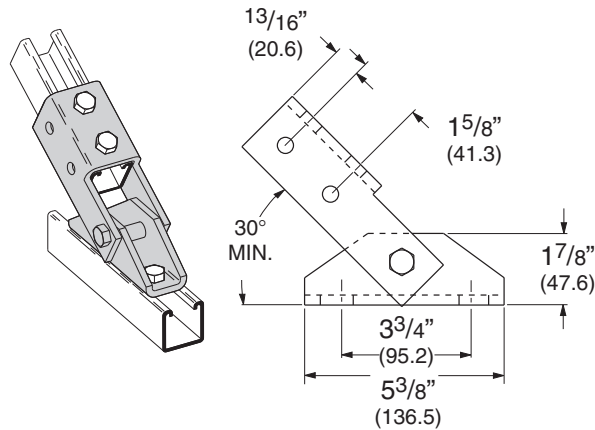


Preassembled fitting.

Angular Fittings

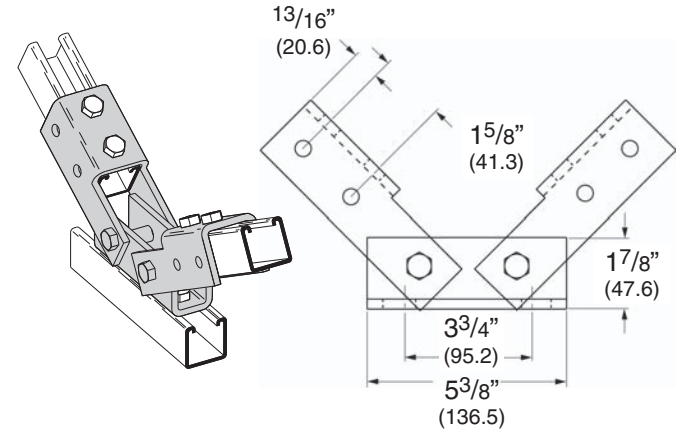
B634 SINGLE CHANNEL ADJUSTABLE BRACE

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



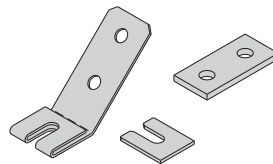
B635 DOUBLE CHANNEL ADJUSTABLE BRACE

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

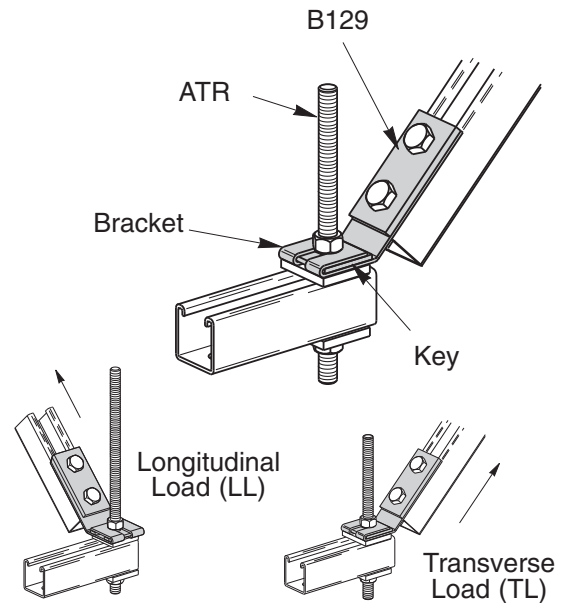


B650 SERIES SEISMIC RETROFIT BRACKET

- 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



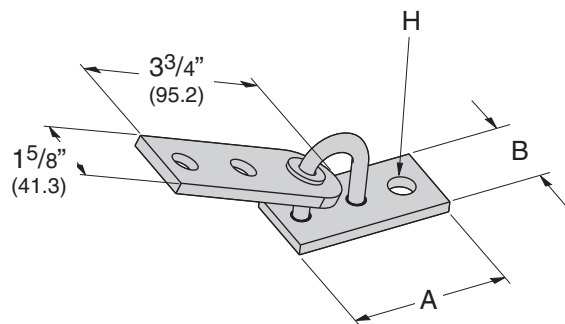
Part No. & Size	For Rod Size	TL Lbs. kN	LL Lbs. kN	Wt./C Lbs. kg
B650-3/8	3/8"	1100 (4.89)	1100 (4.89)	92 (41.4)
B650-1/2	1/2"	1500 (6.67)	1500 (6.67)	97 (43.6)
B650-5/8	5/8"	1500 (6.67)	1500 (6.67)	95 (42.7)
B650-3/4	3/4"	1500 (6.67)	1500 (6.67)	107 (48.5)



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
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)	1 1/16" (17.4)	97 (43.6)
B633-3/4	3 1/2" (82.5)	1 5/8" (41.3)	1 3/16" (20.6)	95 (42.7)
B633-7/8	3 9/16" (90.5)	2" (50.8)	1 5/16" (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)

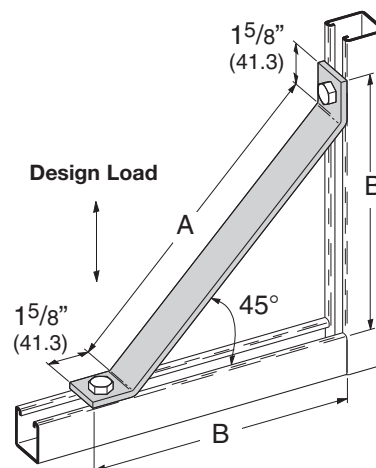


Reference page 72 for general fitting and standard finish specifications.

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

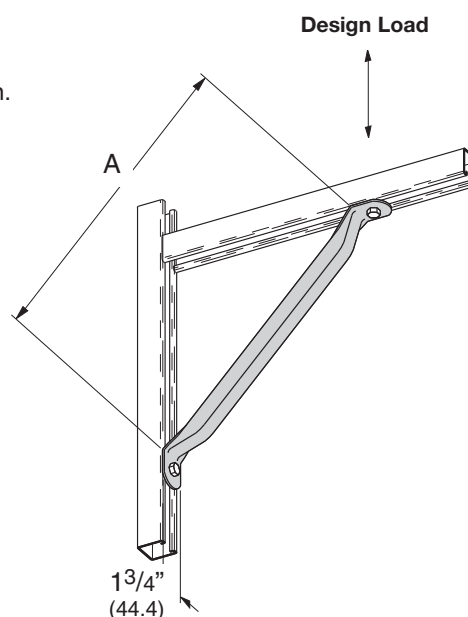
Part No.	A	(A)	B	(B)	Design Load Lbs.	kN	Wt./C Lbs.	kg
B261-8	8"	(203.2)	7 ³ / ₈ "	(187.3)	1500	(6.67)	119	(54.0)
B261-12	12"	(304.8)	10 ¹ / ₈ "	(257.2)	1020	(4.54)	165	(74.8)
B261-16	16 ⁵ / ₈ "	(422.3)	13 ³ / ₈ "	(339.7)	530	(2.36)	218	(98.9)
B261-18	18"	(457.2)	14 ⁷ / ₁₆ "	(366.7)	450	(2.00)	234	(106.1)
B261-24	24"	(609.6)	18 ¹¹ / 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

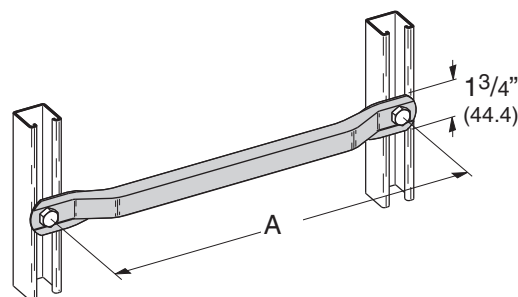
Part No.	A	(A)	Design Load Lbs.	kN	Wt./C Lbs.	kg
B631-18	18"	(457.2)	1500	(6.67)	145	(65.8)
B631-24	24"	(609.6)	1500	(6.67)	186	(84.4)
B631-30	30"	(762.0)	1500	(6.67)	225	(102.0)
B631-36	36"	(914.4)	1500	(6.67)	266	(120.6)
B631-42	42"	(1066.8)	1230	(5.47)	307	(139.2)
B631-48	48"	(1219.2)	940	(4.18)	348	(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)

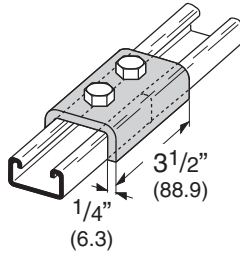


Reference page 72 for general fitting and standard finish specifications.

Clevis Fittings

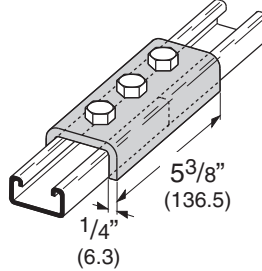
B169 TWO HOLE SPLICE CLEVIS FOR B52

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



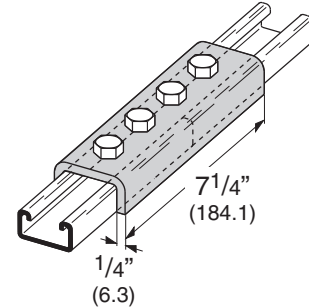
B168 THREE HOLE SPLICE CLEVIS FOR B52

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



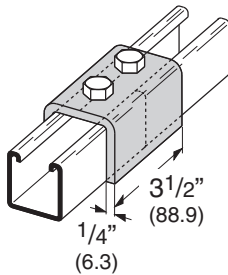
B167 FOUR HOLE SPLICE CLEVIS FOR B52

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



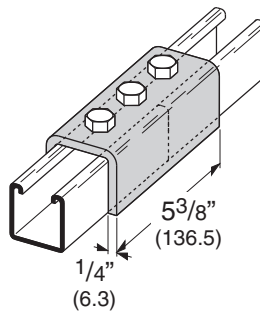
B170 TWO HOLE SPLICE CLEVIS FOR B22 OR B52A

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



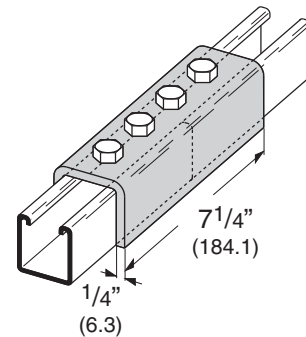
B171 THREE HOLE SPLICE CLEVIS FOR B22 OR B52A

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



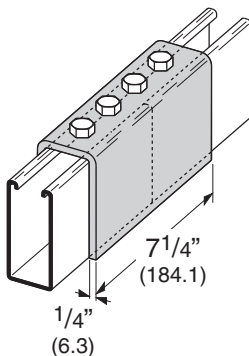
B172 FOUR HOLE SPLICE CLEVIS FOR B22 OR B52A

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



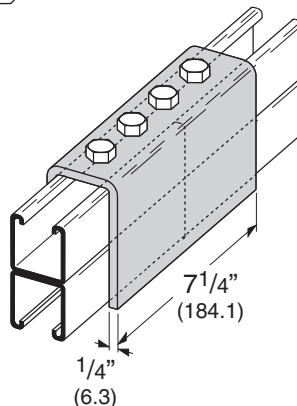
B172-12 FOUR HOLE SPLICE CLEVIS FOR B12

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



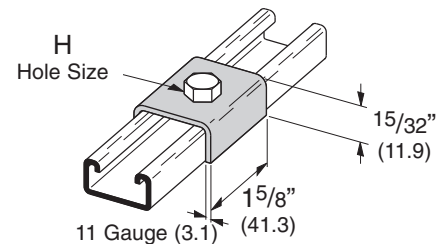
B172-22A FOUR HOLE SPLICE CLEVIS FOR B11 OR B22A

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



B450 U-WASHER

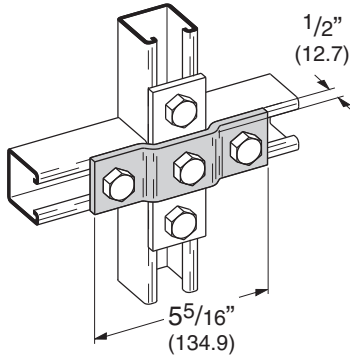
- Material: ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



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)

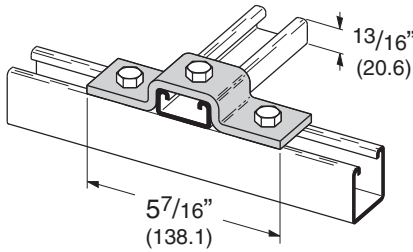
B527 THREE HOLE OFFSET PLATE CONNECTION

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



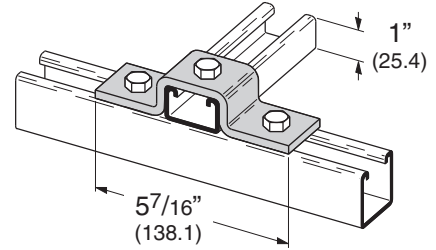
B116-52 THREE HOLE U-SUPPORT

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



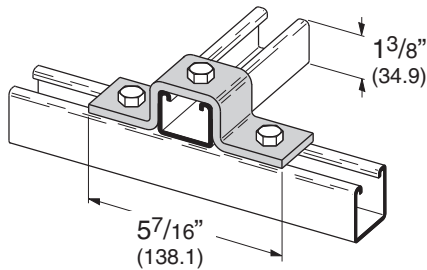
B116-42 THREE HOLE U-SUPPORT

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



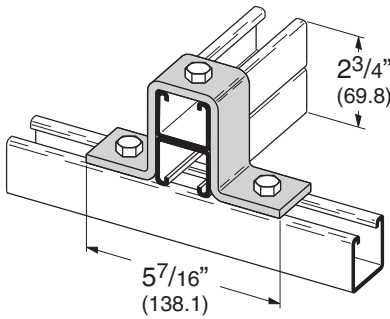
B116-32 THREE HOLE U-SUPPORT

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



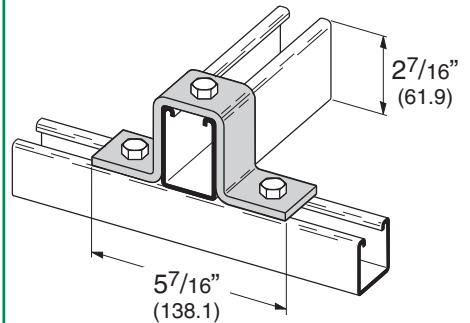
B116-32A THREE HOLE U-SUPPORT

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



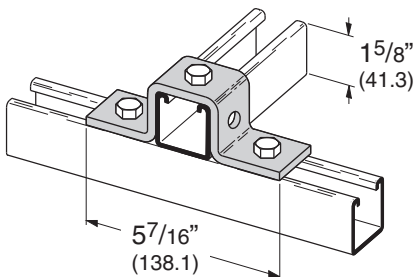
B116-12 THREE HOLE U-SUPPORT

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



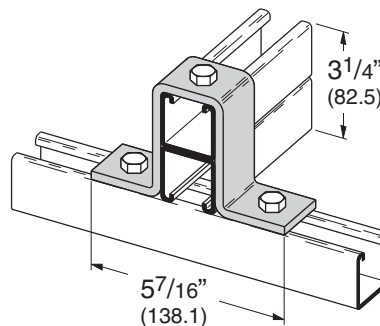
B107 FIVE HOLE U-SUPPORT

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



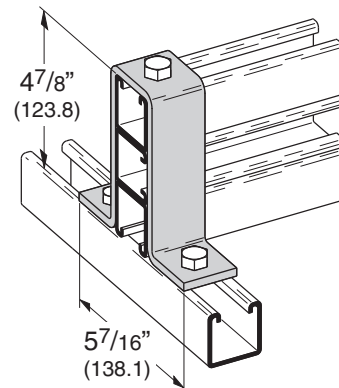
B107-22A THREE HOLE U-SUPPORT

- 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 72 for general fitting and standard finish specifications.

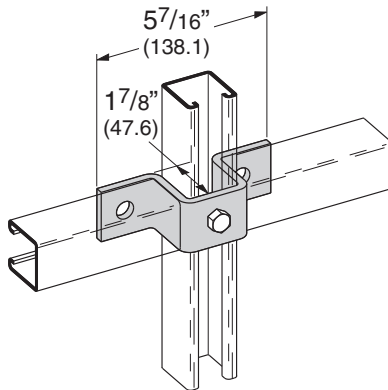


Preassembled fitting.

'U' Fittings

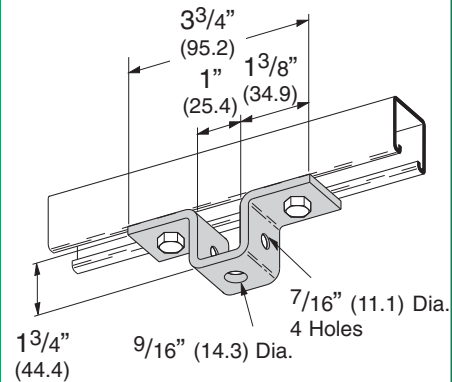
B412 THREE HOLE OFFSET U-SUPPORT

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



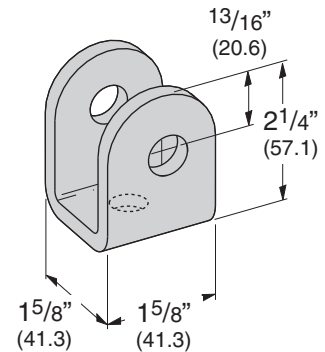
B107S FIVE HOLE U-SUPPORT

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



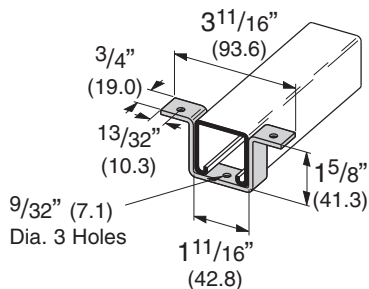
B596 THREE HOLE SWIVEL CLEVIS

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



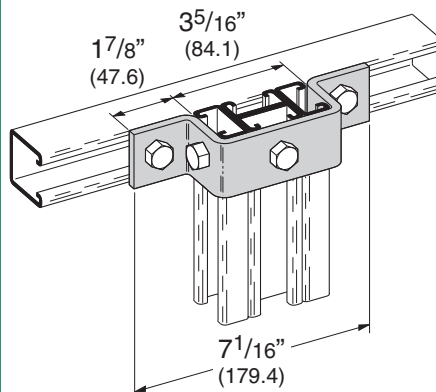
B578 THREE HOLE LIGHT-WEIGHT U-SUPPORT

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



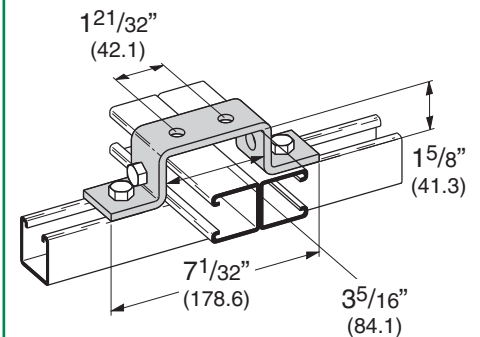
B594 FIVE HOLE U-SUPPORT

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



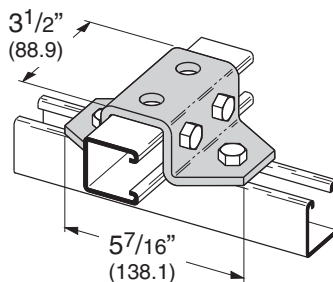
B266 SIX HOLE U-SUPPORT

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



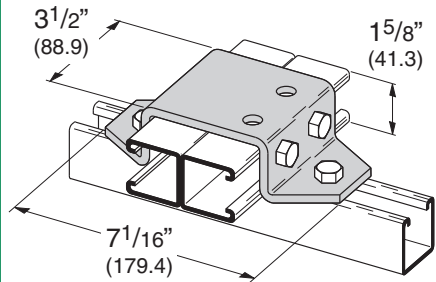
B425 SIX HOLE U-SUPPORT

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



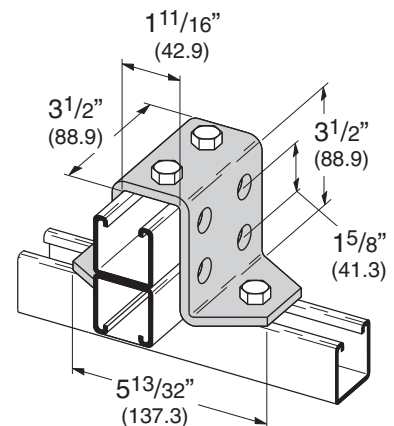
B581 EIGHT HOLE U-SUPPORT

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



B519 EIGHT HOLE U-SUPPORT

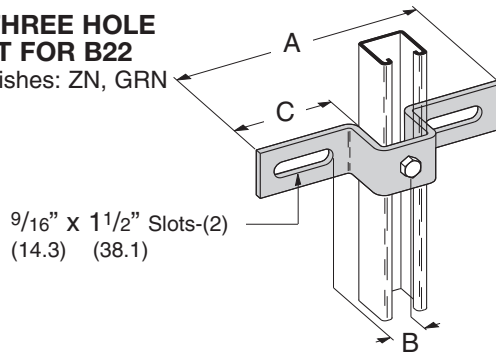
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (102.5 kg)



Reference page 72 for general fitting and standard finish specifications.

B333 SLOTTED THREE HOLE U-SUPPORT FOR B22

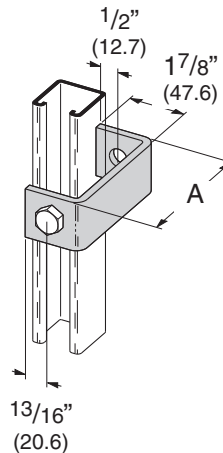
- Standard finishes: ZN, GRN



Part No.	A	(A)	B	(B)	C	(C)	Wt./C	
							Lbs.	kg
B333-1	7 ¹ / ₂ "	(190.5)	15/16"	(38.3)	27/8"	(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)	27/8"	(73.0)	4 ⁵ / ₁₆ "	(109.5)	135	(61.2)

B408 TWO HOLE BUS DUCT CLEVIS

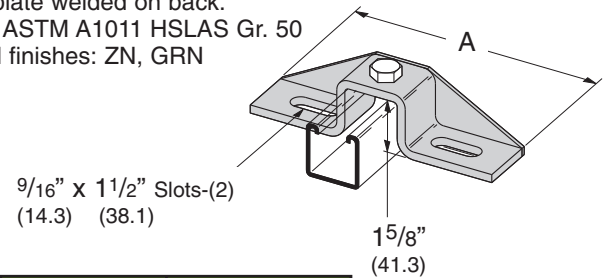
- Standard finishes: ZN, GRN



Part No.	A	(A)	Wt./C	
			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)

B451 SLOTTED THREE HOLE U-SUPPORT WITH GUSSET FOR B22

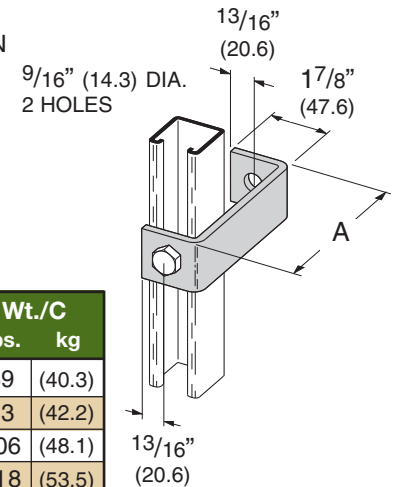
- Consists of B333-1, 2, or 3 with gusset plate welded on back.
- Material: ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



Part No.	A	(A)	Wt./C	
			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)

B358 TWO HOLE CLEVIS

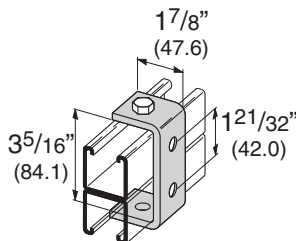
- Standard finishes: ZN, GRN



Part No.	A	(A)	Wt./C	
			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)

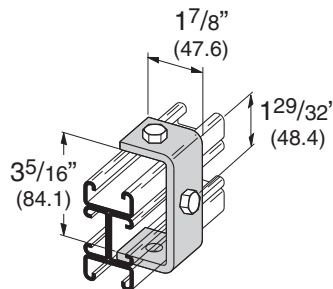
B173 FOUR HOLE CLEVIS

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



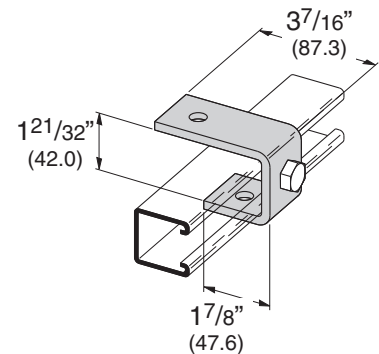
B595 THREE HOLE CLEVIS

- 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)



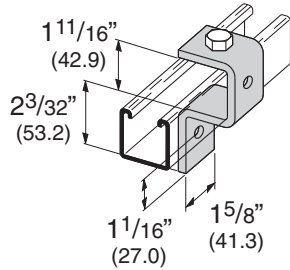
Reference page 72 for general fitting and standard finish specifications.

'U' Fittings

B398-1

THREE HOLE CUP SUPPORT

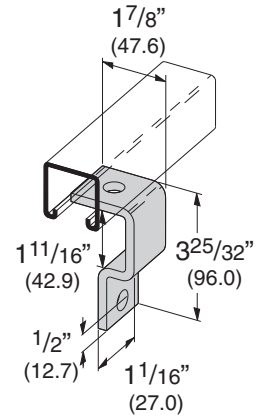
- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)



B415

TWO HOLE BUS DUCT CONNECTION

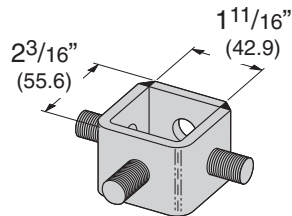
- Standard finishes: ZN, GRN
- Wt./C 56 Lbs. (25.4 kg)



B400

THREE STUD RING CONNECTION

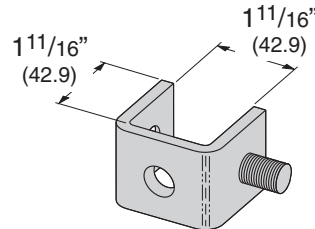
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 85 Lbs. (38.5 kg)



B400-1

ONE STUD RING CONNECTION

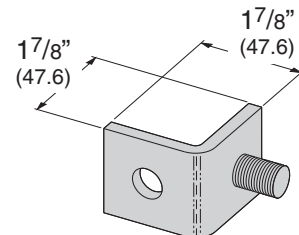
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 53 Lbs. (24.0 kg)



B400-2

ONE STUD RING CONNECTION

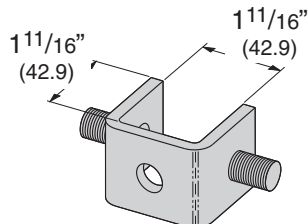
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 40 Lbs. (18.1 kg)



B400-3

TWO STUD RING CONNECTION

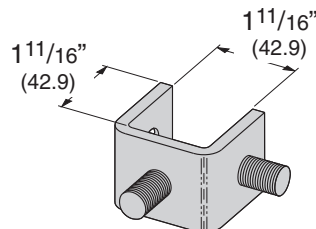
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



B400-4

TWO STUD RING CONNECTION

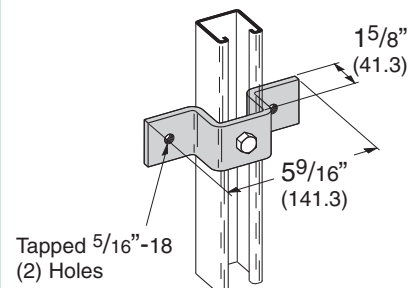
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



B536

TAPPED U-SUPPORT

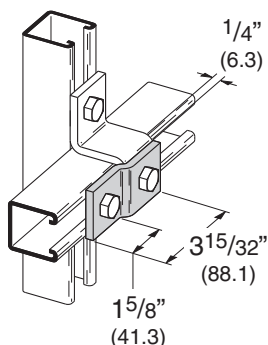
- Standard finishes: ZN
- Wt./C 87 Lbs. (39.4 kg)



Reference page 72 for general fitting and standard finish specifications.

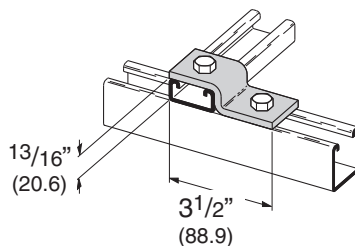
B526 TWO HOLE OFFSET Z-SUPPORT

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



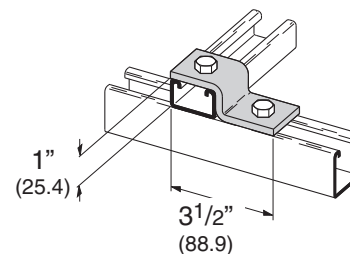
B106-52 TWO HOLE Z-SUPPORT FOR B52

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



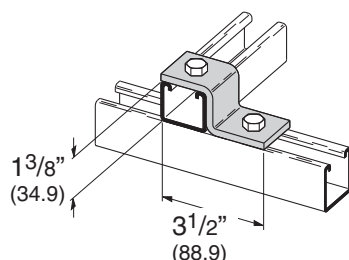
B106-42 TWO HOLE Z-SUPPORT FOR B42

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



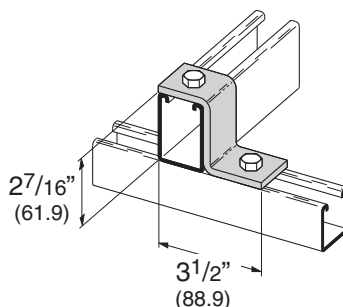
B106-32 TWO HOLE Z-SUPPORT FOR B32

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



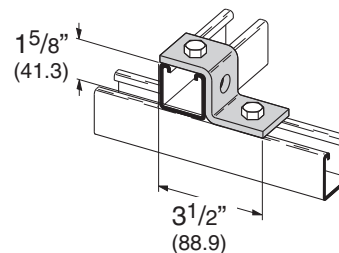
B106-12 TWO HOLE Z-SUPPORT FOR B12

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



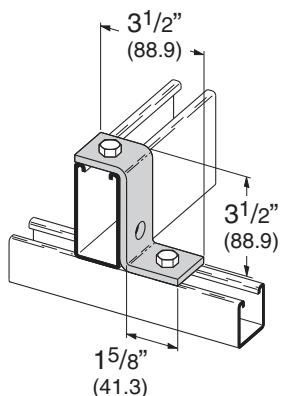
B105 THREE HOLE Z-SUPPORT FOR B22

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



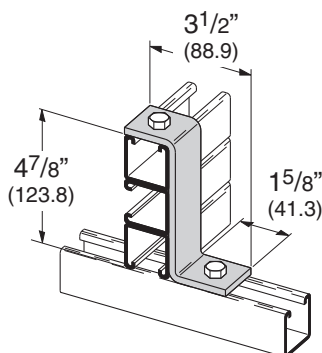
B110 THREE HOLE Z-SUPPORT FOR B11

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



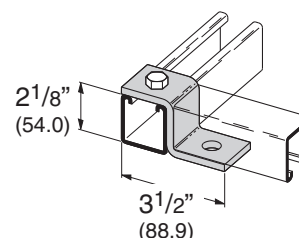
B586 TWO HOLE Z-SUPPORT

- 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)

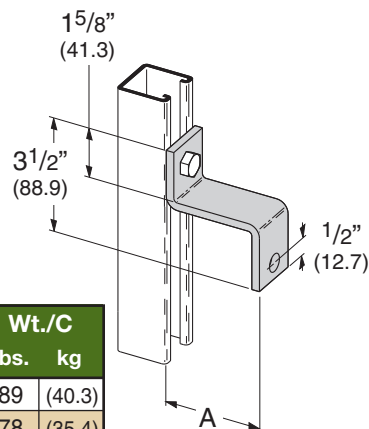


Reference page 72 for general fitting and standard finish specifications.

'Z' Fittings

B387 TWO HOLE Z-BUS DUCT CONNECTION

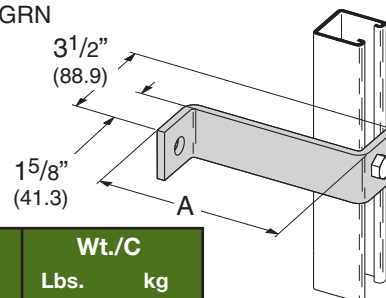
- Standard finishes: ZN, GRN



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

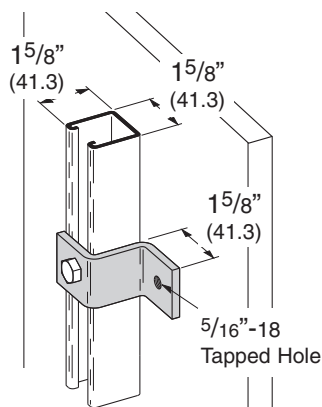
- Standard finishes: ZN, GRN



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)

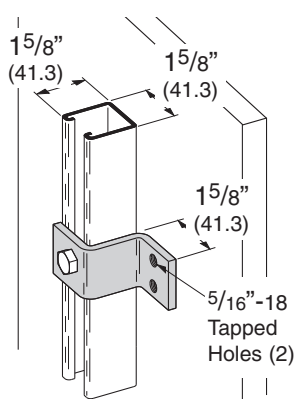
B534 TAPPED Z-SUPPORT

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



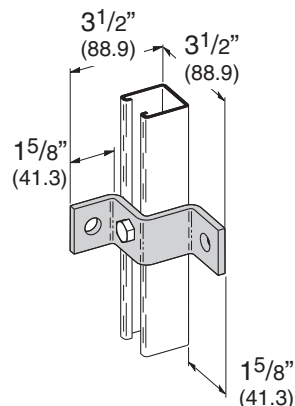
B535 TAPPED Z-SUPPORT

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



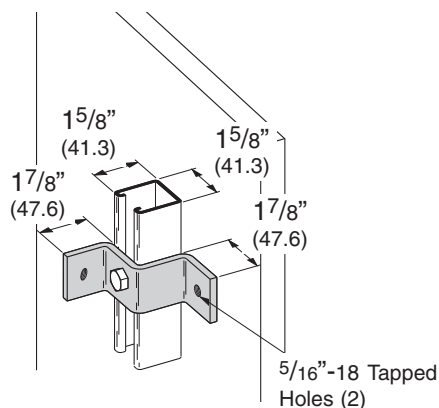
B111 THREE HOLE SHEATH CORNER CONNECTION

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



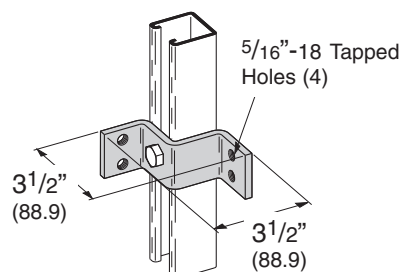
B538 TAPPED CORNER CONNECTION

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



B539 TAPPED CORNER CONNECTION

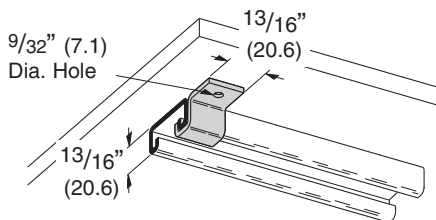
- Standard finishes: ZN
- Wt./C 68 Lbs. (30.8 kg)



Reference page 72 for general fitting and standard finish specifications.

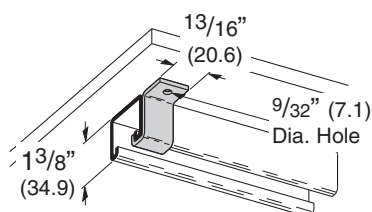
B410-52 CHANNEL HANGER BRACKET FOR B52

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



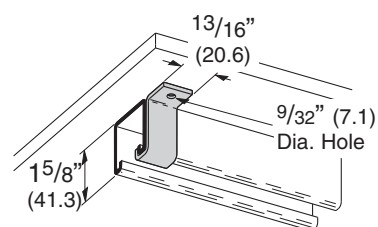
B410-32 CHANNEL HANGER BRACKET FOR B32

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



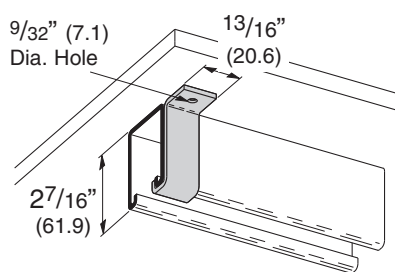
B410-22 CHANNEL HANGER BRACKET FOR B22

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



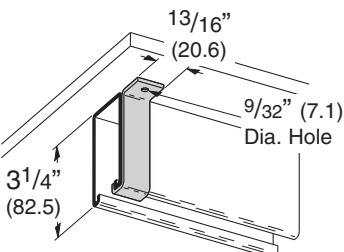
B410-12 CHANNEL HANGER BRACKET FOR B12

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



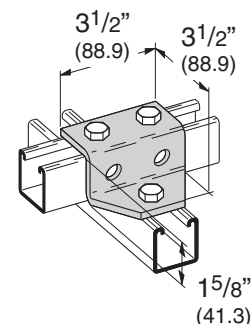
B410-11 CHANNEL HANGER BRACKET FOR B11

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



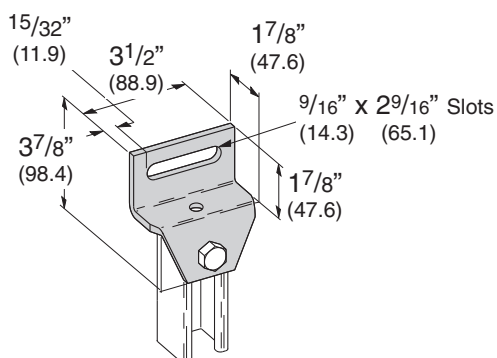
B580 FIVE HOLE GUSSETED Z-SUPPORT

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



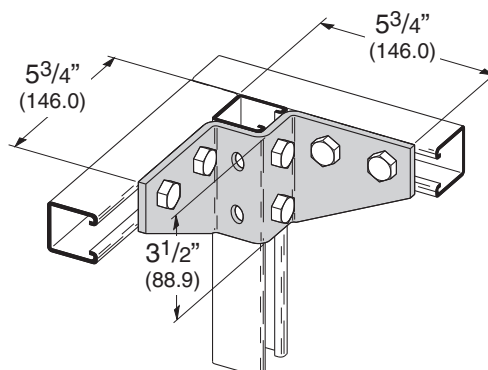
B515 ADJUSTABLE OFFSET GUSSETED Z-SUPPORT

- 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)

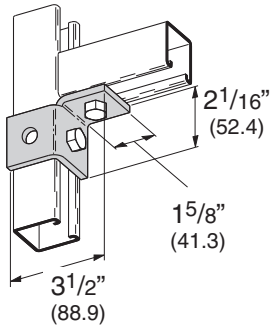


Reference page 72 for general fitting and standard finish specifications.

Wing Fittings

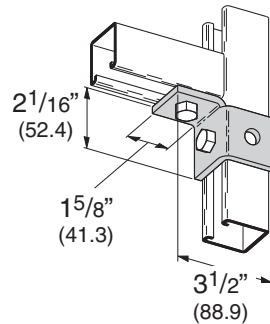
B267R THREE HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

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



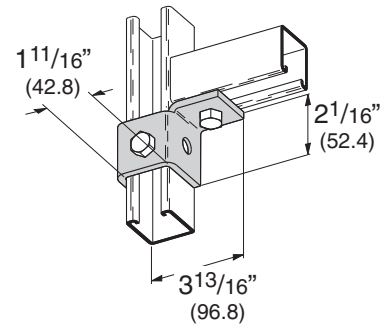
B267L THREE HOLE SINGLE CORNER CONNECTION (LEFT HAND)

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



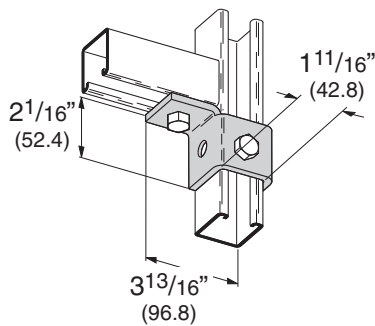
B270R FOUR HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

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



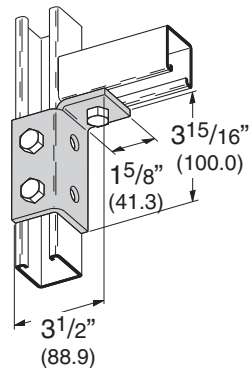
B270L FOUR HOLE SINGLE CORNER CONNECTION (LEFT HAND)

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



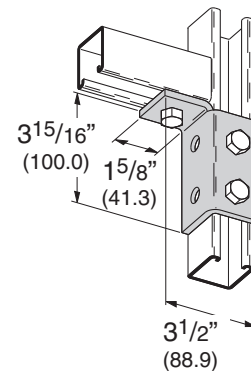
B268R FIVE HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

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



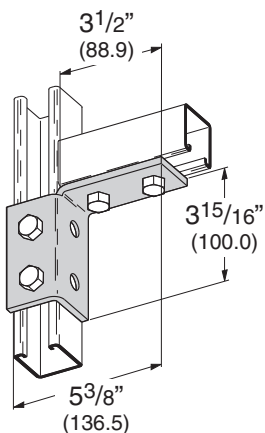
B268L FIVE HOLE SINGLE CORNER CONNECTION (LEFT HAND)

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



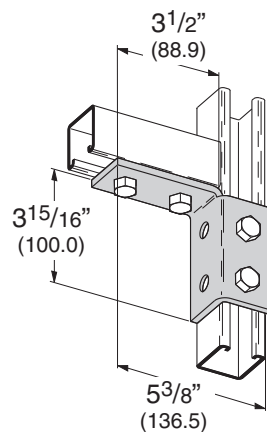
B269R SIX HOLE SINGLE CORNER CONNECTION (RIGHT HAND)

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



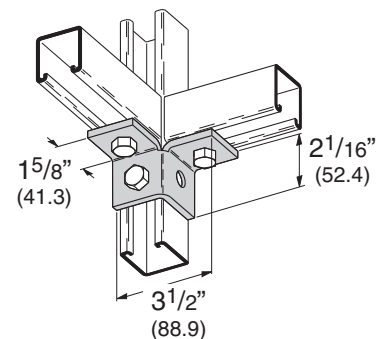
B269L SIX HOLE SINGLE CORNER CONNECTION (LEFT HAND)

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



B119 FOUR HOLE DOUBLE CORNER CONNECTION

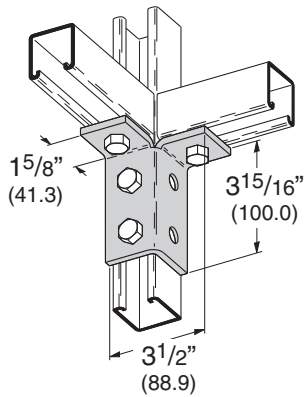
- Standard finishes: ZN, GRN
- Wt./C 71 Lbs. (32.2 kg)



Reference page 72 for general fitting and standard finish specifications.

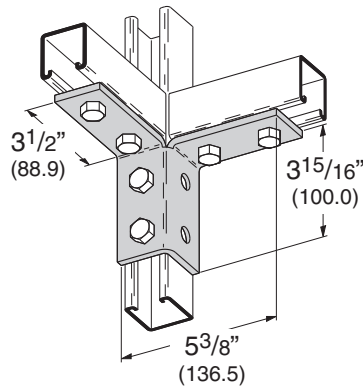
B120 SIX HOLE DOUBLE CORNER CONNECTION

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



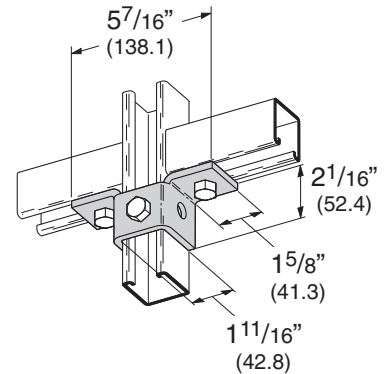
B121 EIGHT HOLE DOUBLE CORNER CONNECTION

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



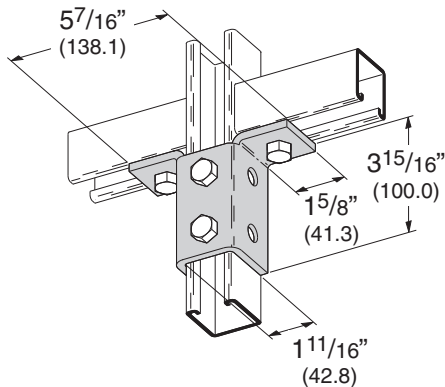
B271 FIVE HOLE DOUBLE WING CONNECTION

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



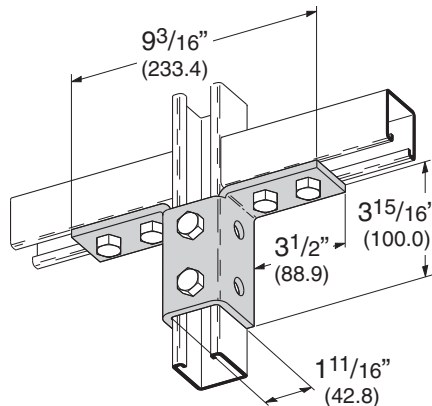
B272 EIGHT HOLE DOUBLE WING CONNECTION

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



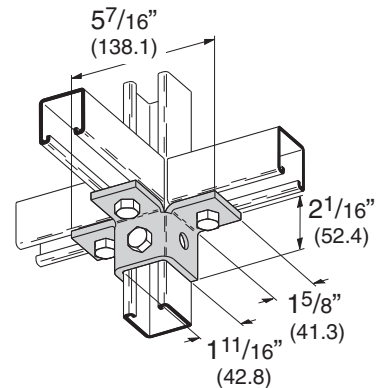
B273 TEN HOLE DOUBLE WING CONNECTION

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



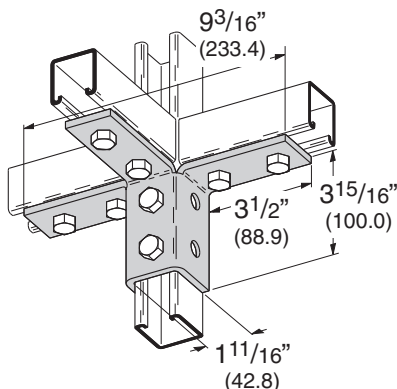
B122 SIX HOLE TRIPLE WING CONNECTION

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



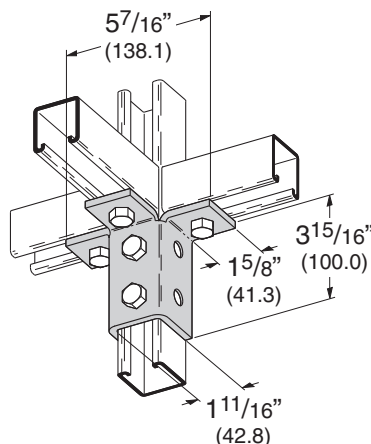
B123 TWELVE HOLE TRIPLE WING CONNECTION

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



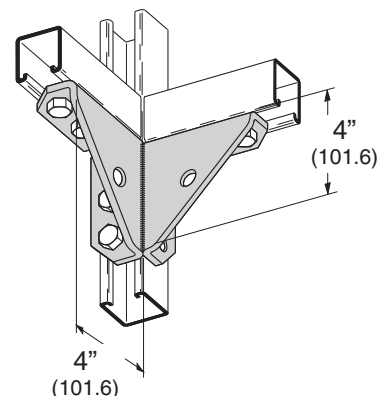
B124 NINE HOLE TRIPLE WING CONNECTION

- 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)

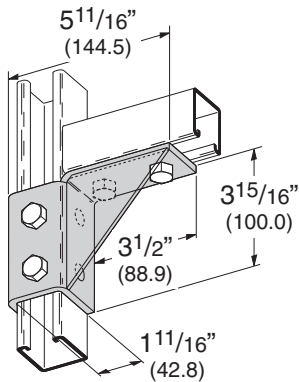


Reference page 72 for general fitting and standard finish specifications.

Wing Fittings

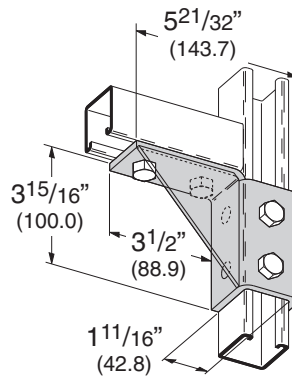
B274R EIGHT HOLE SINGLE CORNER GUSSETED CONNECTION (RIGHT HAND)

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



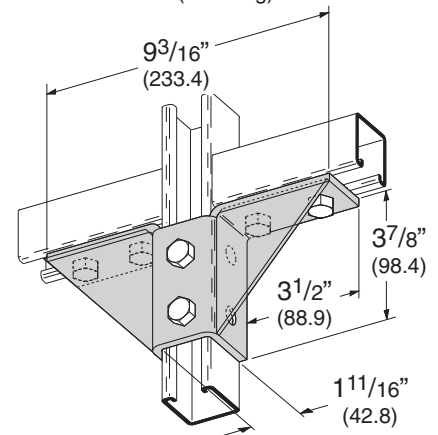
B274L EIGHT HOLE SINGLE CORNER GUSSETED CONNECTION (LEFT HAND)

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



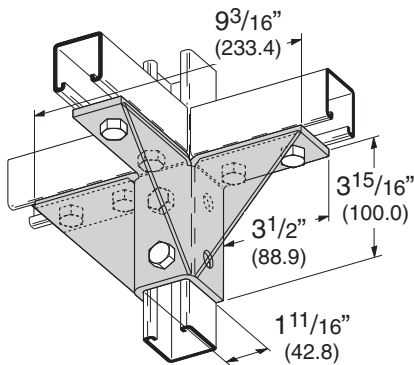
B495 TEN HOLE DOUBLE WING GUSSETED CONNECTION

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



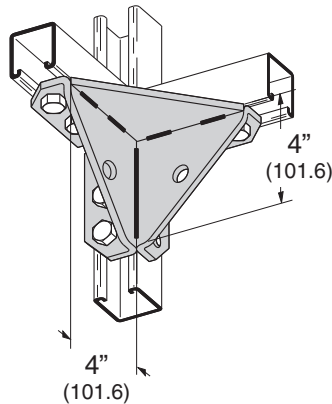
B277 TWELVE HOLE TRIPLE WING GUSSETED CONNECTION

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



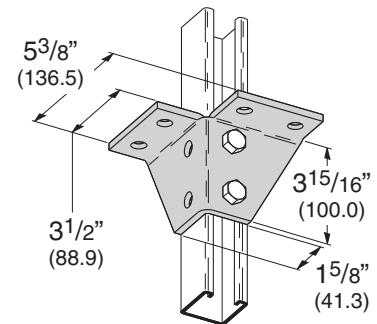
B362 EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION

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



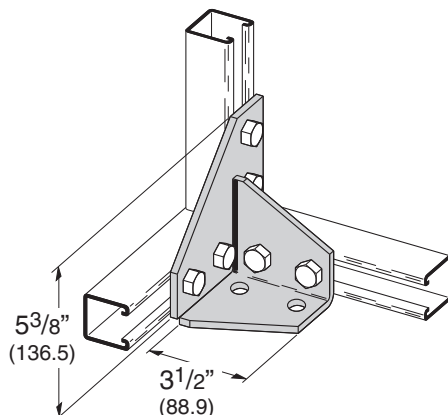
B571 EIGHT HOLE WING CONNECTION

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



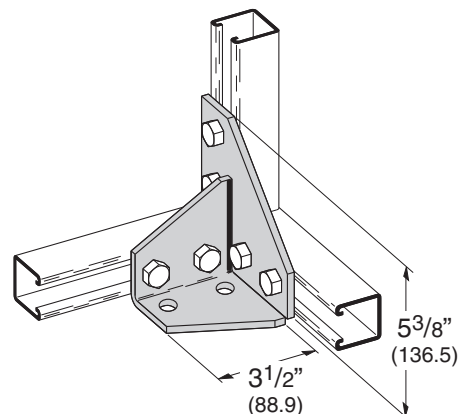
B346L EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION (LEFT HAND)

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



B346R EIGHT HOLE DOUBLE CORNER GUSSETED CONNECTION (RIGHT HAND)

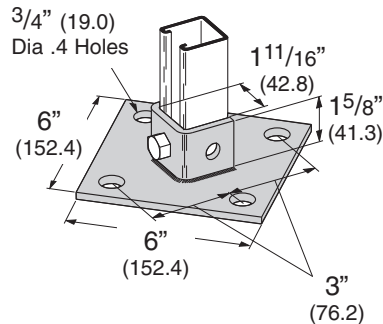
- Standard finishes: ZN, GRN
- Wt./C 242 Lbs. (109.8 kg)



Reference page 72 for general fitting and standard finish specifications.

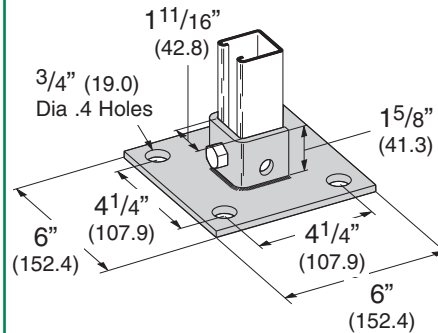
B279 POST BASE FOR B22

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



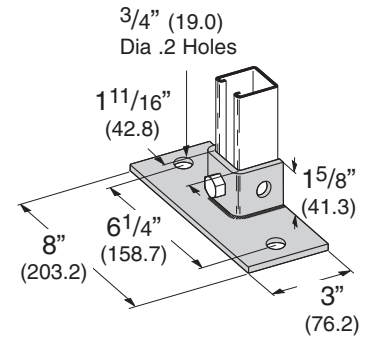
B279SQ POST BASE FOR B22

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



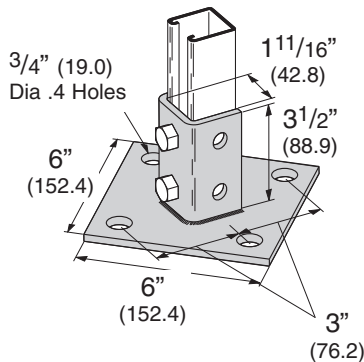
B279FL POST BASE FOR B22

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



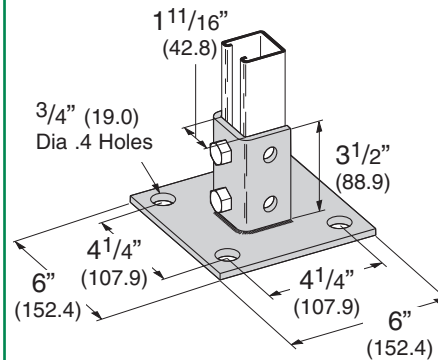
B280 POST BASE FOR B22

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



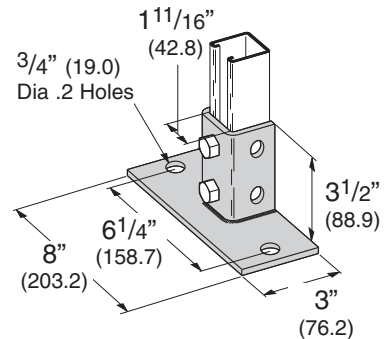
B280SQ POST BASE FOR B22

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



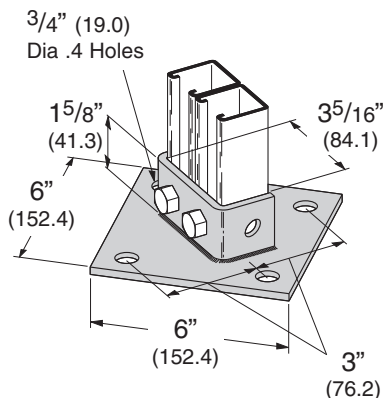
B280FL POST BASE FOR B22

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



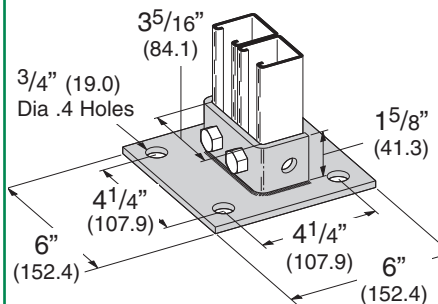
B281A POST BASE FOR B22A, B, C, ETC.

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



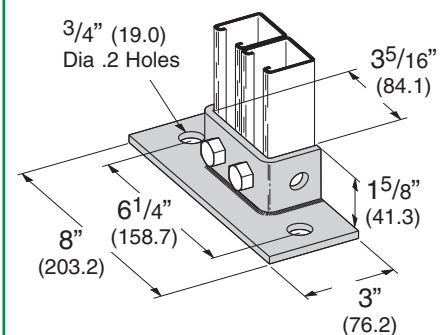
B281ASQ POST BASE FOR B22A, B, C, ETC.

- 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)



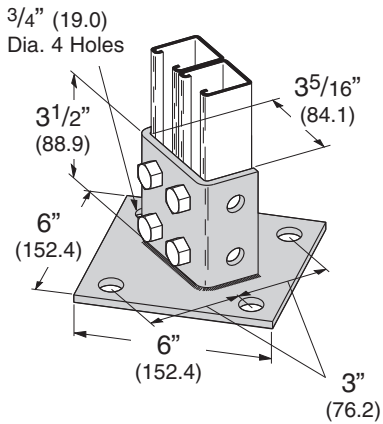
Reference page 72 for general fitting and standard finish specifications.

Post Bases

B281

POST BASE FOR B22A, B, C, ETC.

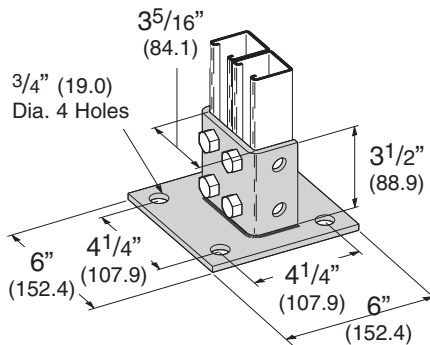
- Standard finishes: ZN, GRN, HDG
- Wt./C 400 Lbs. (181.4 kg)



B281SQ

POST BASE FOR B22A, B, C, ETC.

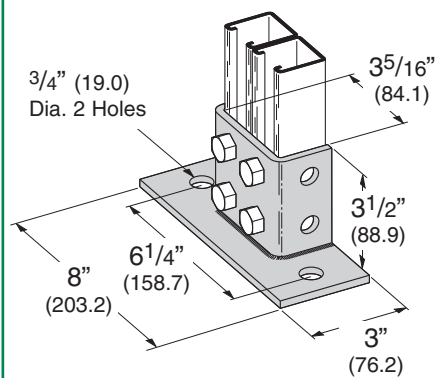
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 400 Lbs. (181.4 kg)



B281FL

POST BASE FOR B22A, B, C, ETC.

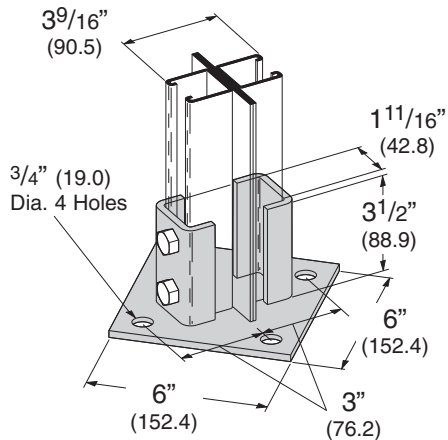
- Standard finishes: ZN, GRN
- Wt./C 320 Lbs. (145.1 kg)



B281M

POST BASE FOR B22-2PL

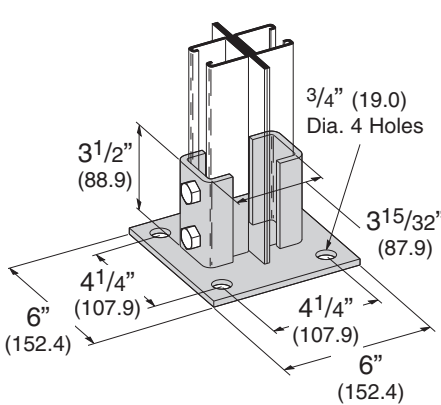
- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)



B281MSQ

POST BASE FOR B22-2PL

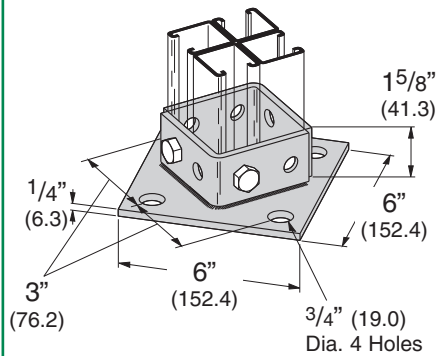
- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)



B570

POST BASE FOR FOUR CHANNEL COMBINATIONS

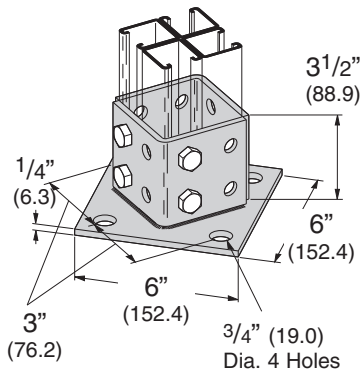
- Standard finishes: ZN, GRN
- Wt./C 397 Lbs. (180.1 kg)



B570A

POST BASE FOR FOUR CHANNEL COMBINATIONS

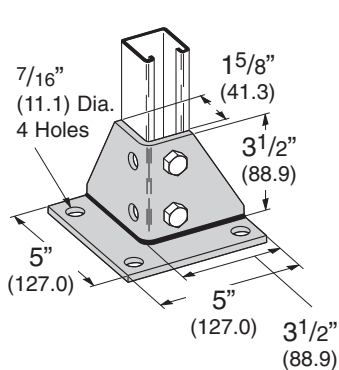
- Standard finishes: ZN, GRN
- Wt./C 550 Lbs. (249.5 kg)



B278

POST BASE FOR B22

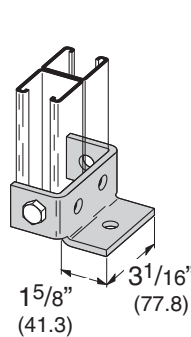
- Standard finishes: ZN, GRN
- Wt./C 288 Lbs. (130.6 kg)



B585

POST BASE FOR B22A

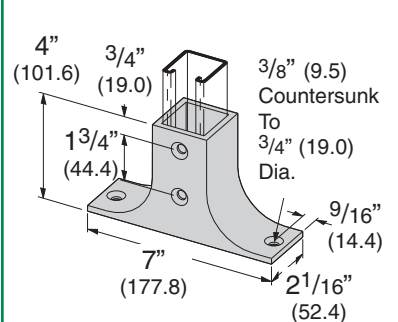
- Standard finishes: ZN, GRN
- Wt./C 97 Lbs. (44.0 kg)



B300

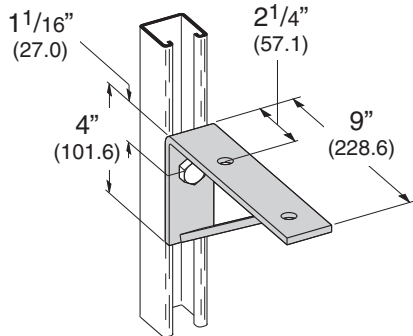
POST BASE

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



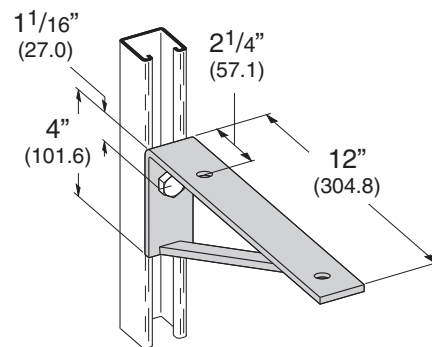
B187 BRACKET

- Uniform Loading 1450 Lbs. (6.45 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top $5\frac{5}{16}$ " (150.8) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 193 Lbs. (87.5 kg)



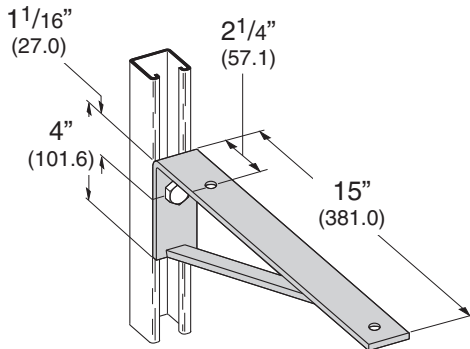
B188 BRACKET

- Uniform Loading 1080 Lbs. (4.80 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top $8\frac{15}{16}$ " (227.0) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 241 Lbs. (109.3 kg)



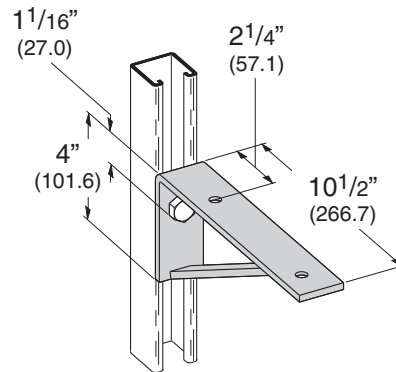
B189 BRACKET

- Uniform Loading 870 Lbs. (3.87 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top $11\frac{15}{16}$ " (303.2) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 308 Lbs. (139.7 kg)



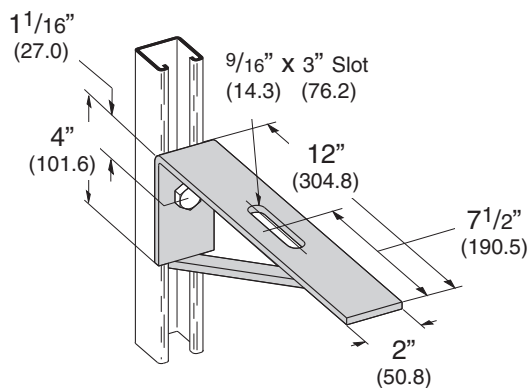
B541 BRACKET

- Uniform Loading 1240 Lbs. (5.51 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top $7\frac{7}{16}$ " (188.9) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)



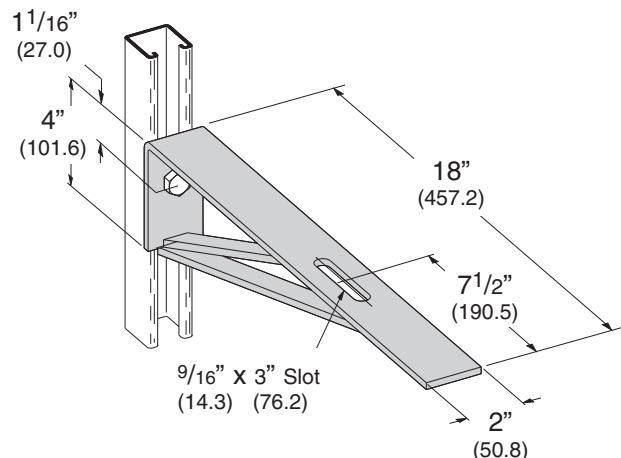
B190 12" (304.8) BRACKET

- 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)

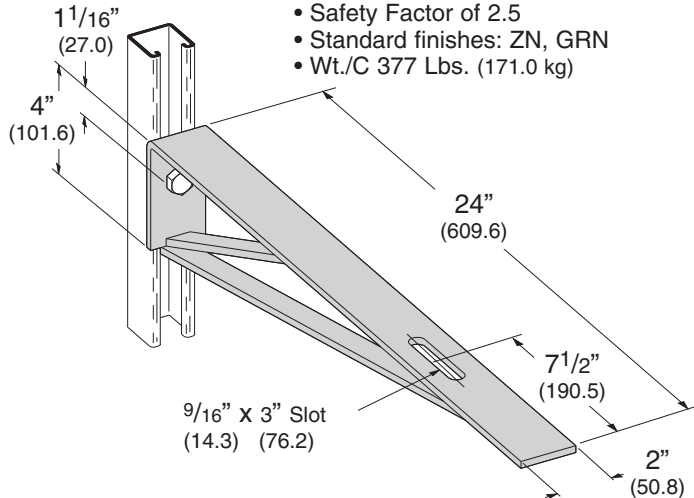


Reference page 72 for general fitting and standard finish specifications.

Brackets

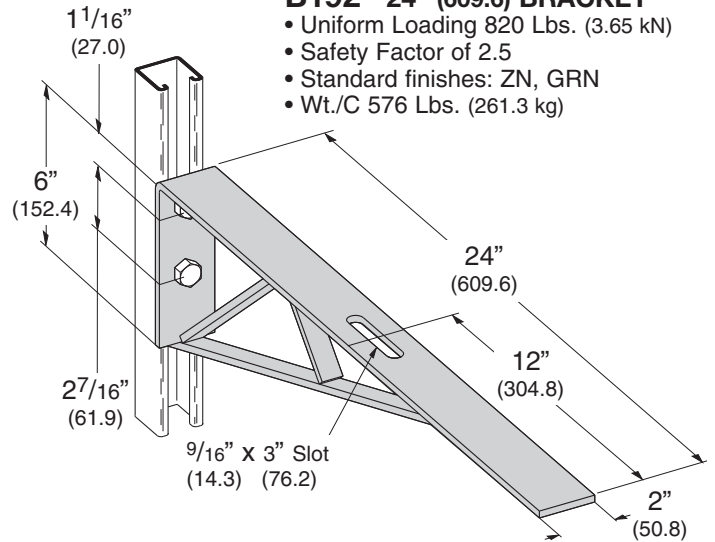
B191-24 24" (609.6) BRACKET

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



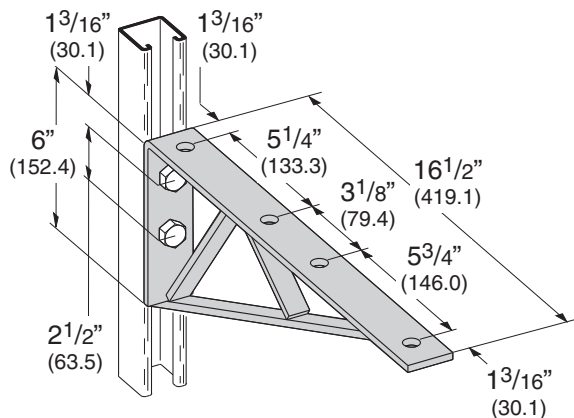
B192 24" (609.6) BRACKET

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



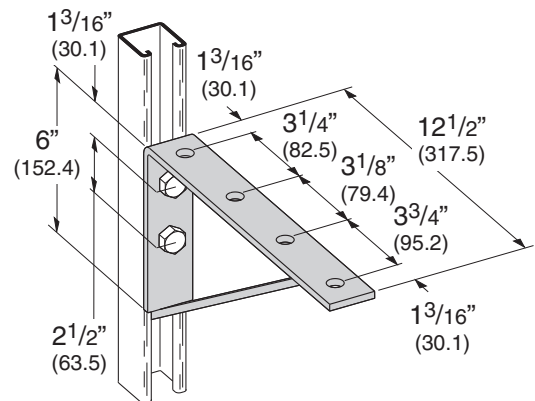
B290 16 1/2" (419.1) BRACKET

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



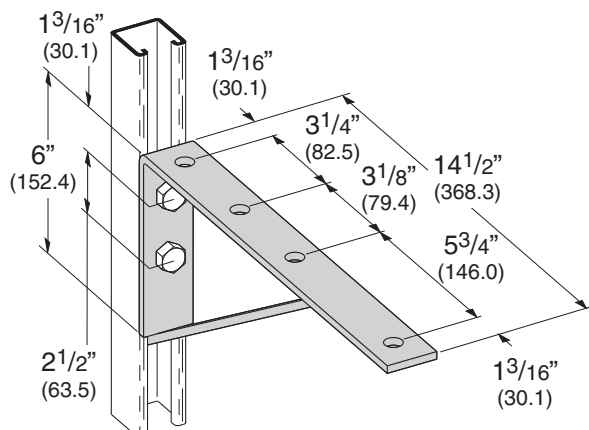
B289-12 12 1/2" (317.5) BRACKET

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



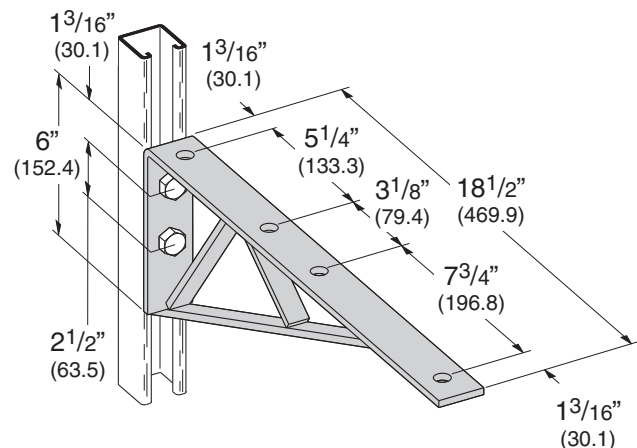
B289-14 14 1/2" (368.3) BRACKET

- 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

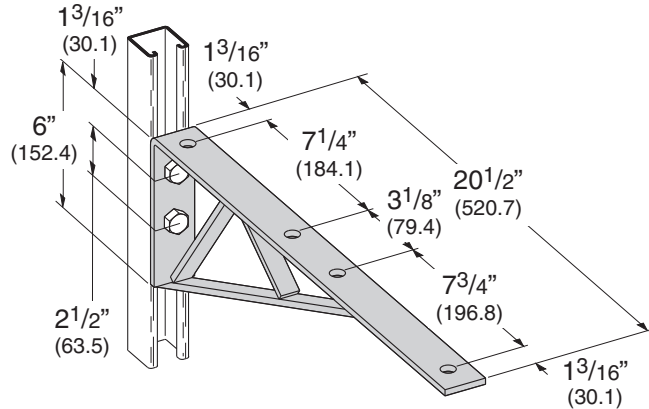
- Uniform Loading 1070 Lbs. (4.76 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 468 Lbs. (212.3 kg)



Reference page 72 for general fitting and standard finish specifications.

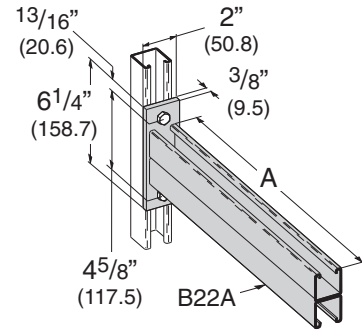
B292 20¹/₂" (520.7) BRACKET

- 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

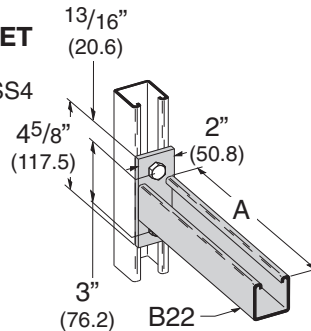
- Safety Factor of 2.5
- Standard finishes: ZN, GRN, HDG



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

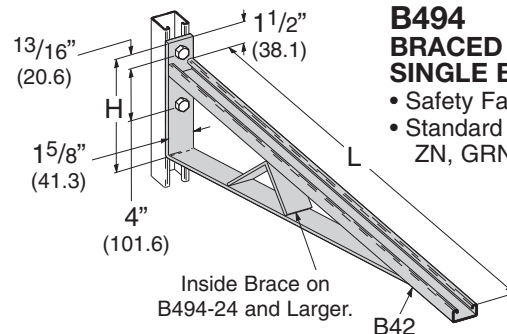
- Safety Factor of 2.5
- Standard finishes: ZN, GRN, SS4



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

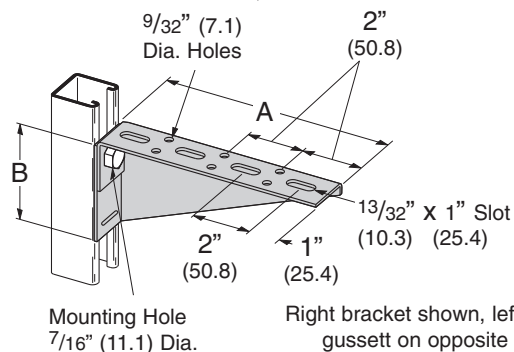
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



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



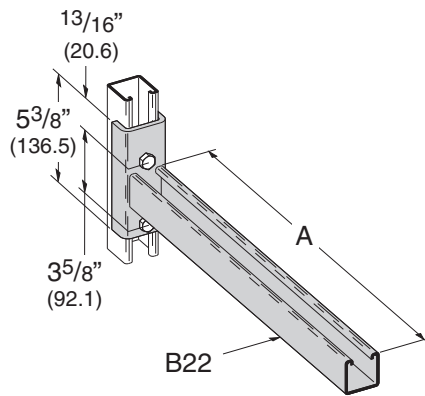
Part No.	A	B	Uniform Load	Wt./C
			Lbs. kN	Lbs. kg
B174SH	24" (609.6)	6 7/16" (163.5)	225 (1.00)	370 (167.8)
B175SH	26" (660.4)	6 15/16" (176.2)	225 (1.00)	425 (192.8)
B176SH	28" (711.2)	7 7/16" (188.9)	225 (1.00)	480 (217.7)
B177SH	30" (762.0)	7 15/16" (201.6)	225 (1.00)	520 (235.9)
B178SH	12" (304.8)	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 72 for general fitting and standard finish specifications.

Brackets

B196 CHANNEL CLEVIS BRACKET

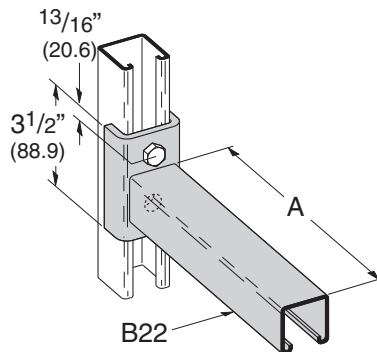
- Safety Factor of 2.5
- Standard finishes:
ZN, GRN



Part No.	A	(A)	Uniform Load Lbs. kN	Wt./C 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

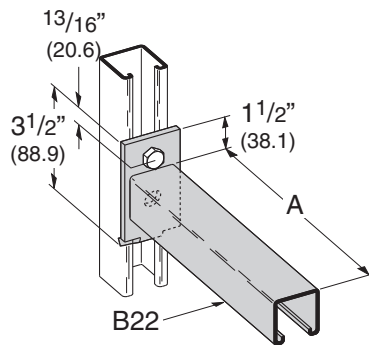
- Safety Factor of 2.5
- Standard finishes:
ZN, GRN



Part No.	A	(A)	Uniform Load Lbs. kN	Wt./C 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

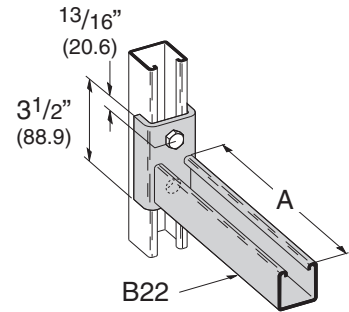
- Safety Factor of 2.5
- Standard finishes:
ZN, GRN



Part No.	A	(A)	Uniform Load Lbs. kN	Wt./C 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

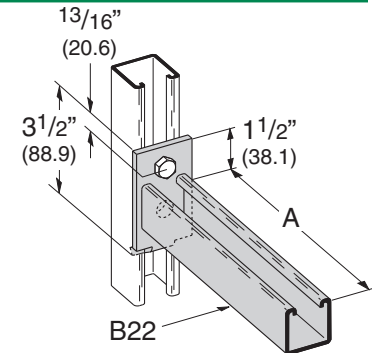
- Safety Factor of 2.5
- Standard finishes:
ZN, GRN



Part No.	A	(A)	Uniform Load Lbs. kN	Wt./C 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

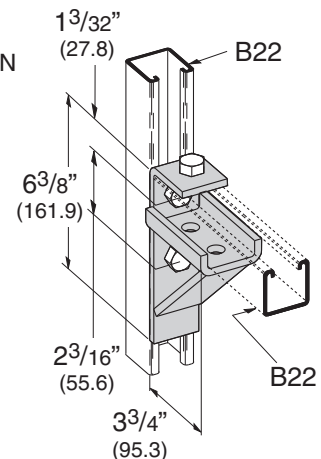
- Safety Factor of 2.5
- Standard finishes:
ZN, GRN



Part No.	A	(A)	Uniform Load Lbs. kN	Wt./C 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

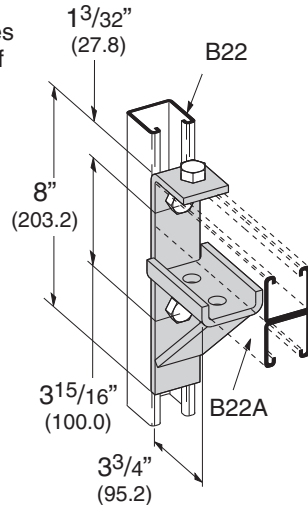
- Safety Factor of 2.5
- 6300 In.-Lbs (712 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 223 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 210 Lbs. (95.2 kg)



Reference page 72 for general fitting and standard finish specifications.

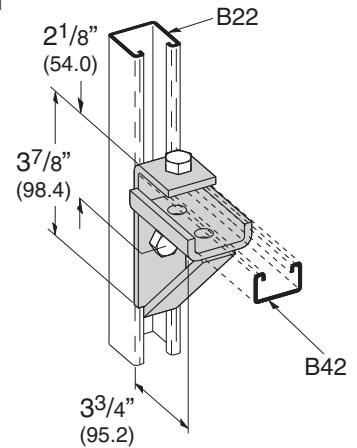
B370 BRACKET FOR B22A & B11

- 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)



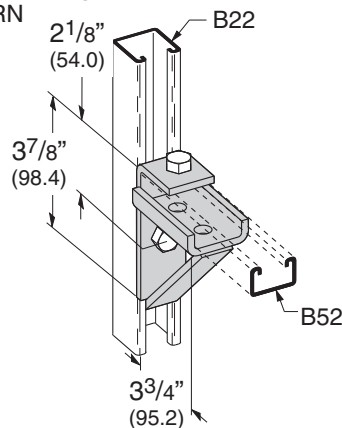
B195 BRACKET FOR B42

- 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)



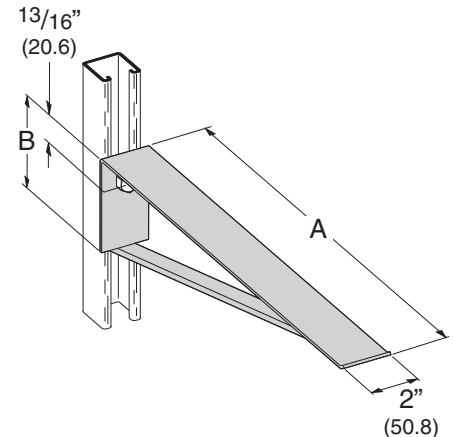
B440 BRACKET FOR B52 & B54

- 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

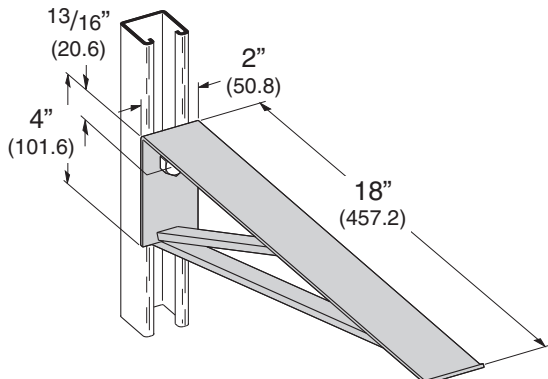
- Safety Factor of 2.5
- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



Part No.	A	B	Uniform Load Lbs. kN	Wt./C Lbs. kg
B449-4	41/2" (114.3)	23/8" (60.3)	2400 (10.67)	74 (33.5)
B449-8	81/2" (215.9)	23/8" (60.3)	1270 (5.65)	124 (56.2)
B449-12	121/2" (317.5)	4" (101.6)	860 (3.82)	184 (83.4)

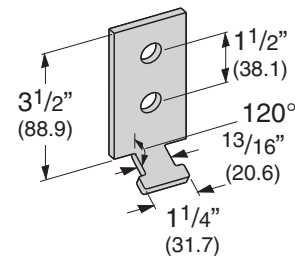
B449-18 18" (457.2) CABLE SADDLE BRACKET

- 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)

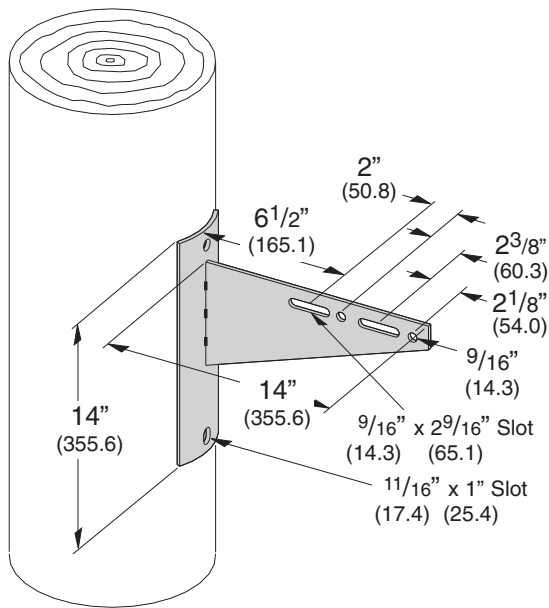


Reference page 72 for general fitting and standard finish specifications.

Brackets

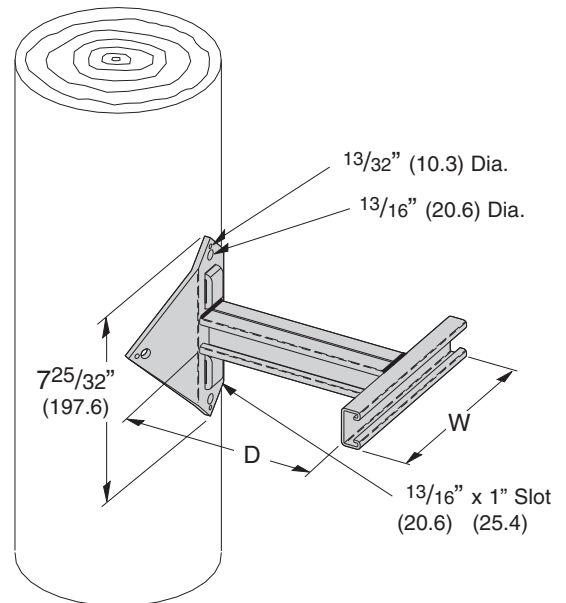
B816

- Standard finishes: ZN, HDG



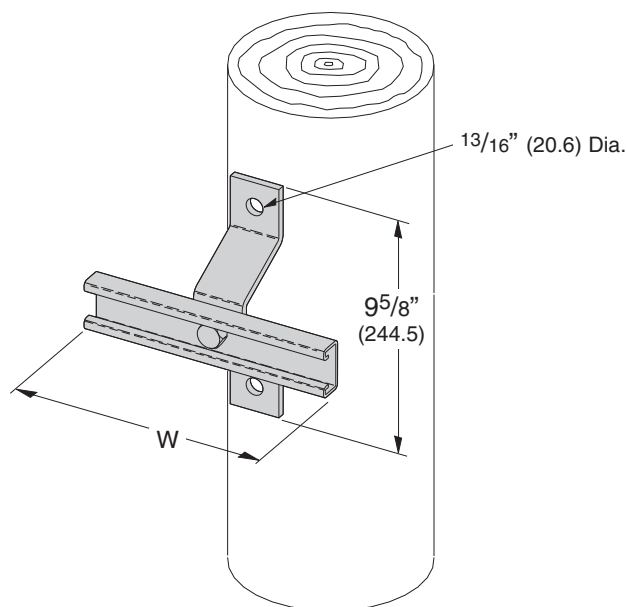
B852S-W-D

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



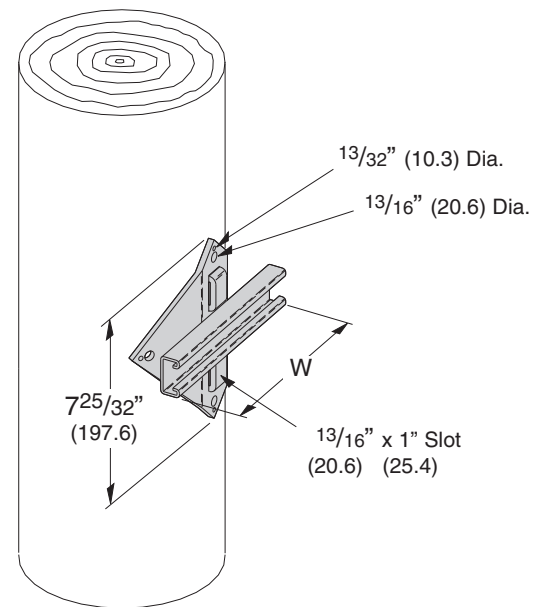
B802D-W

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



B810-W

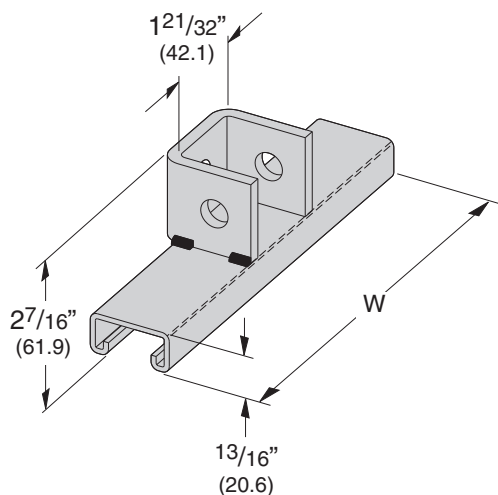
- Specify W = 8, 12, 16
- 13/16" (20.6mm) x 1" (25.6mm) banding slots for steel band
- Standard finishes: ZN, HDG



Reference page 72 for general fitting and standard finish specifications.

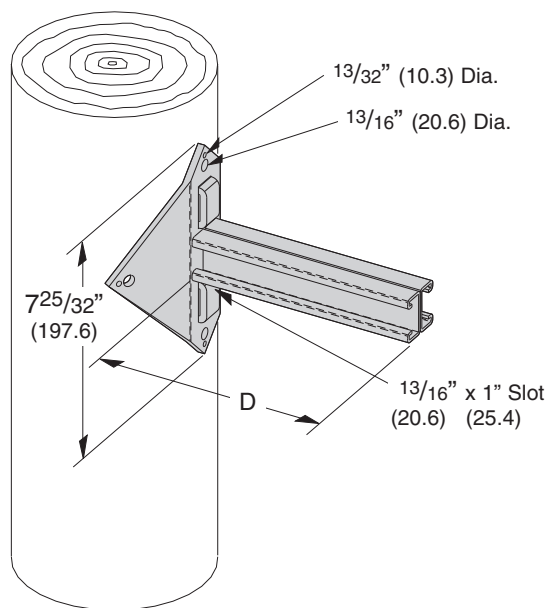
B811-W

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



B812-*

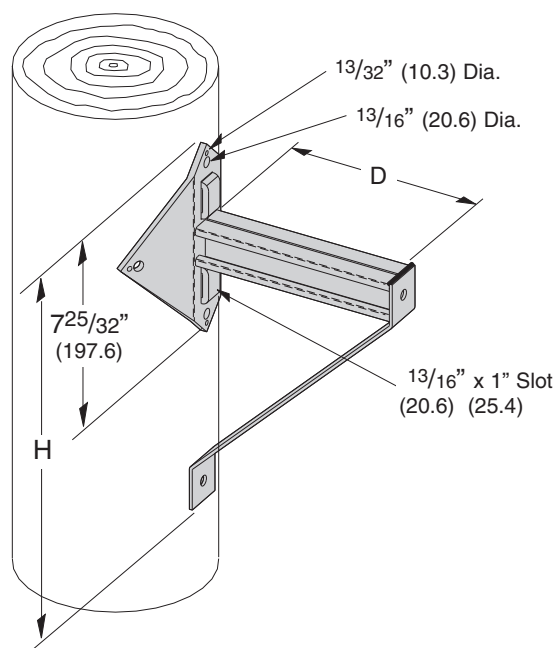
- Specify D = 6, 8, 10, 12, 16, 18, 24
- 13/16" (20.6mm) x 1" (25.4mm) banding slots for steel band
- Standard finishes: ZN, HDG



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)

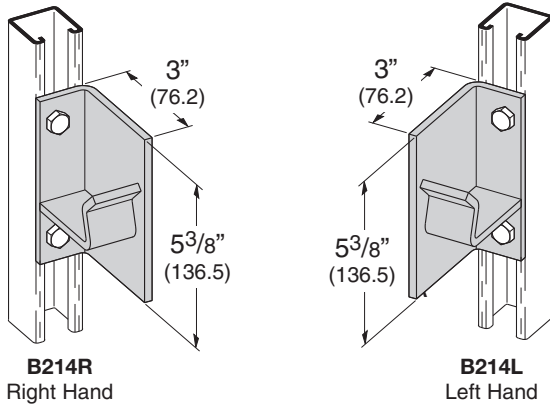


Reference page 72 for general fitting and standard finish specifications.

Miscellaneous Fittings

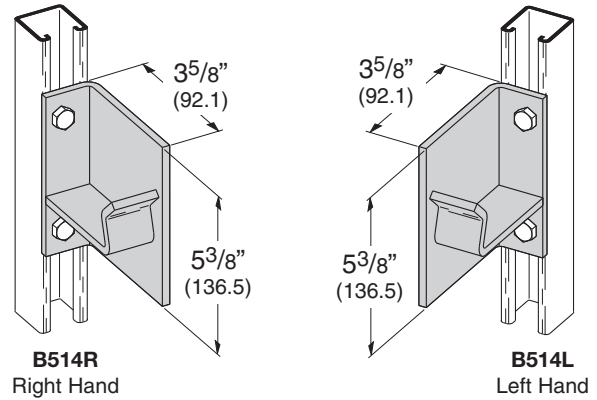
B214 R&L REEL RACK SUPPORT FOR 1 1/4" (32) PIPE

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



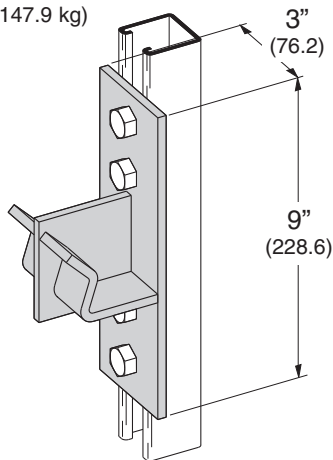
B514 R&L REEL RACK SUPPORT FOR 2" (50) PIPE

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



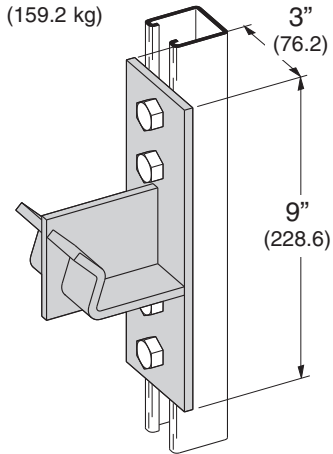
B475 DOUBLE REEL RACK SUPPORT ON SINGLE CHANNEL FOR 1 1/4" (32) PIPE

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



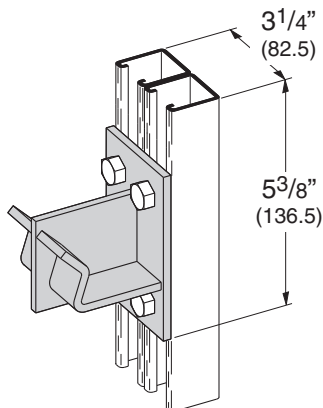
B473 DOUBLE REEL RACK SUPPORT ON SINGLE CHANNEL FOR 2" (50) PIPE

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



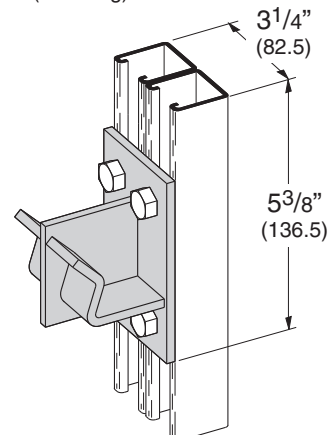
B474 DOUBLE REEL RACK CHANNEL FOR 1 1/4" (32) PIPE

- 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)

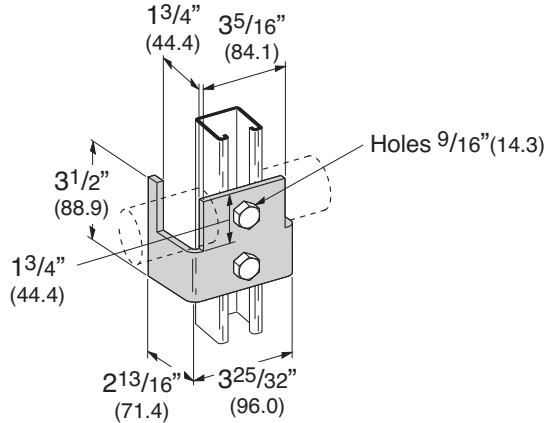


Reference page 72 for general fitting and standard finish specifications.

B664

DOUBLE PIPE SUPPORT FOR 1 1/4" (32) PIPE

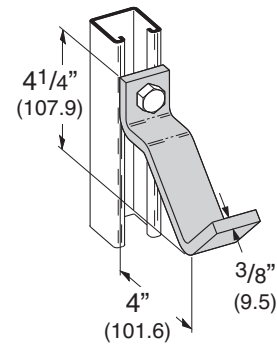
- Standard finishes: ZN, GRN
- Wt./C 154 Lbs. (69.8 kg)



B438

PIPE SUPPORT BRACKET

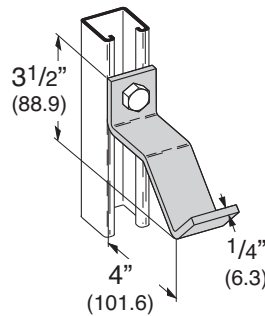
- Standard finishes: ZN, GRN
- Material: ASTM A36
- Wt./C 132 Lbs. (59.9 kg)



B439

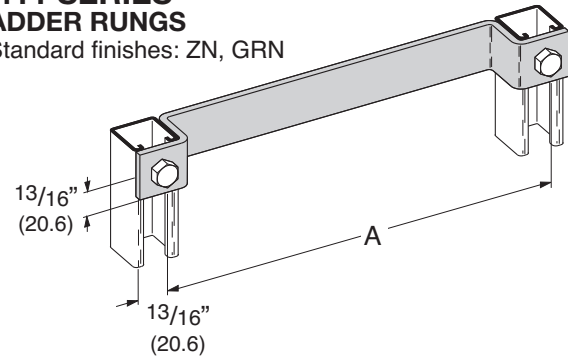
PIPE SUPPORT BRACKET

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



B411 SERIES LADDER RUNGS

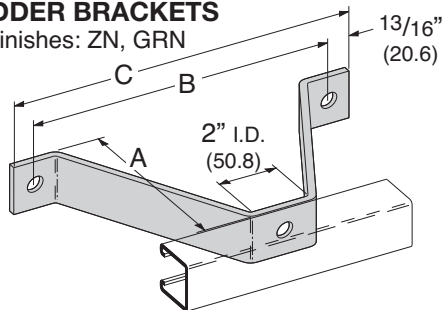
- Standard finishes: ZN, GRN



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

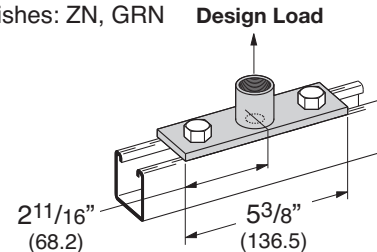
- Standard finishes: ZN, GRN



Part No.	A	(A)	B	(B)	C	(C)	Wt./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	8 3/8"	(212.7)	12"	(304.8)	13 5/8"	(346.1)	253	(114.7)
B385	10 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.	kg	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)

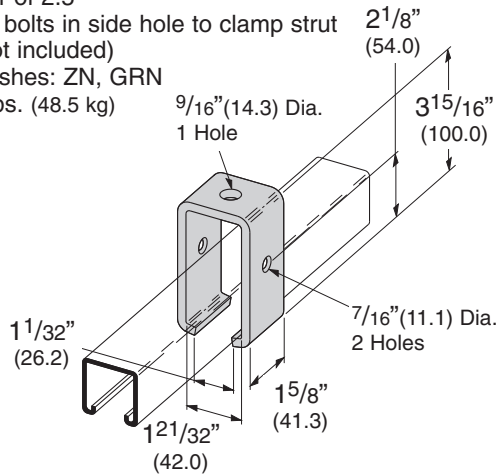
Reference page 72 for general fitting and standard finish specifications.

Miscellaneous Fittings

B349

TROLLEY BEAM SUPPORT

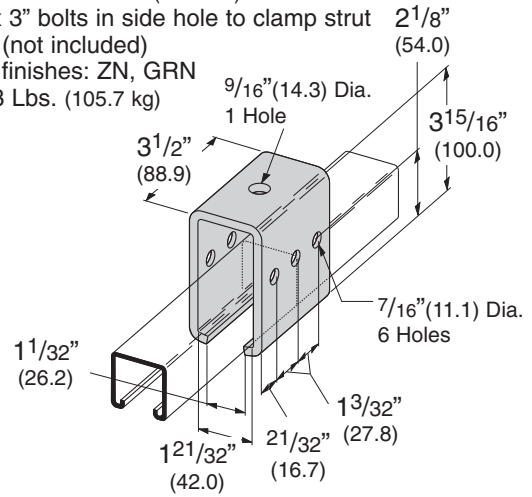
- Design Load 1200 Lbs. (5.34 kN)
- Safety Factor of 2.5
- Use $\frac{3}{8}$ " x 3" bolts in side hole to clamp strut together (not included)
- Standard finishes: ZN, GRN
- Wt./C 107 Lbs. (48.5 kg)



B350

TROLLEY BEAM JOINT SUPPORT

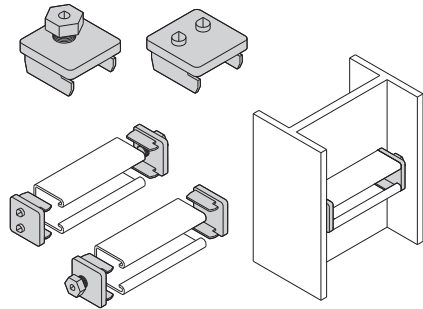
- Design Load 1200 Lbs. (5.34 kN)
- Use $\frac{3}{8}$ " x 3" bolts in side hole to clamp strut together (not included)
- Standard finishes: ZN, GRN
- Wt./C 233 Lbs. (105.7 kg)



B614

COLUMN SUPPORT FOR B22

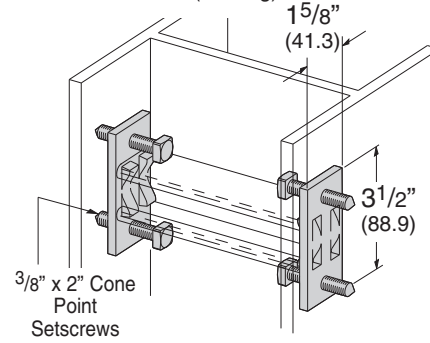
- Quick installation (one bolt to tighten)
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B22 and B24 Channel
- Sold in pairs
- Standard finish: ZN
- Wt./C 50 Lbs. (22.6 kg)



B613

COLUMN SUPPORT FOR B22

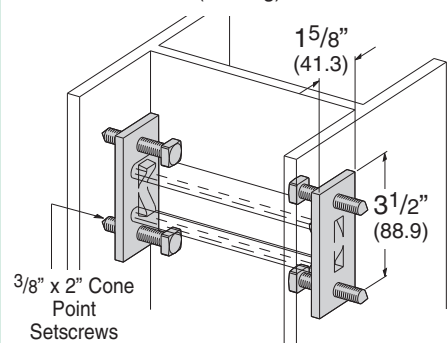
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B22 and B24 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



B613A

COLUMN SUPPORT FOR B52

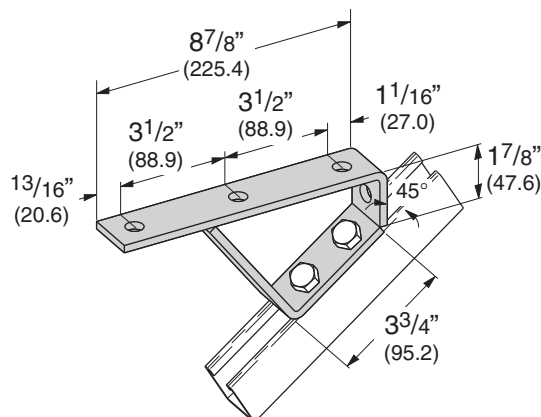
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B52 and B54 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



B560

45° STAIR SUPPORT

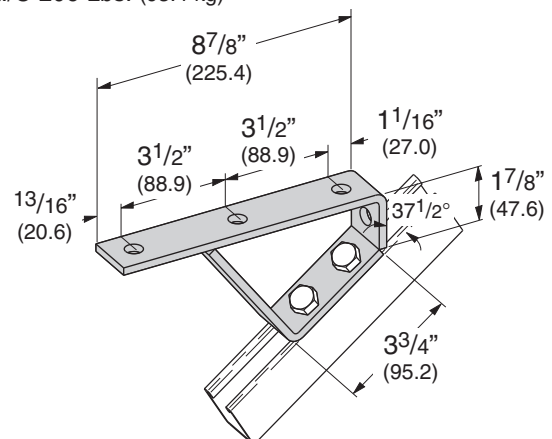
- Standard finishes: ZN, GRN
- Wt./C 220 Lbs. (99.8 kg)



B562

37-1/2° STAIR SUPPORT

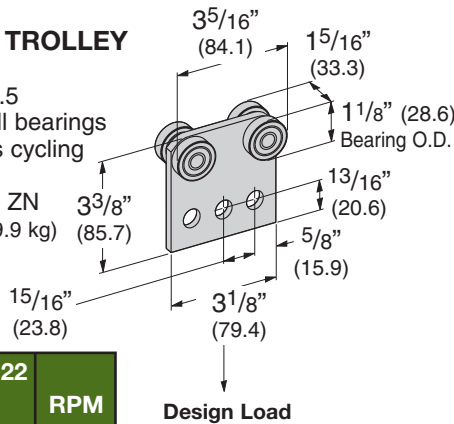
- Standard finishes: ZN, GRN
- Wt./C 206 Lbs. (93.4 kg)



Reference page 72 for general fitting and standard finish specifications.

B376 FOUR BEARING TROLLEY ASSEMBLY

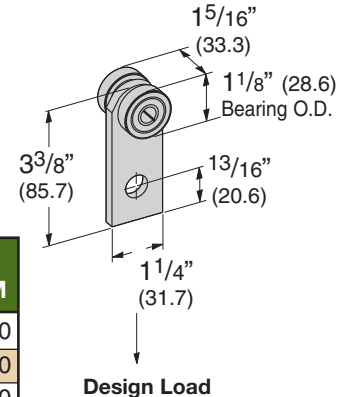
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Standard finishes: ZN
- Wt./C 110 Lbs. (49.9 kg)



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)



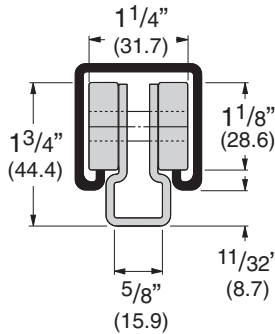
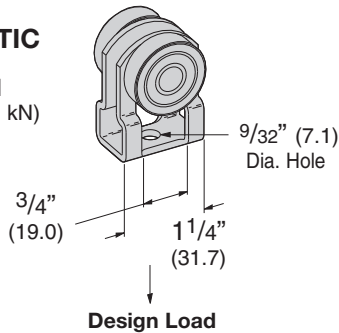
Design Load in B22		
Lbs.	kN	RPM
150	(.67)	@ 600
225	(1.00)	@ 300
437	(1.94)	@ 100

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)

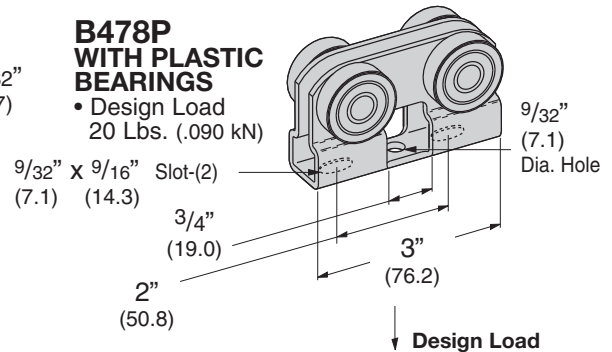


B478 FOUR BEARING LIGHT DUTY TROLLEY ASSEMBLY

- 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)

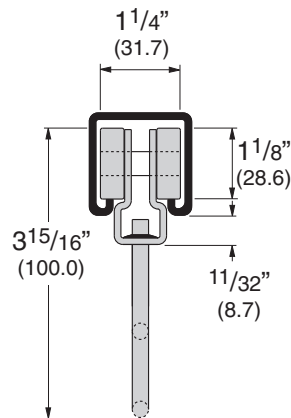
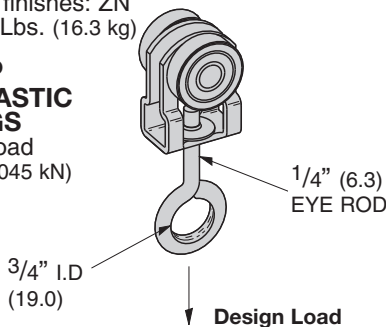


B477H TWO BEARING LIGHT DUTY TROLLEY ASSEMBLY WITH EYE HOOK

- 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)

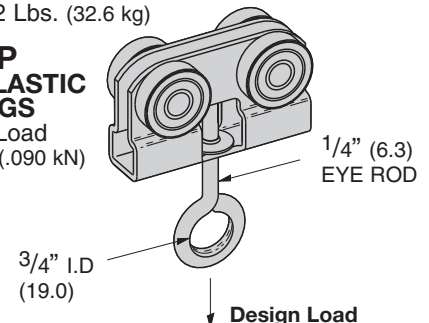


B478H FOUR BEARING LIGHT DUTY TROLLEY ASSEMBLY WITH EYE HOOK

- 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)

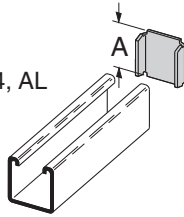


Reference page 72 for general fitting and standard finish specifications.

Miscellaneous Fittings

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

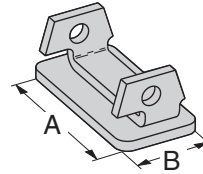
- Material: ASTM A1011 CS Type B
- Standard finishes: ZN, GRN, HDG, SS4, AL



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

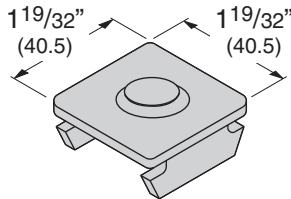
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



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

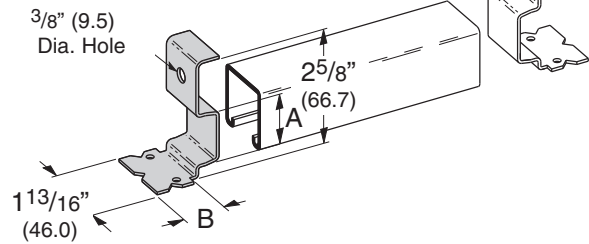
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



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

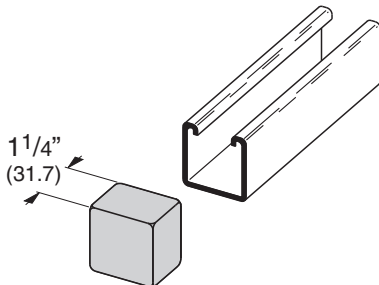
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN



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)

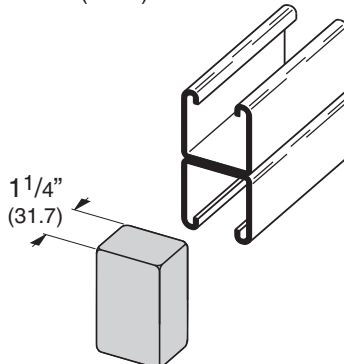
B822 PLASTIC END CAP FOR B22 & B24

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



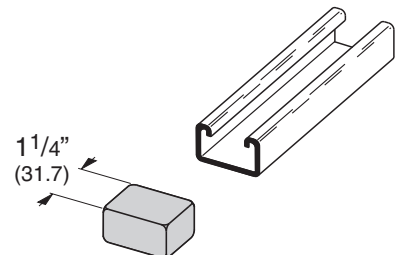
B822A PLASTIC END CAP FOR B22A & B11

- 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)

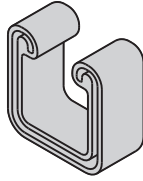


Reference page 72 for general fitting and standard finish specifications.

B823 PROFILE END CAPS

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

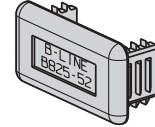
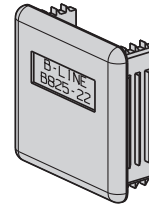
Approx. 3/4" deep
(19.0)



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 72 for general fitting and standard finish specifications.

Beam Clamps

Cooper 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 Cooper 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 or ASTM A653
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 72 for bolt torque.

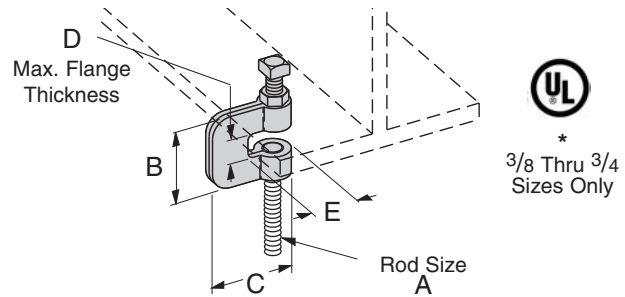
Metric

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



B351L STEEL C-CLAMP WITH LOCKNUT

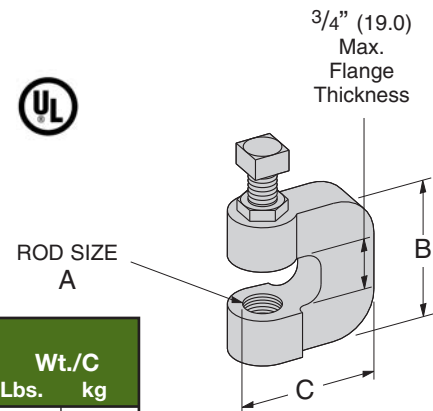
- Safety Factor of 5
- Setscrew and locknut included
- When Retaining Strap is required, order B3362, B3363 or B3365 separately
- Standard finishes: ZN, SS4, PLN



Part Number With Locknut	Rod Size A	B	C	D	E	Design Load Lbs. kg	Wt./C 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

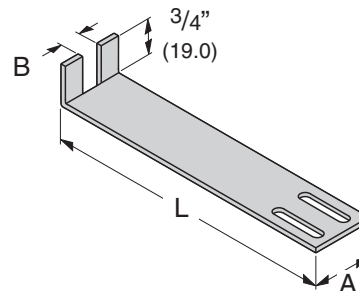
- Safety Factor of 5
- When Retaining Strap is required, order B3363 or B3364 separately
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN



Part Number With Locknut	Rod Size A	B	C	Design Load Lbs. kg	Wt./C Lbs. kg
B3036L-3/8	3/8"-16	1 3/4" (44.4)	1 3/4" (44.4)	300 (0.89)	29 (13.1)
B3036L-1/2	1/2"-13	1 3/4" (44.4)	1 3/4" (44.4)	380 (1.69)	28 (12.7)
B3036L-5/8	5/8"-11	2" (50.8)	1 7/8" (47.6)	530 (2.36)	55 (24.9)
B3036L-3/4	3/4"-10	2" (50.8)	2" (50.8)	530 (2.36)	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: GALV, SS4



Part No.	6" (152.4) Lbs. kg	8" (203.2) Lbs. kg	10" (254.0) Lbs. kg	12" (304.8) Lbs. kg	A	B	For Use With
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)	1 1/16" (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.

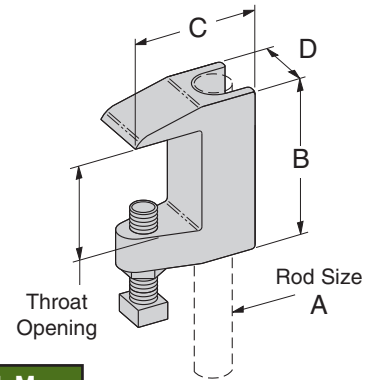
Reference page 112 for general fitting and standard finish specifications.

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
1 1/4" (31.7) For
3/8 & 1/2 Sizes
1 5/16" (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

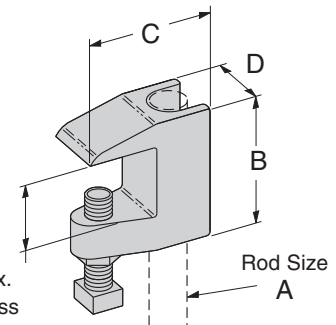
- Safety Factor of 5
- 3/4" (19.0) Max. Flange Thickness
- Setscrew and locknut included
- Material: Malleable iron
- Standard finishes: ZN, PLN

Note:
3/8" & 1/2" Sizes
Are Reversible
Style



*
3/8 & 1/2
Sizes Only

3/4" (19.0) Max.
Flange Thickness



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)	-- --

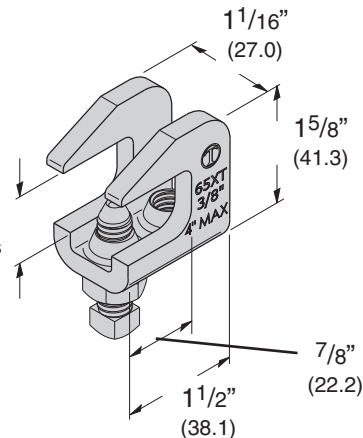
Fig. 65XT REVERSIBLE C-TYPE BEAM CLAMP

- Safety Factor of 5
- 3/4" (19.0) Max. Flange Thickness
- Setscrew and locknut included
- Maximum Pipe Size 4" (100)
- Design Load 610 Lbs. (2.71kN)
- Material: Steel
- Standard finishes: ZN, PLN



Rod Size
3/8"-16

3/4" (19.0) Max.
Flange Thickness



Reference page 112 for general fitting and standard finish specifications.

Fig. 69 (Formerly B-Line B3367)
RETAINING STRAP

- Specify 'L' lengths required
- Minimum recommended return on strap is 1" (25.4)
- Material: Pre-Galvanized Steel
- Standard finishes: GALV

Part No.	Hole Dia. D	For Use With	Wt./C**	
			Lbs.	kg
69-3/8-L	7/16" (30.1)	B3033-3/8 & B3034-3/8 65XT-3/8	23.9	(10.8)
69-1/2-L	9/16" (30.1)	B3033-1/2 & B3034-1/2	23.6	(10.7)
69-5/8-L	11/16" (50.8)	B3033-5/8	23.2	(10.5)
69-3/4-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.

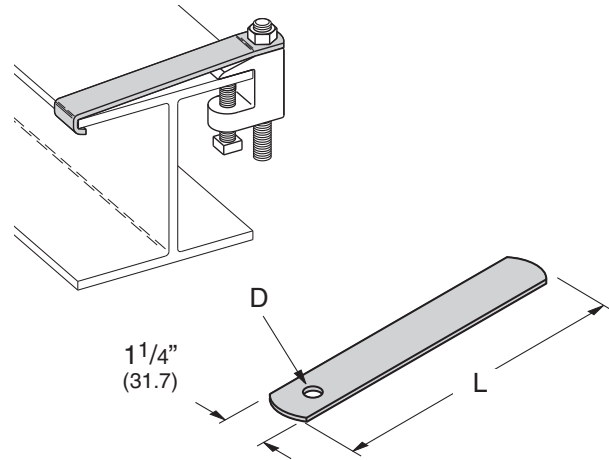
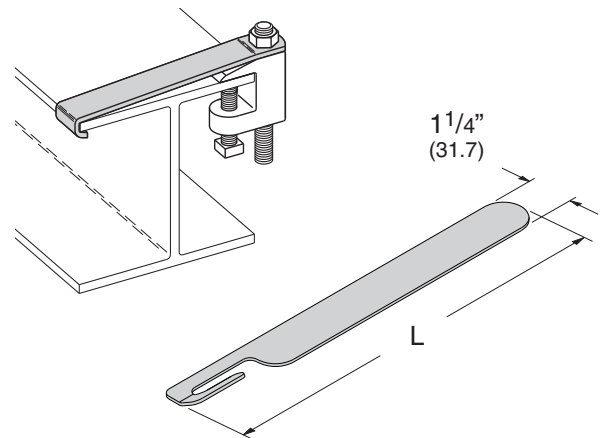


Fig. 69R
RETROFIT RETAINING STRAP

- Specify 'L' lengths required
- Minimum recommended return on strap is 1" (25.4)
- Material: Pre-Galvanized Steel
- Standard finishes: GALV

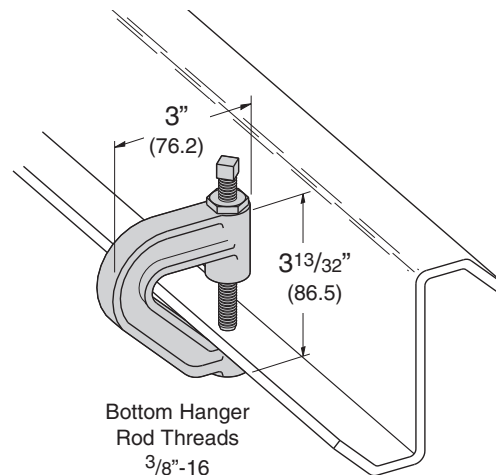
Part No.	Slot Width	For Use With	Wt./C**	
			Lbs.	kg
69R-3/8-L	7/16" (30.1)	B3033-3/8 & B3034-3/8 65XT-3/8	22.9	(10.4)
69R-1/2-L	9/16" (30.1)	B3033-1/2 & B3034-1/2	22.6	(10.2)

** 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.



B3037Z
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

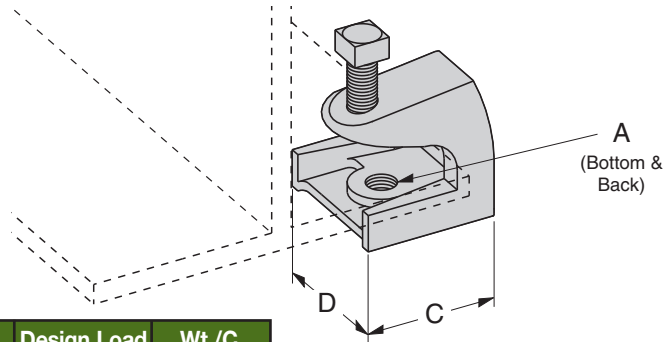


Reference page 112 for general fitting and standard finish specifications.

Beam Clamps

B444 SERIES ROD SUPPORT

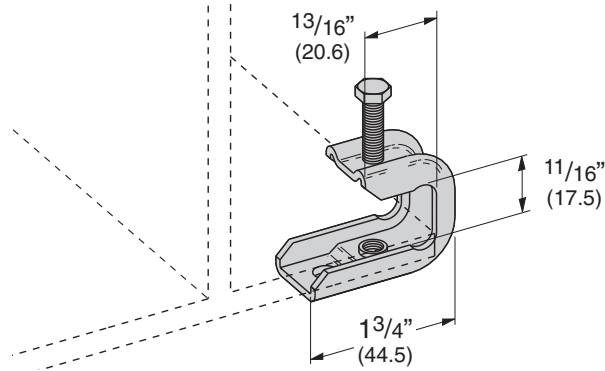
- Safety Factor of 5
- Max. Flange Thickness
3/4" (19.0) for 1/4 & 5/16 sizes
1" (25.4) for 3/8 & 1/2 sizes
- Setscrew included
- Material: Malleable iron
- Standard finish: ZN
Available in HDG with CZ Hardware



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)

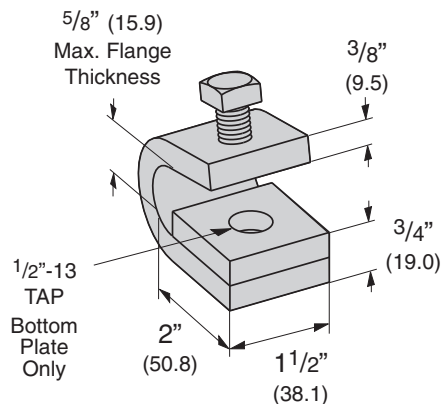
BC442 LIGHT DUTY BEAM CLAMP

- Design Load 75 Lbs. (.33 kN)
- Safety Factor of 5
- 1 1/16" (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)



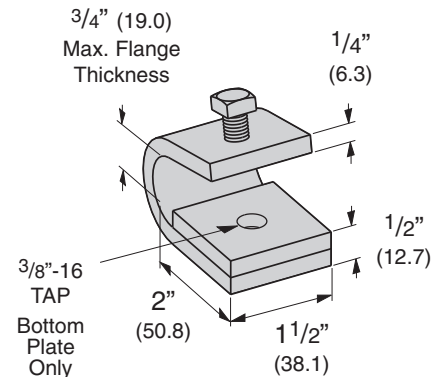
B210 BEAM CLAMP

- 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

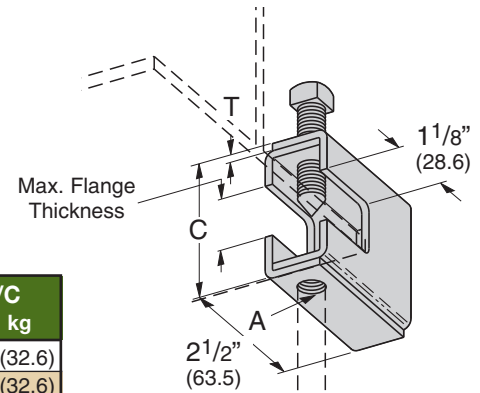
- Design Load 300 Lbs. (1.33 kN)
- Safety Factor of 5
- 3/4" (19.0) Max. Flange Thickness
- 3/8"-16 Setscrew included
- Standard finish: ZN
- Wt./C 60 Lbs. (27.2 kg)



Reference page 112 for general fitting and standard finish specifications.

B303 THRU B309 BEAM CLAMPS

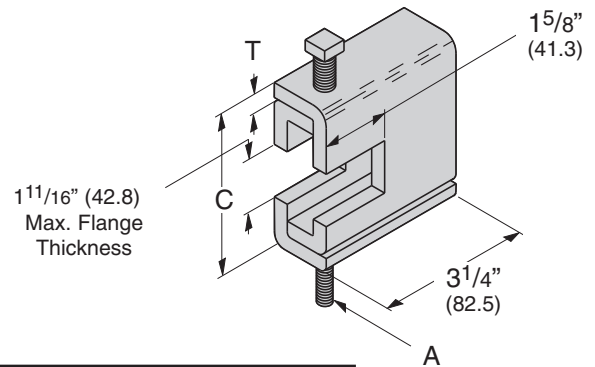
- Safety Factor of 5
- Max. Flange Thickness $\frac{1}{16}$ " (1.6) thru $\frac{7}{8}$ " (22.2)
- Setscrew included
- When Retaining Strap is required, order B312 separately
- Recommended Setscrew Torque: $\frac{3}{8}$ "-16 150 in-lbs. (16.9 N•m)
 $\frac{1}{2}$ "-13 350 in-lbs. (39.5 N•m)
- Standard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



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

B321 SERIES BEAM CLAMPS

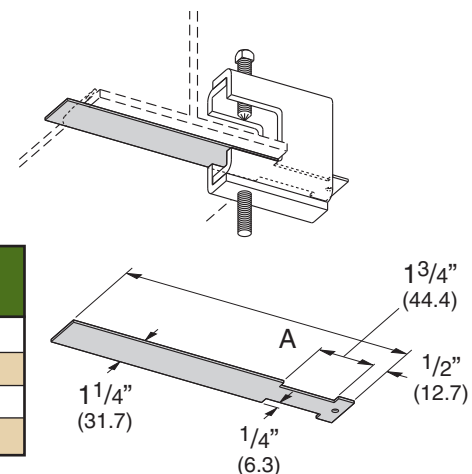
- Safety Factor of 5
- $1\frac{11}{16}$ " (42.8) Max. Flange Thickness
- Setscrew included
- When Retaining Strap is required, order B312 separately
- Recommended Setscrew Torque: $\frac{1}{2}$ "-13 350 in-lbs. (39.5 N•m)
 $\frac{5}{8}$ "-11 700 in-lbs. (79.0 N•m)
- Minimum flange thickness: B321-1 thru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



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

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

- $\frac{3}{4}$ " (19.0) Max. Flange Thickness
- For thicker beams, step up one flange width size
- Material: 14 Gauge (1.9)
- Standard finishes: GALV, HDG



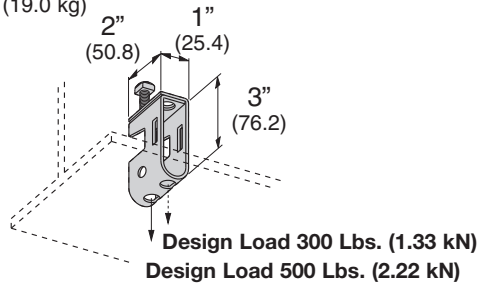
Part No.	For Flange Width	A	Wt./C Lbs. kg
B312-6	6" (152.4)	9" (228.6)	22 (10.0)
B312-9	9" (228.6)	12" (304.8)	30 (13.6)
B312-12	12" (304.8)	15" (381.0)	40 (18.1)
B312-15	15" (381.0)	18" (457.2)	49 (22.2)

Reference page 112 for general fitting and standard finish specifications.

Beam Clamps

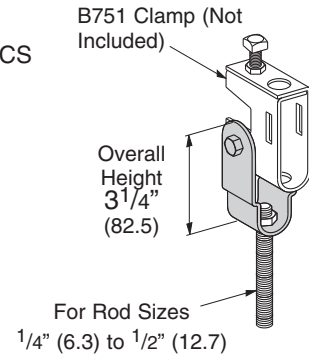
B751 BEAM CLAMP

- 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)



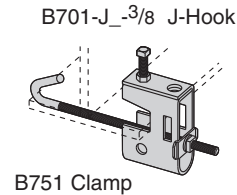
B752 BEAM CLAMP SWIVEL

- 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

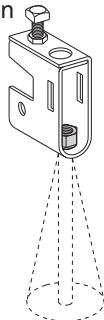
- Includes:
 - 1 pc. B751 Beam Clamp
 - 1 pc. B701 Type J-Hook only
 - 1 pc. SA203-158 Clip
 - 1 pc. 3/8"-16 Hex Nut
- 1/4" (6.3) Diameter J-Hook available upon request
Part Number changes to B751-J_-1/4 and a 1/4-20 Machine Square Nut (MSQN) is used
- Use B753 Swivel Nut (not included)
- Standard finishes: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

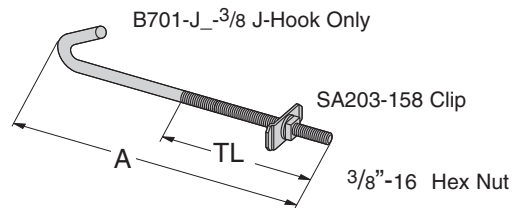
- Provides a full swivel of 15° in any direction
- Specify rod size
- Standard finish: ZN



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



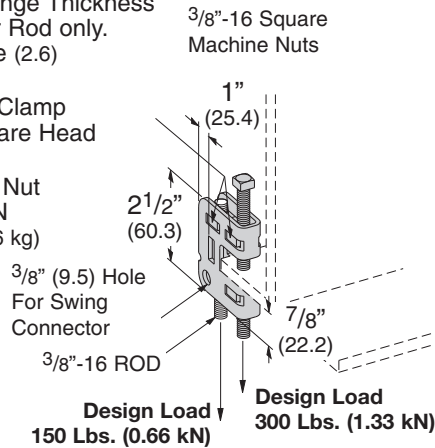
Part No.	A		Thread Length TL		Wt./C	
					Lbs.	kg
B701-J4-3/8	8 3/4"	(222.2)	5 1/2"	(139.7)	26	(11.8)
B701-J6-3/8	11 3/4"	(298.4)	6 1/2"	(165.1)	34	(15.4)
B701-J9-3/8	14 3/4"	(374.6)	6 1/2"	(165.1)	41	(18.6)
B701-J12-3/8	17 3/4"	(450.8)	6 1/2"	(165.1)	48	(21.8)

Reference page 112 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:

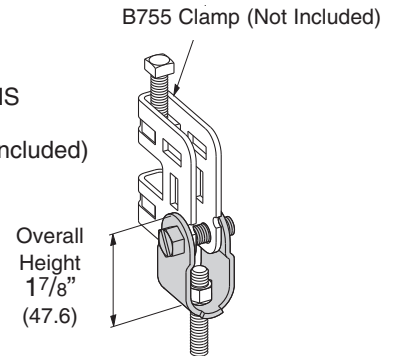
- 1 pc. B755 Beam Clamp
- 1 pc. 3/8" x 2" Square Head Set Screw
- 2 pcs. 3/8" Square Nut
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



B756-3/8 SWING CONNECTOR

- Design Load 150 Lbs. (0.66 kN)
- Safety Factor of 5
- Material: 12 Gauge (2.6)
- Includes:

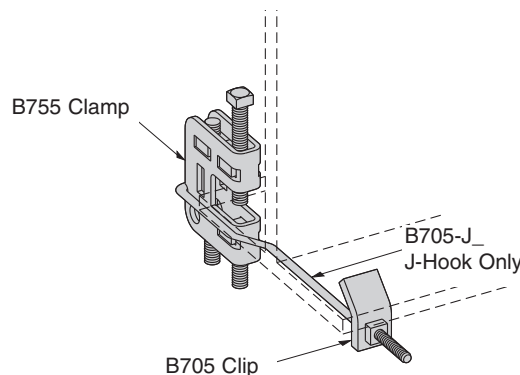
- 1 pc. B756-3/8 Swing Connector Body
- 1 pc. 5/16"-18 x 1 1/4" SHHMS
- 1 pc. 5/16"-18 Square Nut
- Use B753 Swivel Nut (not included)
- Standard finish: ZN
- Wt./C 15 Lbs. (6.8 kg)



B755-3/8-J BEAM CLAMP ASSEMBLY

- Includes:

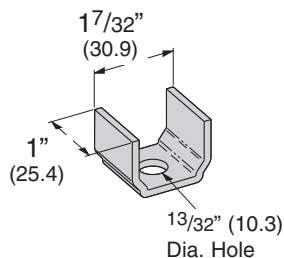
- 1 pc. B755-3/8 Beam Clamp
- 1 pc. B705 Type J-Hook only
- 1 pc. B705 Clip
- 1 pc. 1/4"-20 Square Nut
- Standard finish: ZN



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)

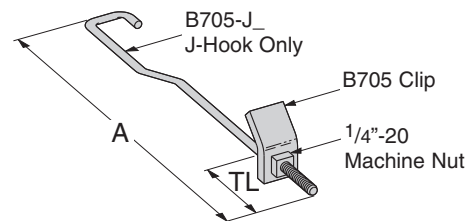
B702 CLEAT

- 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



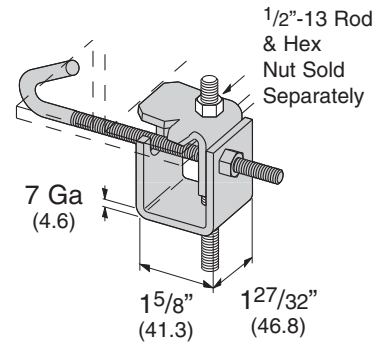
Part No.	A	Thread Length TL		Wt./C	
				Lbs.	kg
B705-J4	7 3/8"	3"	(76.2)	17	(7.7)
B705-J6	11 3/8"	4 1/2"	(114.3)	21	(9.5)
B705-J10	13 3/8"	4 1/2"	(114.3)	23	(10.4)
B705-J12	15 3/8"	4 1/2"	(114.3)	25	(11.3)

Reference page 112 for general fitting and standard finish specifications.

Beam Clamps

B750 SERIES BEAM CLAMP

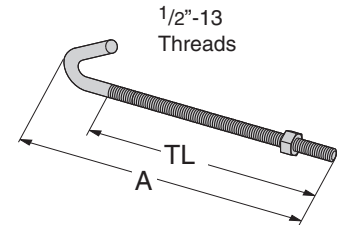
- Safety Factor of 5
- Design Load 500 Lbs. (2.22 kN)
- Recommended Torque:
J-Hook Nut 125 in-lbs. (14.1 N•m)
- Maximum Flange Thickness $\frac{5}{8}$ " (15.9)
- Standard finish: ZN



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

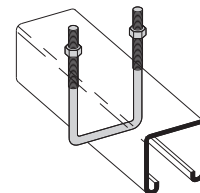
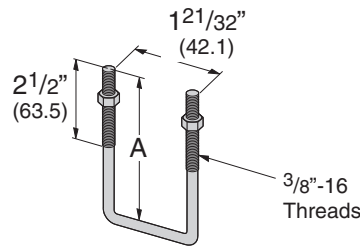
- Includes:
1 pc. J-Bolt
1 pc. Hex Nut
- Maximum Flange Thickness $\frac{5}{8}$ " (15.9)
- Standard finish: ZN



Part No.	A		Thread Length TL	Wt./C	
				Lbs.	kg
B700-J4	8 1/2"	(215.9)	6 3/4"	44	(19.9)
B700-J6	11 1/2"	(292.1)	9 3/4"	53	(24.0)
B700-J9	14 1/2"	(368.3)	12 3/4"	63	(28.6)
B700-J12	17 1/2"	(444.5)	15 3/4"	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

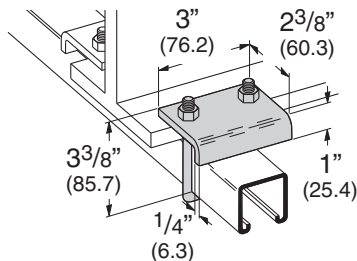


Part No.	A		Channel Size	Wt./C	
				Lbs.	kg
B500-3-3/8	3 3/8"	(85.7)	1 5/8" x 1 5/8"	25	(11.3)
B500-5	5"	(127.0)	3 1/4" x 1 5/8"	33	(14.9)

Reference page 112 for general fitting and standard finish specifications.

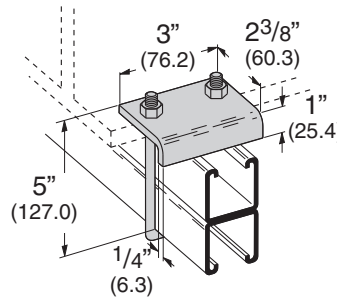
B441-22 BEAM CLAMP

- 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)



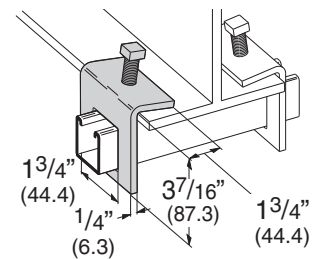
B441-22A BEAM CLAMP

- 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)



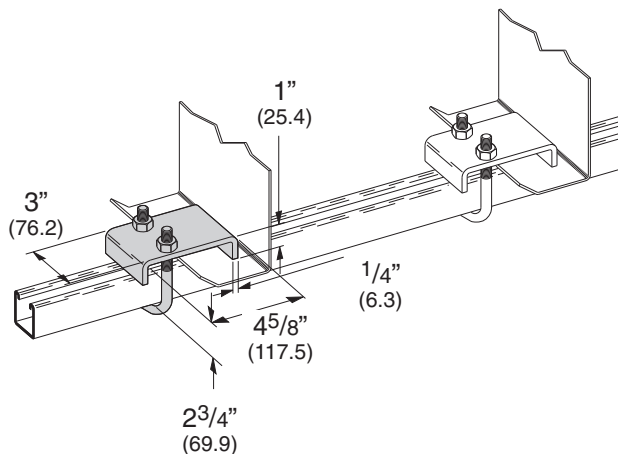
B314 BEAM CLAMP

- 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)



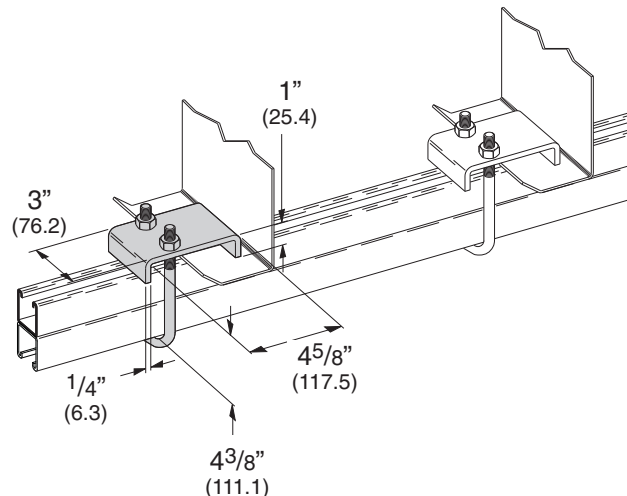
B441Z-22 BEAM CLAMP

- 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)

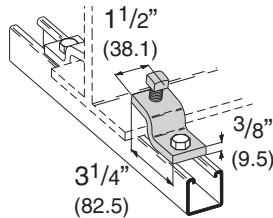


Reference page 112 for general fitting and standard finish specifications.

Beam Clamps

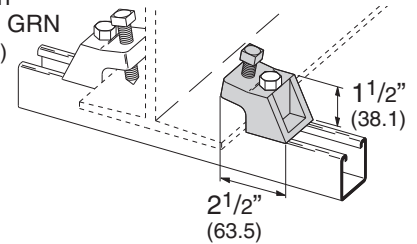
B211 ZEE BEAM CLAMP

- 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)



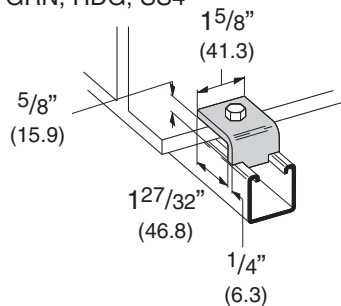
B213 I-BEAM CLAMP

- 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)



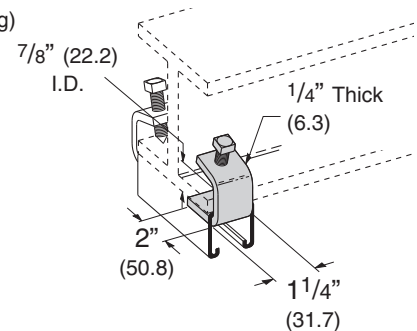
B355 BEAM CLAMP

- 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)



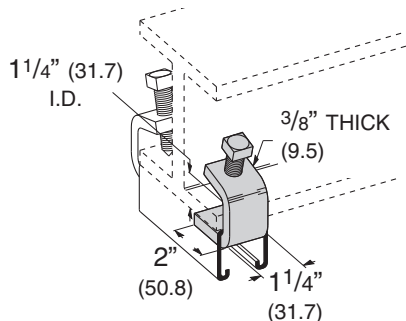
B212-1/4 I-BEAM CLAMP

- 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)



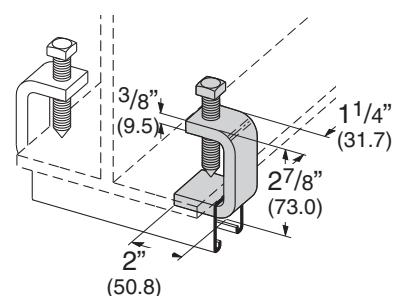
B212-3/8 I-BEAM CLAMP

- 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

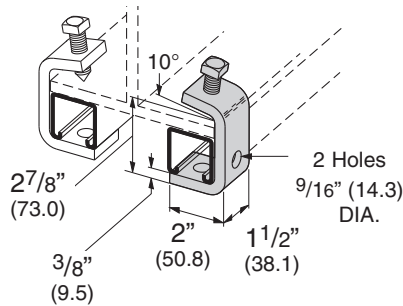
- Design Load 900 Lbs. (4.00 kN) when used in pairs
- Safety Factor of 5
- 2 1/8" (54.0) Max. Flange Thickness
- 1/2"-13 x 2" Setscrew included
- Sold in pieces
- Standard finish: ZN
- Wt./C 82 Lbs. (37.2 kg)



Reference page 112 for general fitting and standard finish specifications.

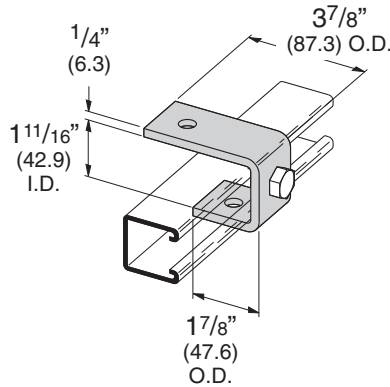
B427 BEAM CLAMP

- 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)



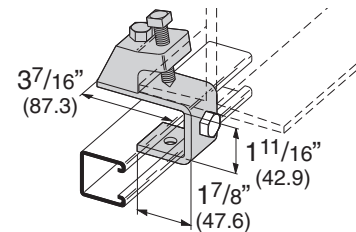
B405 SUSPENSION MEMBER

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



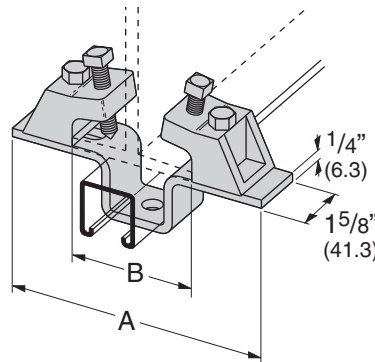
B405A SUSPENSION MEMBER WITH BEAM CLAMP

- 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

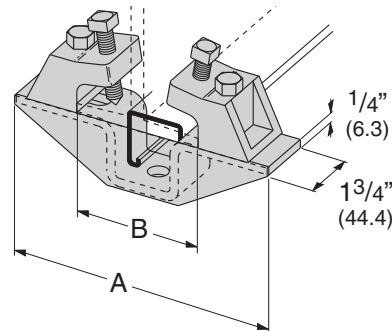
- Safety Factor of 5
- 7/8" (22.2) Max. Flange Thickness
- Includes:
 - 1 pc. B333 Slotted U-Support
 - 2 pcs. B213 I-Beam Clamp
 - 2 pcs. 1/2"-13 x 2 1/2" HHCS
 - 2 pcs. 1/2"-13 Hex Nuts
- Material: Malleable iron
- Standard finishes: ZN, GRN



Part No.	A	For Flange Width B	Design Load Lbs. kN	Wt./C 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



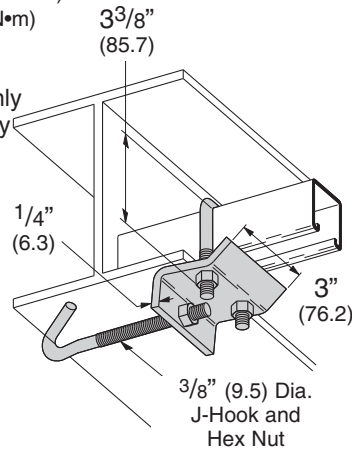
Part No.	A	For Flange Width B	Design Load Lbs. kN	Wt./C Lbs. kg
B602A	7 1/4" (184.1)	2 3/8"-4 1/2" (60.3-114.3)	1200 (5.34)	365 (165.1)
B602B	8 1/2" (215.9)	3 3/4"-5 3/4" (95.2-146.0)	1200 (5.34)	383 (173.7)
B602C	10 3/8" (263.5)	5 5/8"-7 5/8" (142.9-193.7)	1200 (5.34)	408 (185.0)

Reference page 112 for general fitting and standard finish specifications.

Beam Clamps

B760-22 SERIES BEAM CLAMP

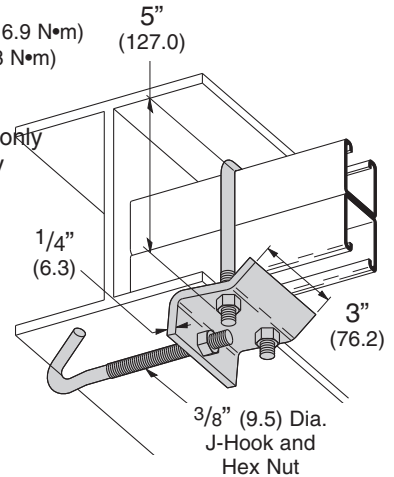
- 1" (25.4) Max. Flange Thickness
- For use with 1³/₁₆" (20.6) to 1⁵/₈" (41.3) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
J-Hook Nut 60 in-lbs. (6.8 N•m)
- Includes:
1 pc. B760 Plate
1 pc. B701 Type J-Hook only
1 pc. B500-3³/₈" U-Bolt only
3 pcs. 3³/₈"-16 Hex Nuts
- Standard 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

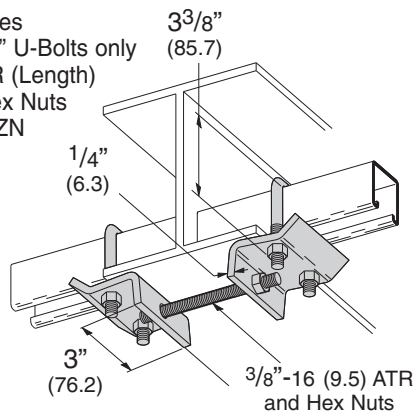
- 1" (25.4) Max. Flange Thickness
- For use with 1⁵/₈" (41.3) to 3¹/₄" (82.5) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
J-Hook Nut 60 in-lbs. (6.8 N•m)
- Includes:
1 pc. B760 Plate
1 pc. B701 Type J-Hook only
1 pc. B500-5" U-Bolt only
3 pcs. 3³/₈"-16 Hex Nuts
- Standard finish: 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

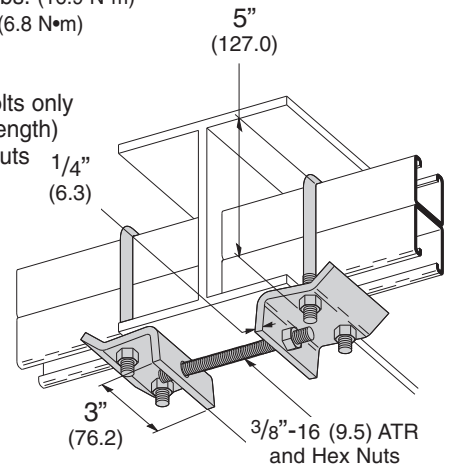
- 1" (25.4) Max. Flange Thickness
- For use with 1³/₁₆" (20.6) to 1⁵/₈" (41.3) high channel
- Recommended Torques:
U-Bolt Nuts 150 in-lbs. (16.9 N•m)
ATR Nuts 60 in-lbs. (6.8 N•m)
- Includes:
2 pcs. B700 Plates
2 pcs. B500-3³/₈" U-Bolts only
1 pc. 3³/₈"-16 ATR (Length)
6 pcs. 3³/₈"-16 Hex Nuts
- Standard finish: ZN



Part No.	For Flange Width		ATR Length		Wt./C	
					Lbs.	kg
B761-22-4	4"-5 ⁷ / ₈ "	(101.6-149.2)	4"	(101.6)	202	(91.6)
B761-22-6	6"-8 ⁷ / ₈ "	(152.4-225.4)	6"	(152.4)	206	(93.4)
B761-22-9	9"-11 ⁷ / ₈ "	(228.6-301.6)	9"	(228.6)	214	(97.0)
B761-22-12	12"-14 ⁷ / ₈ "	(304.8-377.8)	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. 3³/₈"-16 ATR (Length)
6 pcs. 3³/₈"-16 Hex Nuts
- Standard finish: ZN

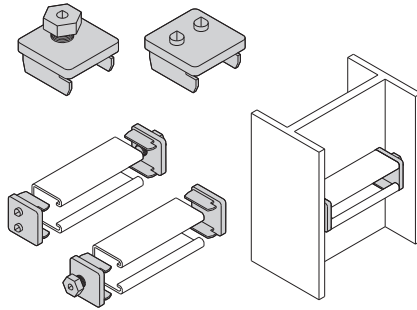


Part No.	For Flange Width		ATR Length		Wt./C	
					Lbs.	kg
B761-22A-4	4"-5 ⁷ / ₈ "	(101.6-149.2)	4"	(101.6)	216	(98.0)
B761-22A-6	6"-8 ⁷ / ₈ "	(152.4-225.4)	6"	(152.4)	220	(99.8)
B761-22A-9	9"-11 ⁷ / ₈ "	(228.6-301.6)	9"	(228.6)	228	(103.4)
B761-22A-12	12"-14 ⁷ / ₈ "	(304.8-377.8)	12"	(304.8)	235	(106.6)

Reference page 112 for general fitting and standard finish specifications.

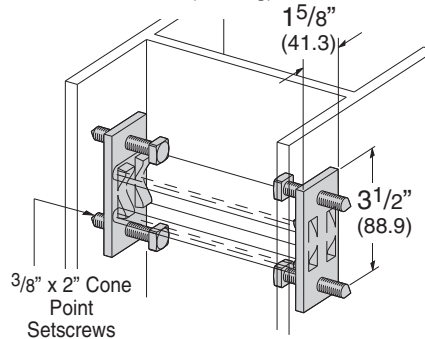
B614 COLUMN SUPPORT FOR B22

- 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)



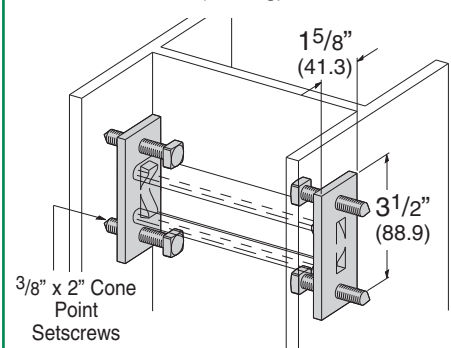
B613 COLUMN SUPPORT FOR B22

- 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

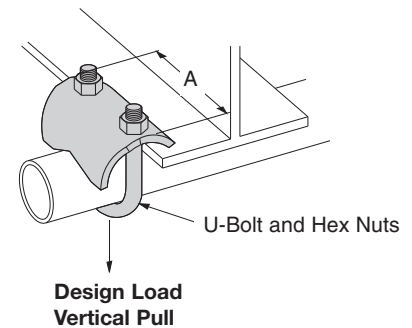
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B52 and B54 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



B422 SERIES RIGHT ANGLE CLAMP

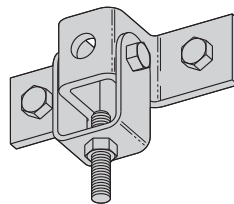
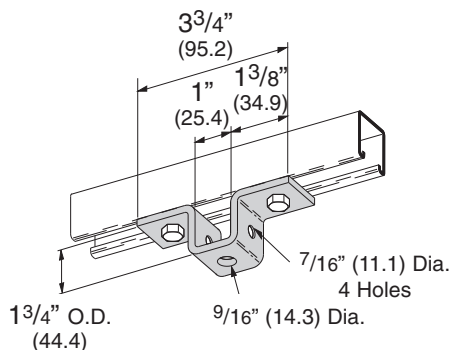
- Safety Factor of 5
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, SS4

Part No.	Conduit Size		A		Design Load Vertical Pull		Wt./C	
					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

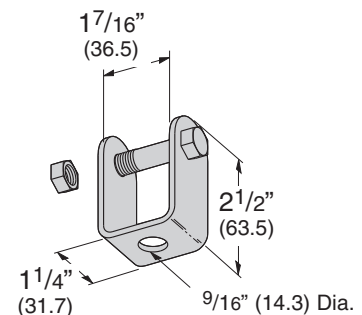
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, GRN
- Wt./C 51 Lbs. (23.1 kg)



- 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 112 for general fitting and standard finish specifications.

Pipe/Conduit Clamps & Hangers

Cooper 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 Cooper 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 or ASTM A653
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 72 for bolt torque.

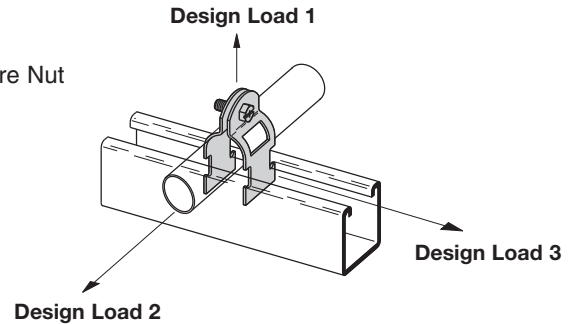
Metric

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

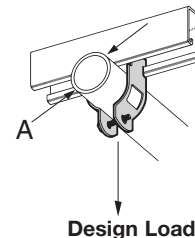


Part No.	Nominal Size	Material Thickness	O.D. Size Range	Alternate For Clamp No.'s	Design Load 1		Design Load 2		Design Load 3		Wt./C	
					Lbs.	kN	Lbs.	kg	Lbs.	kg	Lbs.	kg
B2207	3/8" (10)	16 Ga. (1.5)	.557-.706 (14.2-17.9)	B2000, B2001, B2026	400	(1.78)	50	(.22)	50	(.22)	9	(4.1)
B2208	1/2" (15)	16 Ga. (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)

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 Rigid or EMT Conduit Size		Wt./C	
			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)



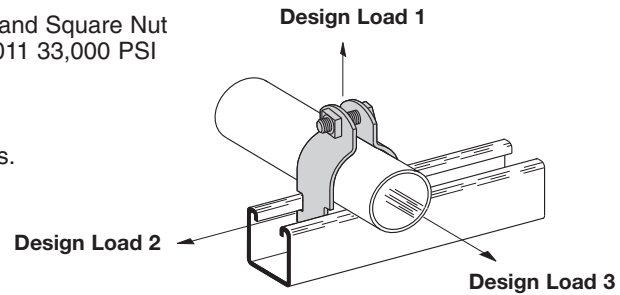
Reference page 126 for general fitting and standard finish specifications.

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 2¹/₂" 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 126 for general fitting and standard finish specifications.

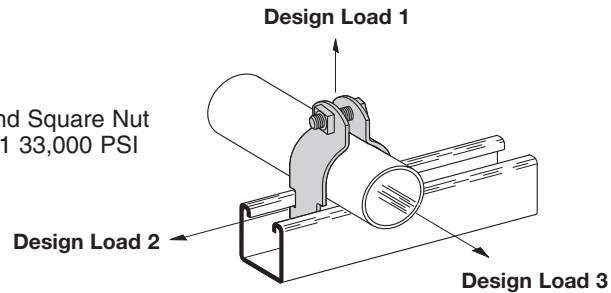
B2000 SERIES PVC CLAMPS

- 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	B2003
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. 130-131 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. 130-131 for corresponding clamp load data.

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

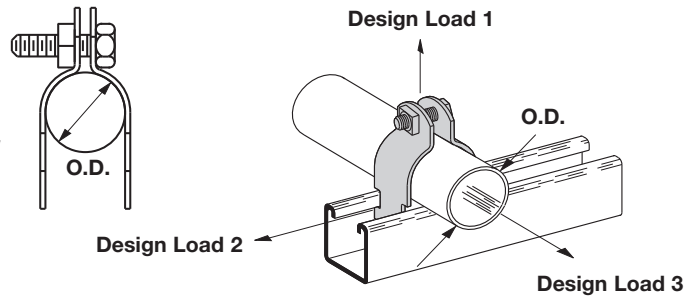
Part No.	Tubing Size	O.D. Size		Material Thickness	Design Load 1		Design Load 2		Design Load 3		Wt./C	
		In.	(mm)		Lbs.	kN	Lbs.	kg	Lbs.	kg	Lbs.	kg
B2024DCU	1/4"	.375	(9.5)	16 Ga. (1.5)	400	(1.78)	50	(.22)	50	(.22)	8	(3.6)
B2025DCU	3/8"	.500	(12.7)	16 Ga. (1.5)	400	(1.78)	50	(.22)	50	(.22)	9	(4.1)
B2026DCU	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 126 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



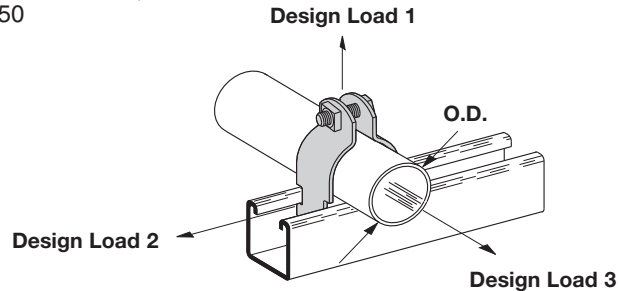
O.D. CLAMPS

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)
B2008	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 126 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

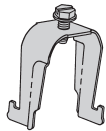
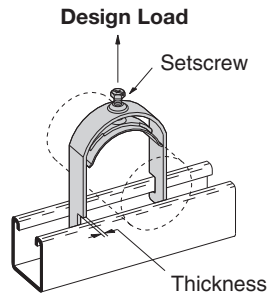
Part No.	O.D. Size (in.)	Hardware Size	Material Gauge Thickness	Design Load 1 Lbs.	Design Load 1 kN	Design Load 2 Lbs.	Design Load 2 kN	Design Load 3 Lbs.	Design Load 3 kN	Wt./C Lbs.	Wt./C kg
B2059	4 ³ / ₄ " (120.6)	5/16"-18	11 (3.0)	1000	(4.45)	200	(.89)	150	(.67)	68	(30.8)
B2060	4 ⁷ / ₈ " (123.8)	5/16"-18	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 126 for general fitting and standard finish specifications.

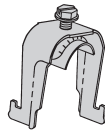
Pipe Clamps

B1508 THRU B1564S CONDUIT/STRUT CLAMPS

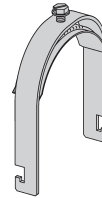
- Safety Factor of 3
- Clamps without saddles are not recommended for flexible conduit or cable
- All Sizes Include:
1/4"-20 Slotted Hex Head Machine Screw
- Standard finish: ZN



B1508 THRU B1520



B1508S THRU B1524S



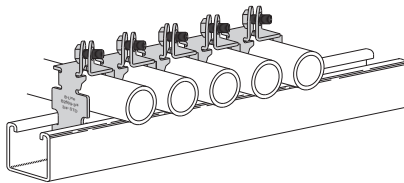
B1532S THRU B1564S

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 126 for general fitting and standard finish specifications.

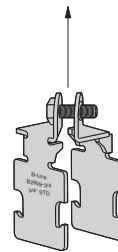
B2601 THRU B2610 TWIST EAR® PIPE CLAMP

- 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

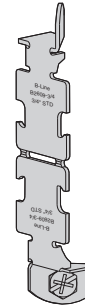


Allows for multiple clamps to be used in succession, with easier access than other pipe clamps.

Design Load



Break-apart - break in the middle, bolt the ends together.

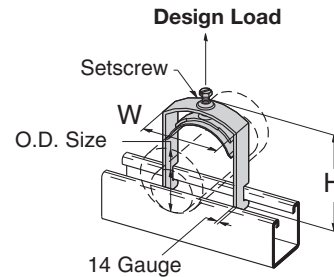


No loose pieces. One piece break apart with screw retainer and thread impressions.

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



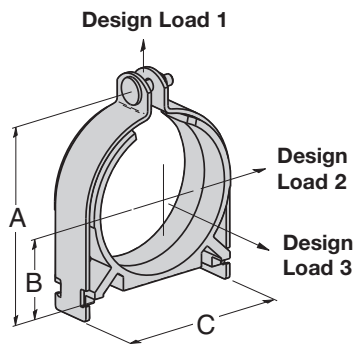
Part No.	O.D. Size		Height H		Width W		Design Load		Wt./C.	
	In.	mm	In.	mm	In.	mm	Lbs.	kN	Lbs.	kg
BP081SS	.250-.840	(6.4-21.3)	1.86	(47.2)	0.87	(22.1)	300	(1.33)	9.0	(4.1)
BP110SS	.810-1.100	(20.6-28.0)	2.18	(55.4)	1.19	(30.2)	300	(1.33)	12.0	(5.4)
BP135SS	.850-1.350	(21.6-34.8)	2.25	(57.2)	1.38	(35.1)	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 126 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



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)

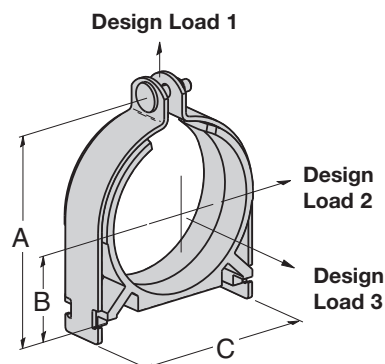
Catalog Number	Design Load 1		Design Load 2		Design Load 3	
	Lbs.	kN	Lbs.	kN	Lbs.	kN
BVT025	400	(1.78)	50	(0.22)	50	(0.22)
BVT037	400	(1.78)	50	(0.22)	50	(0.22)
BVT050	400	(1.78)	50	(0.22)	50	(0.22)
BVT062	400	(1.78)	50	(0.22)	50	(0.22)
BVT075	600	(2.67)	75	(0.33)	75	(0.33)
BVT087	600	(2.67)	75	(0.33)	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 126 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 lbs. kg	
					A		B		C			
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 126 for general fitting and standard finish specifications.

Armafix™ 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

3/4" Wall Insulation Thickness

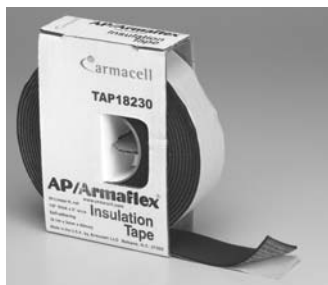
Assembly Part No.	Insert Only Part No.	Pipe/Copper/OD Size	Hanger Size*
IPH03834	IPH03834WO	3/8" O.D.	2"
IPH01234	IPH01234WO	1/2" O.D.	2"
IPH05834	IPH05834WO	5/8" O.D.	2"
IPH03434	IPH03434WO	3/4" O.D.	2"
IPH07834	IPH07834WO	7/8" O.D.	2 1/2"
IPH11834	IPH11834WO	3/4" IPS & 1 1/8" O.D.	2 1/2"
IPH13834	IPH13834WO	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

ARMAFLEX® INSULATION TAPE

- 30 ft. (9.14 M) roll



Armaflex® is a registered trademark of Armacell.

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"

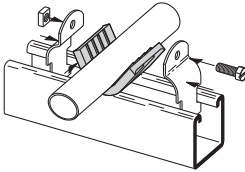
* Recommended pipe hanger size for insulation thickness shown. (Order hanger separately)

Reference page 126 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)



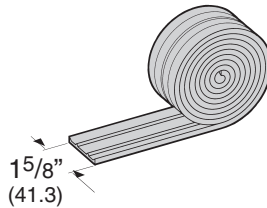
FOR RIGID CONDUIT OR IRON PIPE

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

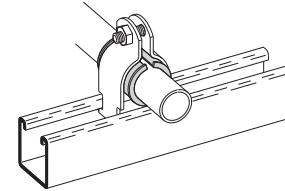
Vibra Cushion™ is designed for use with refrigeration lines, HVAC, copper tubing, glass pipe and hydraulic lines. It provides an energy-absorption barrier between the lines and the mounting material and remains flexible thru its entire service range of -75°F (-60°C) to +375°F (+199°C).

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

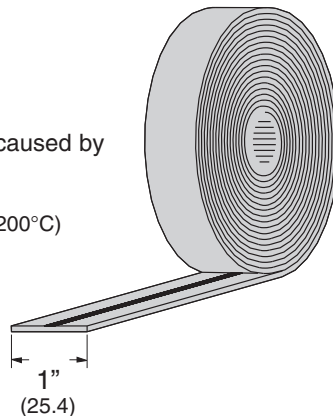


FOR COPPER TUBING TYPE L & K

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)	B2008
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

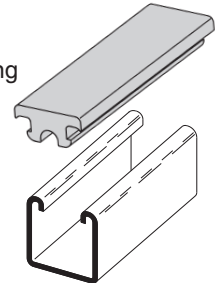
- Non-adhesive rubber tape
- Fuses to itself
- Water resistant
- Ideal Isolation Material
- Prevents galvanic reaction caused by dissimilar metal contact
- Temperature Range
-140°F (-60°C) to +395°F (+200°C)



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



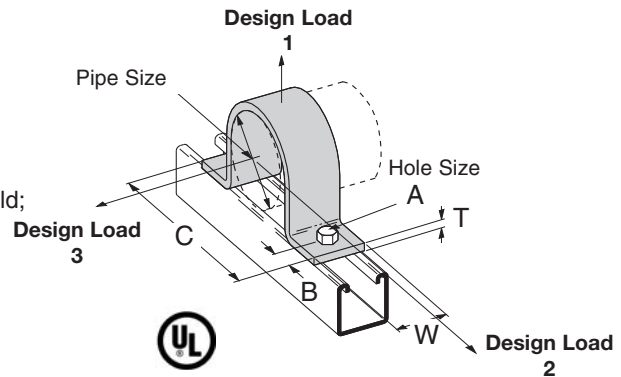
Part No.	Max. Load Lbs. per Lineal In.	Max. Load kg/25.4 mm	Length	Std. Pkg.	Wt. Each Lbs.	Wt. Each kg
BVS-12	40	(18.1)	12" (304.8)	25	.46	(.21)
BVS-120	40	(18.1)	120" (3048.0)	25	4.60	(2.08)

Reference page 126 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" - 12", ASTM A1018 33,000 PSI min. yield;
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 1/16"	(17.4)	14"	(355.6)	1/4"	(6.3)	1 5/8"	(41.3)
B2400-12	12"	(300)	9/16"	(14.3)	1 1/16"	(17.4)	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)

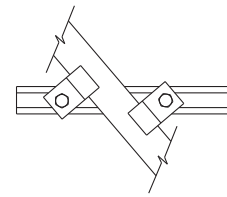
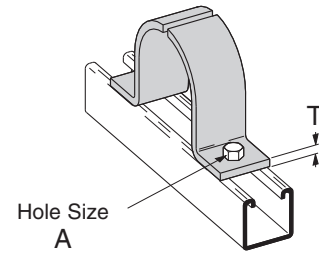
Part No.	Design Load 1		Design Load 2		Design Load 3		Wt./C	
	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kg
B2400-1/2	600	(2.67)	150	(.67)	105	(.47)	23	(10.4)
B2400-3/4	600	(2.67)	150	(.67)	105	(.47)	26	(11.8)
B2400-1	600	(2.67)	150	(.67)	120	(.53)	31	(14.0)
B2400-1 1/4	600	(2.67)	150	(.67)	120	(.53)	36	(16.3)
B2400-1 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 126 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

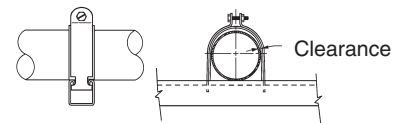
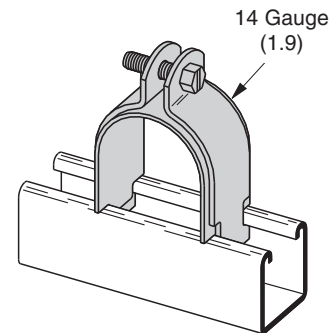
Part No.	Pipe Size		A		T		Wt./C	
							Lbs.	kg
B437-1/2	1/2"	(15)	5/16"	(7.9)	10 Ga.	(3.4)	22	(10.0)
B437-3/4	3/4"	(20)	5/16"	(7.9)	10 Ga.	(3.4)	26	(11.8)
B437-1	1"	(25)	5/16"	(7.9)	10 Ga.	(3.4)	30	(13.6)
B437-1 1/4	1 1/4"	(32)	5/16"	(7.9)	10 Ga.	(3.4)	35	(15.9)
B437-1 1/2	1 1/2"	(40)	5/16"	(7.9)	10 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

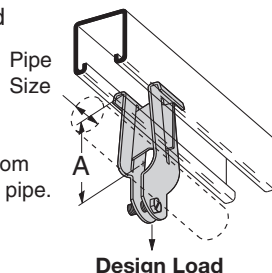
- Copper tubing sizes available - B2417CT Series
- Standard finish: ZN

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.

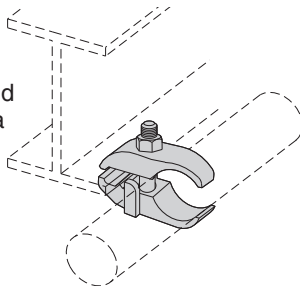
Part No.	Pipe Size		A		Material Thickness	Design Load		Wt./C	
						Lbs.	kN	Lbs.	kg
B2070	3/8"	(10)	1 11/16"	(42.9)	16 Ga. (1.5)	300	(1.33)	24	(10.9)
B2071	1/2"	(15)	1 3/4"	(44.4)	16 Ga. (1.5)	300	(1.33)	26	(11.8)
B2072	3/4"	(20)	1 7/8"	(47.6)	14 Ga. (1.9)	300	(1.33)	30	(13.6)
B2073	1"	(25)	2"	(50.8)	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 126 for general fitting and standard finish specifications.

Pipe Clamps

B670 SERIES PARALLEL PIPE CLAMP

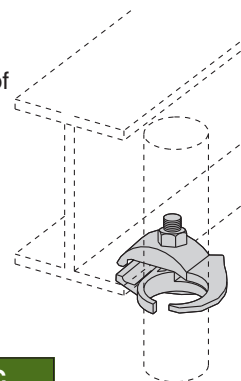
- Designed to support pipe or rigid conduit parallel to the edge of a beam or angle iron
- Hardware included
- Material: Malleable Iron
- Standard finish: HDG



Part Number	Pipe or Conduit Size		Wt./C Lbs.	kg
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

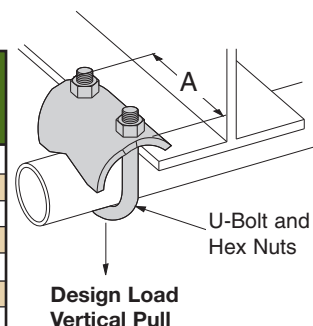


Part Number	Pipe or Conduit Size		Wt./C Lbs.	kg
B671-1/2	1/2"	(15)	67	(30.4)
B671-3/4	3/4"	(20)	71	(32.2)
B671-1	1"	(25)	85	(38.5)
B671-1 1/4	1 1/4"	(32)	91	(41.3)
B671-1 1/2	1 1/2"	(40)	115	(52.1)
B671-2	2"	(50)	135	(61.2)
B671-2 1/2	2 1/2"	(65)	183	(83.0)
B671-3	3"	(80)	230	(104.3)

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 Lbs.	kg	Wt./C 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)

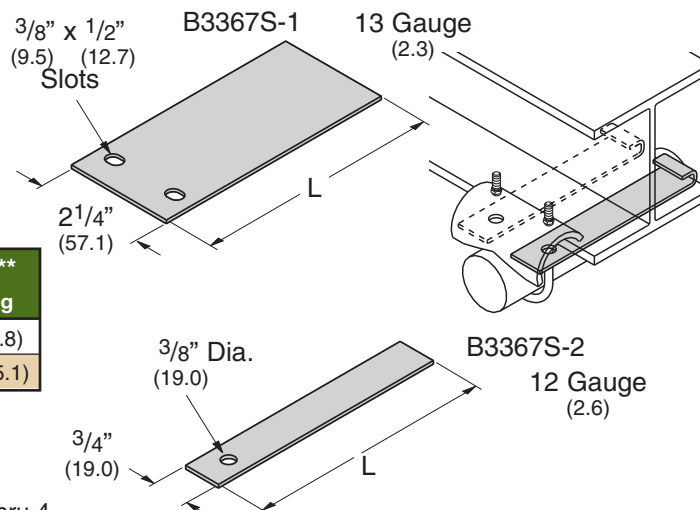


B3367S RETAINING STRAP

- 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)

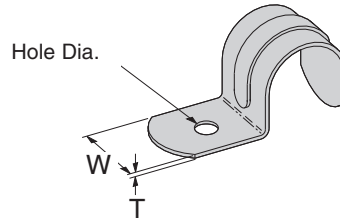
** Wt./C based on 6" (152.4) length. For each additional inch in strap length add the following to the Wt./C.
 For B3367S-1 add 5.7 Lbs (2.6 kg)
 For B3367S-2 add 2.2 Lbs (1.0 kg)
 Note: Use B3367-3/8 retaining strap (page 102) for B422-2 thru 4



Reference page 126 for general fitting and standard finish specifications.

B2301 SERIES ONE HOLE EMT STRAP

- Standard finish: ZN

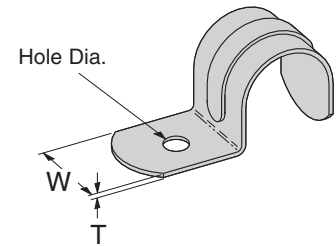


Part No.	Conduit Size		T		W		Hole Dia.		Wt./C	
									Lbs.	kg
B2301-1/2	1/2"	(15)	.050	(1.3)	3/4"	(19.0)	9/32"	(7.1)	2.4	(1.1)
B2301-3/4	3/4"	(20)	.050	(1.3)	7/8"	(22.2)	9/32"	(7.1)	4.2	(1.9)
B2301-1	1"	(25)	.050	(1.3)	1"	(25.4)	9/32"	(7.1)	8.3	(3.7)
B2301-1 1/4	1 1/4"	(32)	.065	(1.6)	1 1/4"	(31.7)	9/32"	(7.1)	11.0	(5.0)
B2301-1 1/2	1 1/2"	(40)	.090	(2.3)	1"	(25.4)	1 1/32"	(8.7)	14.8	(6.7)
B2301-2	2"	(50)	.090	(2.3)	1 1/4"	(31.7)	1 3/32"	(10.3)	21.6	(9.8)

B2302 SERIES ONE HOLE RIGID CONDUIT/PIPE STRAP

- Standard finish: ZN

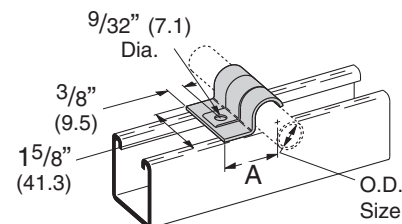
Part No.	Conduit/Pipe Size		T		W		Hole Dia.		Wt./C	
									Lbs.	kg
B2302-1/4	1/4"	(6)	.045	(1.1)	5/8"	(15.9)	1 3/64"	(5.1)	1.4	(.6)
B2302-3/8	3/8"	(10)	.050	(1.3)	3/4"	(19.0)	9/32"	(7.1)	2.4	(1.1)
B2302-1/2	1/2"	(15)	.050	(1.3)	7/8"	(22.2)	9/32"	(7.1)	3.3	(1.5)
B2302-3/4	3/4"	(20)	.050	(1.3)	7/8"	(22.2)	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)	2 1/64"	(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 1/4"	(6.3)	1 1/4"	(31.7)	.622	(15.8)	96.0	(43.5)
B2302-4	4"	(100)	1 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)

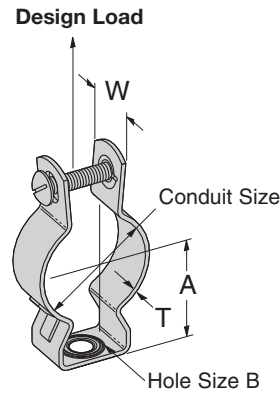


Reference page 126 for general fitting and standard finish specifications.

Pipe Clamps

BL1400 SERIES CONDUIT HANGER

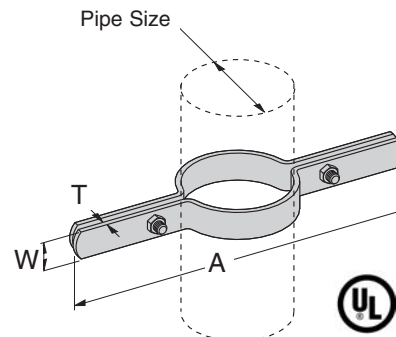
- Safety Factor of 3
- Unless noted all sizes fit both rigid (R) and thinwall (EMT) conduit
- Hardware included
- Standard finishes: ZN, SS4



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)	1 1/32"	(8.7)	16 Ga.	(1.5)	1"	(25.4)	755	(3.36)	17	(7.7)
BL1450	2"	(50)	2 1/16"	(47.6)	1 1/32"	(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)	1 1/32"	(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)	1 1/32"	(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)	1 1/32"	(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)	1 1/32"	(8.7)	16 Ga.	(1.5)	1 1/4"	(31.7)	1410	(6.27)	40	(18.1)

B3373 SERIES RISER CLAMP

- Safety Factor of 3.5
- B3373-3/4 thru B3373-8 are UL listed
- Includes Hex Head Cap Screws and Hex Nuts
- Standard finishes: ZN, PLN

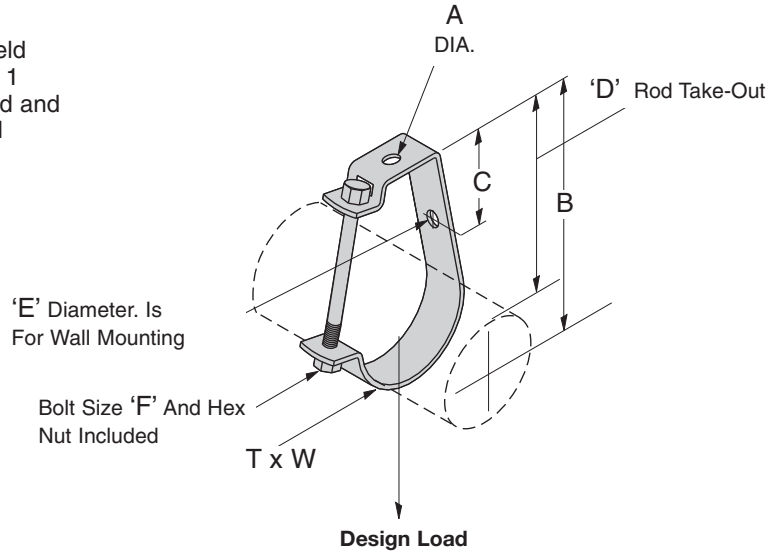
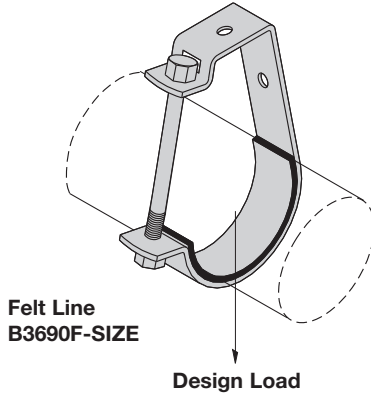


Part No.	Pipe Size		A		Design Load		Wt./C	
					Lbs.	kN	Lbs.	kg
B3373-1/2	1/2"	(15)	9"	(228.6)	255	(1.13)	101	(45.9)
B3373-3/4	3/4"	(20)	9 1/4"	(234.9)	255	(1.13)	105	(47.7)
B3373-1	1"	(25)	9 9/16"	(242.9)	255	(1.13)	109	(49.4)
B3373-1 1/4	1 1/4"	(32)	10"	(254.0)	255	(1.13)	112	(50.9)
B3373-1 1/2	1 1/2"	(32)	10 1/4"	(260.3)	255	(1.13)	113	(51.1)
B3373-2	2"	(40)	10 3/4"	(273.0)	255	(1.13)	165	(75.0)
B3373-2 1/2	2 1/2"	(50)	11 1/4"	(285.7)	390	(1.73)	180	(81.6)
B3373-3	3"	(65)	11 15/16"	(303.2)	530	(2.36)	195	(88.4)
B3373-3 1/2	3 1/2"	(80)	12 3/8"	(314.3)	670	(2.98)	217	(98.5)
B3373-4	4"	(90)	12 7/8"	(327.0)	810	(3.60)	228	(103.5)
B3373-5	5"	(100)	14"	(355.6)	1160	(5.16)	480	(217.7)
B3373-6	6"	(100)	15 3/16"	(385.8)	1570	(6.98)	526	(238.6)
B3373-8	8"	(100)	17 3/4"	(450.8)	2500	(11.12)	957	(434.1)

Reference page 126 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
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)	1 1/16"	(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)	1 1/16"	(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)	1 3/16"	(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)	1 3/16"	(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"

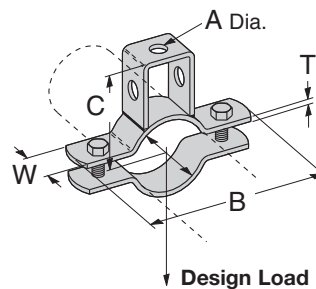
Part No.	T		W		Design Load		Wt./C	
					Lbs.	kN	Lbs.	kg
B3690-1/2	12 Ga.	(2.6)	3/4"	(19.0)	400	(1.78)	20	(9.1)
B3690-3/4	12 Ga.	(2.6)	3/4"	(19.0)	400	(1.78)	23	(10.4)
B3690-1	12 Ga.	(2.6)	3/4"	(19.0)	400	(1.78)	24	(10.9)
B3690-1 1/4	12 Ga.	(2.6)	3/4"	(19.0)	400	(1.78)	27	(12.2)
B3690-1 1/2	12 Ga.	(2.6)	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 126 for general fitting and standard finish specifications.

Pipe Hangers

B386 SERIES SUSPENSION ROD PIPE STRAP

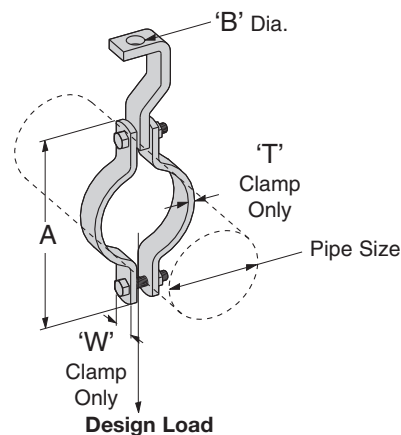
- Safety Factor of 3
- Includes Hex Head Cap Screws and Hex Nuts
- Standard finishes: ZN, GRN



Part No.	Pipe Size		A		B		C		T		W		Design Load		Wt./C	
													Lbs.	kN	Lbs.	kg
B386-3/4	3/4"	(20)	7/16"	(11.1)	35/16"	(84.1)	23/16"	(55.6)	1/8"	(3.2)	1"	(25.4)	730	(3.25)	46	(20.8)
B386-1	1"	(25)	7/16"	(11.1)	33/4"	(95.2)	25/16"	(58.7)	1/8"	(3.2)	1"	(25.4)	730	(3.25)	51	(23.1)
B386-11/4	11/4"	(32)	7/16"	(11.1)	4"	(101.6)	217/32"	(64.3)	1/8"	(3.2)	1"	(25.4)	730	(3.25)	52	(23.6)
B386-11/2	11/2"	(40)	7/16"	(11.1)	45/16"	(109.5)	211/16"	(68.3)	1/8"	(3.2)	1"	(25.4)	730	(3.25)	54	(24.5)
B386-2	2"	(50)	7/16"	(11.1)	51/2"	(139.7)	35/16"	(84.1)	1/4"	(6.3)	1"	(25.4)	730	(3.25)	134	(60.8)
B386-21/2	21/2"	(65)	9/16"	(14.3)	63/8"	(161.9)	31/2"	(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)	37/8"	(98.4)	1/4"	(6.3)	1"	(25.4)	1350	(6.00)	168	(76.2)
B386-31/2	31/2"	(90)	9/16"	(14.3)	79/16"	(192.1)	41/8"	(104.8)	1/4"	(6.3)	1"	(25.4)	1350	(6.00)	197	(89.3)
B386-4	4"	(100)	9/16"	(14.3)	85/8"	(219.1)	43/8"	(111.1)	1/4"	(6.3)	11/4"	(31.7)	1350	(6.00)	270	(122.4)
B386-5	5"	(125)	11/16"	(17.4)	93/4"	(247.6)	53/16"	(131.8)	1/4"	(6.3)	11/4"	(31.7)	2160	(9.61)	308	(139.7)
B386-6	6"	(150)	11/16"	(17.4)	115/8"	(295.3)	61/16"	(154.0)	3/8"	(9.5)	11/2"	(38.1)	2160	(9.61)	609	(276.4)
B386-8	8"	(200)	13/16"	(20.6)	137/8"	(352.4)	71/8"	(181.0)	3/8"	(9.5)	11/2"	(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

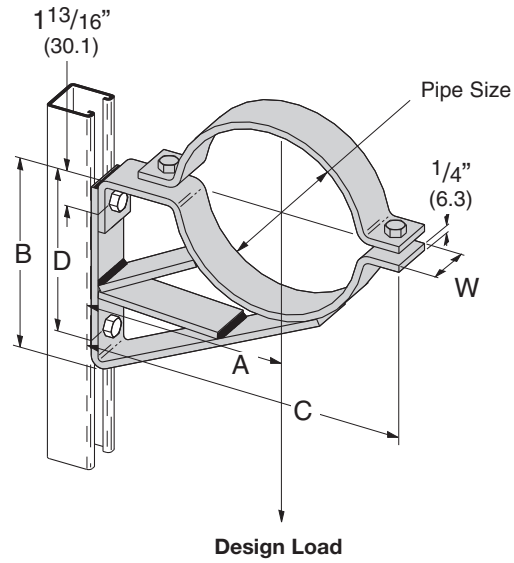


Part No.	Pipe Size		A		B		T		W		Design Load		Wt./C	
											Lbs.	kN	Lbs.	kg
B394-3/4	3/4"	(20)	35/16"	(84.1)	7/16"	(11.1)	1/8"	(3.2)	1"	(25.4)	500	(2.22)	71	(32.2)
B394-1	1"	(25)	33/4"	(95.2)	7/16"	(11.1)	1/8"	(3.2)	1"	(25.4)	500	(2.22)	76	(34.5)
B394-11/4	11/4"	(32)	4"	(101.6)	7/16"	(11.1)	1/8"	(3.2)	1"	(25.4)	500	(2.22)	77	(34.9)
B394-11/2	11/2"	(40)	45/16"	(109.5)	7/16"	(11.1)	1/8"	(3.2)	1"	(25.4)	800	(3.56)	79	(35.8)
B394-2	2"	(50)	51/2"	(139.7)	7/16"	(11.1)	1/4"	(6.3)	1"	(25.4)	1040	(4.62)	166	(75.3)
B394-21/2	21/2"	(65)	63/8"	(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)
B394-31/2	31/2"	(90)	79/16"	(192.1)	9/16"	(14.3)	1/4"	(6.3)	1"	(25.4)	1040	(4.62)	203	(92.1)
B394-4	4"	(100)	85/8"	(219.1)	11/16"	(17.4)	1/4"	(6.3)	11/4"	(31.7)	1040	(4.62)	320	(145.1)
B394-5	5"	(125)	93/4"	(247.6)	11/16"	(17.4)	1/4"	(6.3)	11/4"	(31.7)	1040	(4.62)	353	(160.1)
B394-6	6"	(150)	115/8"	(295.3)	13/16"	(20.6)	3/8"	(9.5)	11/2"	(38.1)	1615	(7.18)	637	(288.9)
B394-8	8"	(200)	137/8"	(352.4)	13/16"	(20.6)	3/8"	(9.5)	11/2"	(38.1)	1615	(7.18)	837	(379.6)

Reference page 126 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 B591-2 1/2
- 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	
B591-2	2"	(50)	4 1/2"	(114.3)	4 1/2"	(114.3)	7 3/16"	(182.6)	3 1/16"	(77.8)	1 5/8"	(41.3)	1235	(5.53)	290	(131.5)
B591-2 1/2	2 1/2"	(65)	5"	(127.0)	5"	(127.0)	7 15/16"	(201.6)	3 9/16"	(90.5)	1 5/8"	(41.3)	1180	(5.29)	330	(149.7)
B591-3	3"	(80)	5 1/2"	(139.7)	5 3/4"	(146.0)	8 3/4"	(222.2)	3 13/16"	(96.8)	1 5/8"	(41.3)	1125	(5.04)	439	(199.1)
B591-3 1/2	3 1/2"	(90)	6"	(152.4)	6 3/4"	(171.4)	9 1/2"	(241.3)	4 9/16"	(115.9)	1 5/8"	(41.3)	1070	(4.79)	490	(222.2)
B591-4	4"	(100)	6 1/2"	(165.1)	6 3/4"	(171.4)	10 1/4"	(260.3)	6 1/16"	(128.6)	1 5/8"	(41.3)	1015	(4.55)	545	(247.2)
B591-5	5"	(125)	7 1/2"	(190.5)	8"	(203.2)	12 1/8"	(308.0)	6 1/16"	(154.0)	1 5/8"	(41.3)	960	(4.30)	666	(302.1)
B591-6	6"	(150)	8"	(203.2)	8 3/4"	(222.2)	13 3/16"	(335.0)	6 13/16"	(173.0)	1 5/8"	(41.3)	905	(4.05)	724	(328.4)
B591-8	8"	(200)	9"	(228.6)	10 1/2"	(266.7)	15 9/16"	(395.3)	8 9/16"	(217.5)	2"	(50.8)	850	(3.81)	1087	(493.0)

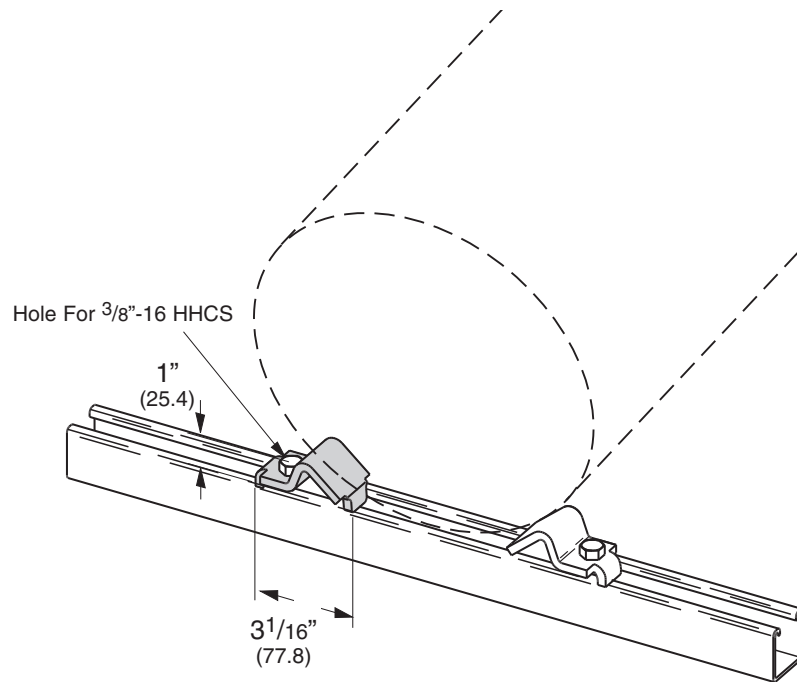
Reference page 126 for general fitting and standard finish specifications.

Pipe Block

B356

PIPE BLOCK-2" (50) TO 8" (200) PIPE

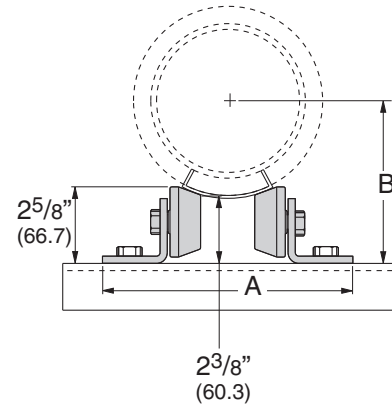
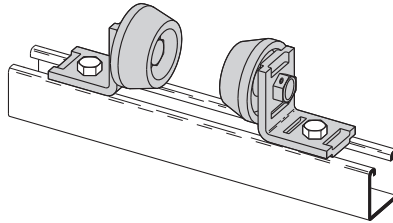
- Required hardware not included:
 - 1 pc. $\frac{3}{8}$ "-16 x 1" Hex Head Cap Screw
 - 1 pc. $\frac{3}{8}$ "-16 Channel Nut
- Material: $\frac{1}{4}$ " (6.3) thick $1\frac{5}{8}$ " (41.3) wide
ASTM A1018 33,000 PSI min. yield
- Standard finish: ZN
- Wt./C 42 Lbs. (19.0 kg) Per Pair



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 in. (mm)													
		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)	—	—
4"	(100)	7 5/8"	(193.7)	9"	(228.6)	9"	(228.6)	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)	12"	(304.8)
6"	(150)	9"	(228.6)	10"	(254.0)	10"	(254.0)	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 in. (mm)													
		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 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)	—	—	—	—

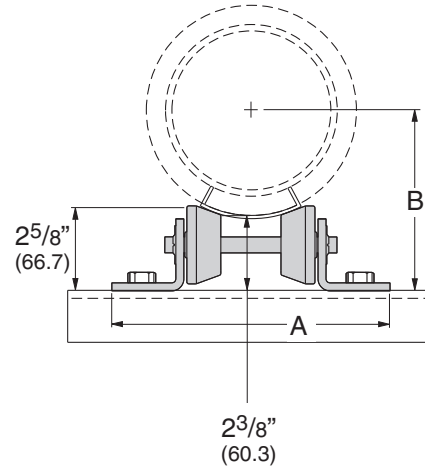
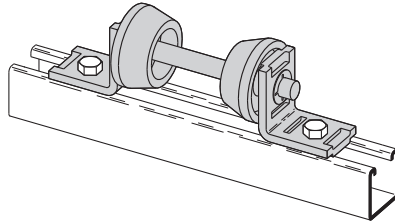
Reference page 126 for general fitting and standard finish specifications.

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 135
- Standard finish: ZN



REFERENCE CHART - A DIMENSION

Part No.	A		Wt./C PR	
			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 in. (mm)													
		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 149

Reference page 126 for general fitting and standard finish specifications.

B219 SIZING CHART

Pipe Size		Insulation Thickness in. (mm)						
		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)	B219	—	—	—	—	—	—
3/4"	(20)	B219	B219	B219	B219-1	—	—	—
1"	(25)	B219	B219	B219-1	B219-1	—	—	—
1 1/4"	(32)	B219	B219	B219-1	B219-1	—	—	—
1 1/2"	(40)	B219	B219	B219-1	B219-2	B219-2	—	—
2"	(50)	B219	B219-1	B219-1	B219-2	B219-2	—	—
2 1/2"	(65)	B219	B219-1	B219-2	B219-2	B219-3	—	—
3"	(80)	B219	B219-1	B219-2	B219-2	B219-3	B219-3	—
3 1/2"	(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	—	—	—	—	—	—

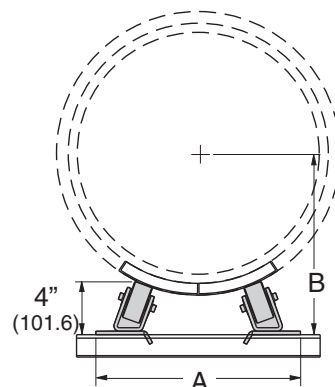
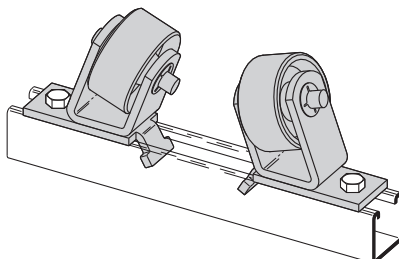
Reference page 126 for general fitting and standard finish specifications.

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 in. (mm)											
		0" (0.0)		1" (25.4)		1 1/2" (38.1)		2" (50.8)		2 1/2" (63.5)		3" (76.2)	
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)
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)
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)
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"	(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)
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)
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)

REFERENCE CHART - B DIMENSION

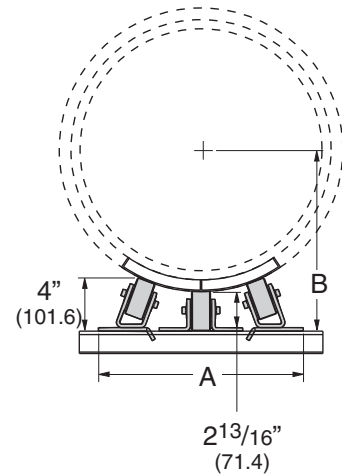
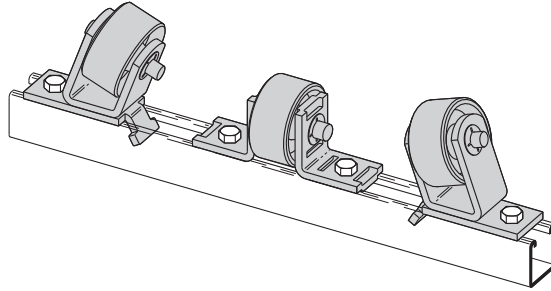
Pipe Size		Insulation Thickness in. (mm)											
		0" (0.0)		1" (25.4)		1 1/2" (38.1)		2" (50.8)		2 1/2" (63.5)		3" (76.2)	
6"	(150)	6 7/8"	(174.6)	7 7/8"	(200.0)	8 3/8"	(212.7)	8 7/8"	(225.4)	9 3/8"	(238.1)	9 7/8"	(250.8)
8"	(200)	7 13/16"	(198.4)	8 7/8"	(225.4)	9 3/8"	(238.1)	9 7/8"	(250.8)	10 7/16"	(265.1)	10 15/16"	(277.8)
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"	(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)
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)
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)
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)

Reference page 126 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)



REFERENCE CHART - A DIMENSION

Pipe Size		Insulation Thickness in. (mm)											
		0" (0.0)		1" (25.4)		1 1/2" (38.1)		2" (50.8)		2 1/2" (63.5)		3" (76.2)	
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)
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)
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)
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)
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)

REFERENCE CHART - B DIMENSION

Pipe Size		Insulation Thickness in. (mm)											
		0" (0.0)		1" (25.4)		1 1/2" (38.1)		2" (50.8)		2 1/2" (63.5)		3" (76.2)	
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)
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)
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)
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)
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)

Reference page 126 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-Blok is ideal for roof top support applications such as pipe, HVAC, duct, conduit, cable tray, and roof walkways.

Manufactured to provide years of service in harsh, roof top environments, Dura-Blok is 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-Blok helps 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.

Alternative finishes available upon request.

Metric

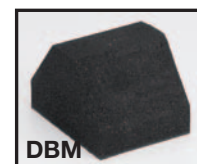
Metric dimensions are shown in parentheses.

Unless noted, all metric dimensions are in millimeters.



SUPPORT BASES ONLY

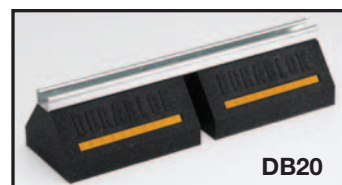
- Base only - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating - Ultimate Uniform Load (See Chart Below)*
- Dura-Blok™ channel support is designed as an economical support for piping systems, cable tray, HVAC equipment and many other applications. The Dura-Blok 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)		Load Rating Lbs. (kN)	
DBM	4" x 6" x 4.8"	(101.6 x 152.4 x 121.9)	2.35	(1.07)	200	(0.89)
DBP	4" x 6" x 9.6"	(101.6 x 152.4 x 243.8)	4.48	(2.03)	500	(2.22)

DB SERIES SUPPORT BASE WITH B44 CHANNEL

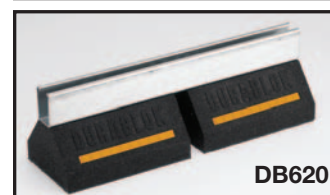
- Base with 14 ga. (1.9mm) galvanized channel 1" high (25.4mm) - see chart for height, width and length.
- 100% recycled rubber, UV resistant.
- Load Rating - Ultimate Uniform Load (See Chart Below)*
- Dura-Blok™ DB-Series channel support is designed for superior support of piping systems, cable tray, 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 158)
- For sloped roofs use B634 adjustable hinge fittings (see page 84).



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)	200	(0.89)
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 158)
- For sloped roofs use B634 adjustable hinge fittings (see page 84).



Part No.	Height x Width x Length In. (mm)		Wt./Each Lbs. (kg)		Load Rating Lbs. (kN)	
DB610	67/16" x 6" x 9.6"	(163.5 x 152.4 x 243.8)	6.36	(2.88)	500	(2.22)
DB620	67/16" x 6" x 20.2"	(163.5 x 152.4 x 513.1)	12.90	(5.85)	1000	(4.45)
DB630	67/16" x 6" x 30.8"	(163.5 x 152.4 x 782.3)	19.45	(8.82)	1500	(6.67)
DB640	67/16" x 6" x 41.4"	(163.5 x 152.4 x 1051.5)	26.00	(11.79)	2000	(8.89)
DB648	67/16" 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 152 for general fitting and standard finish specifications.

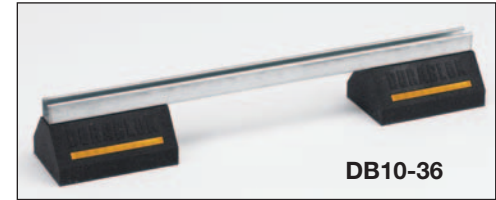
Dura-Blok™ Rooftop Supports

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 158)

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)



DB10-36



DB10-50



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.



DBM-2CT



DBM-1

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 152 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 158)



Part No.	Adjustable Height x Width x Length In. (mm)		Wt./Each Lbs. (kg)	
DBE10-8	5 1/2-8"	6" x 9.6"	(139.7-152.4 x 152.4 x 243.8)	5.68 (2.58)
DBE10-12	5 1/2-12"	6" x 9.6"	(139.7-304.8 x 152.4 x 243.8)	5.72 (2.59)
DBE10-16	5 1/2-16"	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"	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: 15 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 15 5/8"	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 152 for general fitting and standard finish specifications.

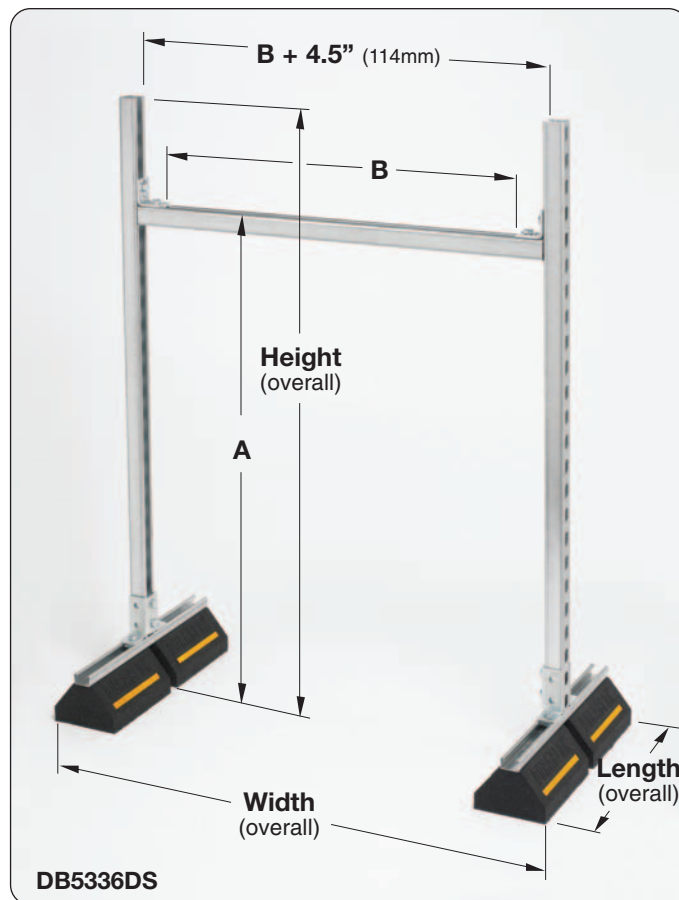
Dura-Blok™ Rooftop Supports

DB_DS SERIES

SUPPORT BASES WITH B22SH

VERTICAL & HORIZONTAL CHANNEL MEMBERS

- Product is shipped unassembled.
- 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 158)



* **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 152 for general fitting and standard finish specifications.

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)

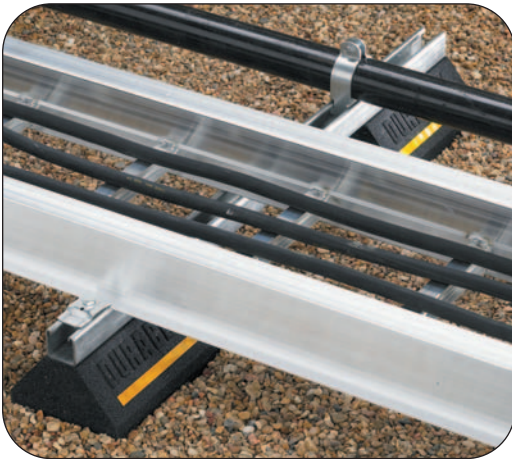
Part No.	Height (overall)		Width (overall)		Length (overall)		Wt./Each	
	In.	(mm)	In.	(mm)	In.	(mm)	lbs.	(kg)
DB2318DS	23"	(584)	25 ⁵ / ₈ "	(651)	20.2"	(513)	33.31	(15.11)
DB2918DS	29"	(736)	25 ⁵ / ₈ "	(651)	20.2"	(513)	35.00	(15.88)
DB4118DS	41"	(1041)	25 ⁵ / ₈ "	(651)	20.2"	(513)	38.40	(17.42)
DB5318DS	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 152 for general fitting and standard finish specifications.

Dura-Blok™ Supports

ROOFTOP APPLICATIONS



Dura-Blok™ Supports



Dura-Blok™ Rooftop Supports

ROOFTOP SUPPORTS IN WALKWAY APPLICATIONS



- Safety Grating is available with slip resistant Grate-Lock™, helping provide a safe walkway for foot traffic on the roof.
- Easy to install, elevated design, creates an identifiable path for foot traffic helping prevent wear and tear to the roof surface.
- The cross-over design offers safe passage over existing cabling, piping, cable tray or any other interference on the rooftop.
- The self cleaning pattern allows water and dirt to easily flow through, helping make the grating an ideal walkway in all weather conditions.
- Handrail options are available



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. Cooper B-Line's surface raceways are U.L. listed and meet the requirements of the National Electrical Code, Article 352.

Surface Raceways

Cooper B-Line's channel provides structural support in addition to a raceway system.

For U.L. wire fill see chart on page 230-231.

Cable Supports

A full range of clamps and saddles are offered in porcelain, thermoplastic elastomer and maple. Cooper 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

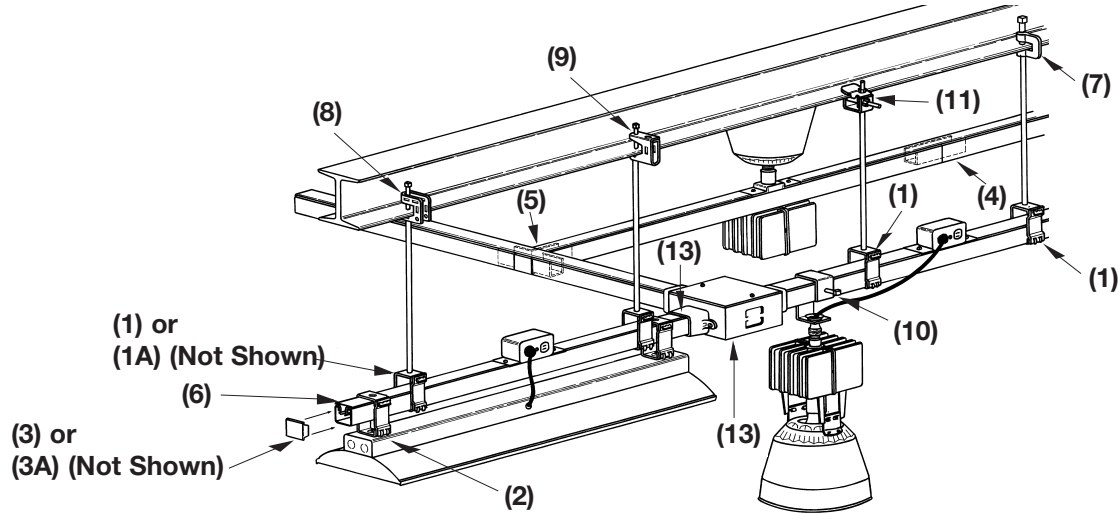
U.L. File No. E29637

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.





SELECTION CHART

Channel Number	Depth	Channel Hanger	Channel Hanger	Fixture Hanger	End Cap	Connection End Cap	Internal Straight Splice	Internal Tee Splice
B22A	3 1/4" (82.5)	B616-22A*	B241S*	B616S-22A*	B205 or B285	B392-22** B285	B766-22 (2)	B768-22 (2)
B11	3 1/4" (82.5)	B616-22A*	B241S*	B616S-22A*	B222	B392-11**	B766-11	B768-11
B12	2 7/16" (61.9)	B616-22A*	B241S*	B616S-22A*	B221	B392-12**	B766-12	B768-12
B22 B24	1 5/8" (41.3)	B616*	B216S*	B616S* B616TG*	B205 or B285 B223 or B286	B392-22**	B766-22	B768-22
B26	1 5/8" (41.3)	B616*	—	—	—	B392-22**	—	—
B32	1 3/8" (34.9)	B616*	B216S*	B616S* B616TG*	B206	B392-32**	B766-32	B768-32
B42	1" (25.4)	B616*	B215S*	B616S* B616TG*	B203	—	B766-42	B768-42
B52 B54	1 3/16" (20.6)	B616*	B215S*	B616S* B616TG*	B220 or B283 B204 or B284	—	B766-52	B768-52
B56	1 3/16" (20.6)	B616*	B215S*	B616S* B616TG*	—	—	B766-56	—

*Specify Hanger Rod or Conduit Size.

**Specify Conduit Size

OTHER ITEMS SHOWN ON ILLUSTRATION

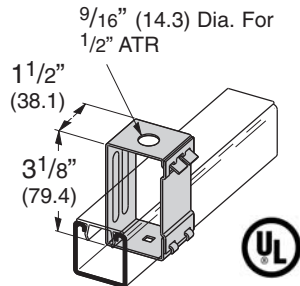
B217-20 Snap-in Closure Strip	B351L Beam Clamp	B755 Beam Clamp	B751 Beam Clamp
B465 H.I.D. Fixture Hanger	B750 Beam Clamp	B447 B447A Conduit Connection Plate	B719 B718 Series Junction Box

Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

Fluorescent Fixture Hangers

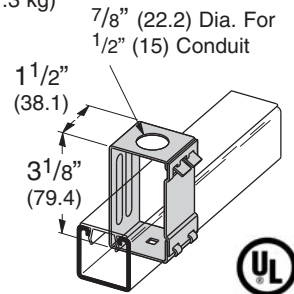
B616-9/16 CHANNEL HANGER

- 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. $\frac{3}{8}$ " Flat Washers for use with $\frac{3}{8}$ " ATR
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 25 Lbs. (11.3 kg)



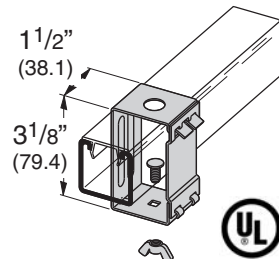
B616-7/8 CHANNEL HANGER

- 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)



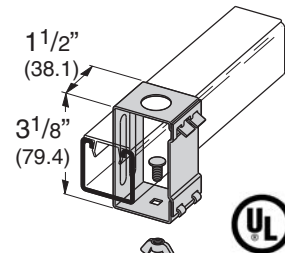
B616S-9/16 FLUORESCENT FIXTURE HANGER WITH STUD

- 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 $\frac{1}{2}$ " (12.7) space between channel and fixture
- Includes:
2 pcs. $\frac{3}{8}$ " Flat Washers for use with $\frac{3}{8}$ " ATR
- Material: 16 Gauge (1.5)
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



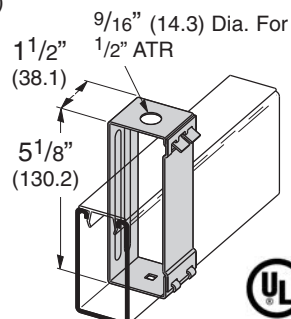
B616S-7/8 FLUORESCENT FIXTURE HANGER WITH STUD

- 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 $\frac{1}{2}$ " (12.7) space between channel and fixture
- Standard finish: ZN
- Wt./C 30 Lbs. (13.6 kg)



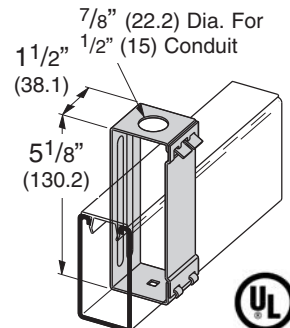
B616-22A-9/16 CHANNEL HANGER

- 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. $\frac{3}{8}$ " Flat Washers for use with $\frac{3}{8}$ " ATR
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 44 Lbs. (19.9 kg)



B616-22A-7/8 CHANNEL HANGER

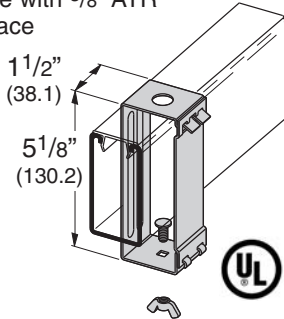
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Material: 14 Gauge (1.9)
- Standard finish: ZN
- Wt./C 44 Lbs. (19.9 kg)



Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

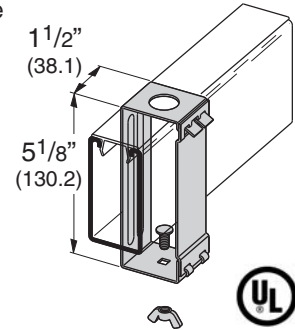
B616S-22A-9/16 FLUORESCENT FIXTURE HANGER WITH STUD

- 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)



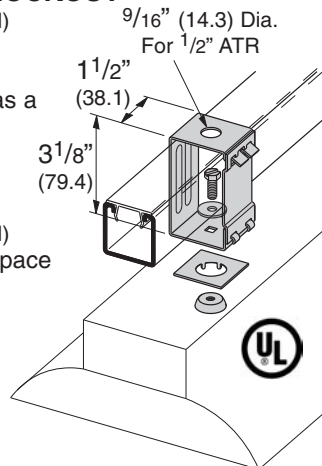
B616S-22A-7/8 FLUORESCENT FIXTURE HANGER WITH STUD

- 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)



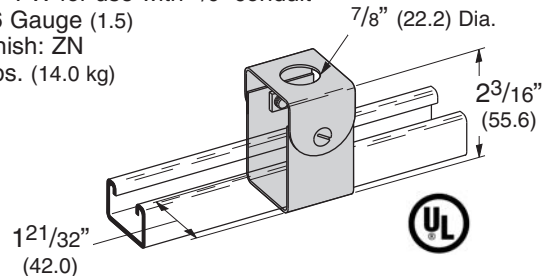
B616TG-9/16 FLUORESCENT FIXTURE HANGER FOR 1/2" (15) KNOCKOUT

- 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)



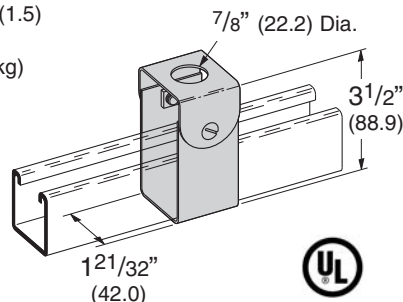
B215S CHANNEL HANGER

- 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)



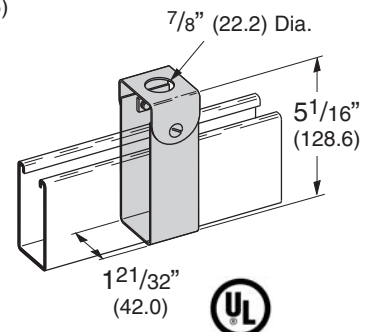
B216S CHANNEL HANGER

- 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)



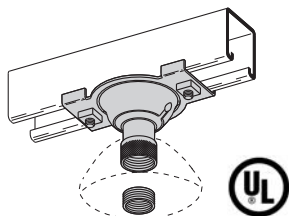
Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

Fluorescent Fixture Hangers

B390S

360° SWIVEL CHANNEL CONNECTOR

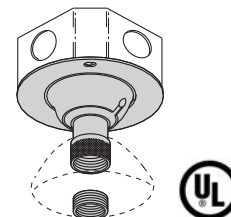
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Maximum design load 50 Lbs. (.22 kN) when used as a fixture support
- Swings 15° in 360° plane
- Includes:
 - 2 pcs. SN224-3/4"WO Stud Nut
 - 2 pcs. 1/4"-20 Square Nut
 - 1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Standard finish: ZN
- Wt./C 71 Lbs. (32.2 kg)



B390BX

360° SWIVEL BOX CONNECTOR

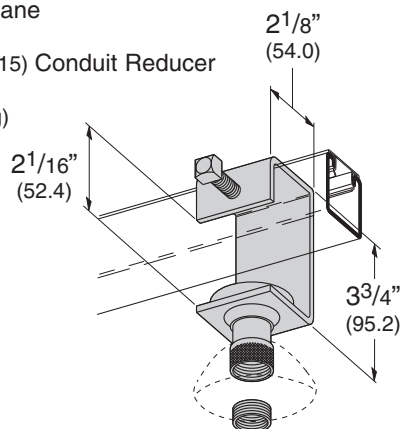
- Design Load 250 Lbs. (1.11 kN) for Connector Fitting only
- Safety Factor of 3
- Design Load 50 Lbs. (.22 kN) when used as illustrated or for use as a fixture support
- Swings 15° in 360° plane
- Includes:
 - 1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Fits on 4" box
- Standard finish: ZN
- Wt./C 55 Lbs. (24.9 kg)



B465

H.I.D. FIXTURE HANGER

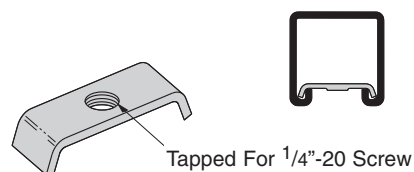
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3
- Swings 15° in 360° plane
- Includes:
 - 1 pc. 3/4" (20) to 1/2" (15) Conduit Reducer
- Standard finish: ZN
- Wt./C 95 Lbs. (43.1 kg)



B436

FLUORESCENT FIXTURE NUT

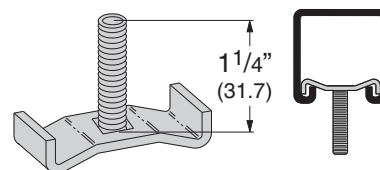
- Standard finish: ZN
- Wt./C 2 Lbs. (.9 kg)



B436S

FLUORESCENT FIXTURE STUD NUT

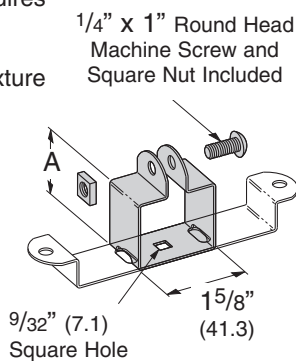
- Bolt size: 1/4" x 1 1/4"
- Standard finish: ZN
- Wt./C 4 Lbs. (1.8 kg)
- Design Load 250 Lbs. (1.11 kN)
- Safety Factor of 3



B460

FLUORESCENT FIXTURE HANGER

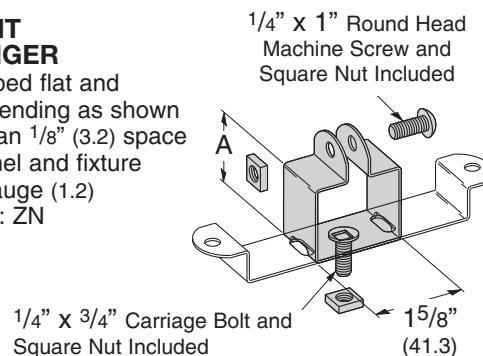
- Hanger is shipped flat and requires field bending as shown
- Allows more than 1/2" (12.7) space between channel and fixture
- Material: 18 Gauge (1.2)
- Standard finish: ZN



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



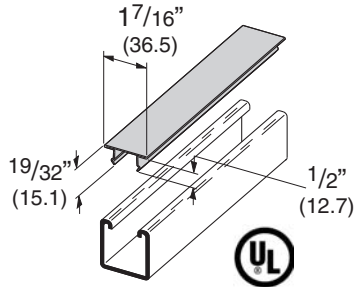
Part No.	For Channel Size	A	Wt./C
			Lbs. kg
B460-22	B22, B24, B26, B32	2 1/8" (57.5)	17 (7.7)
B460-12	B12	2 15/16" (79.5)	20 (9.1)
B460-11	B11	3 3/4" (101.6)	23 (10.4)

Part No.	For Channel Size	A	Wt./C
			Lbs. kg
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 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

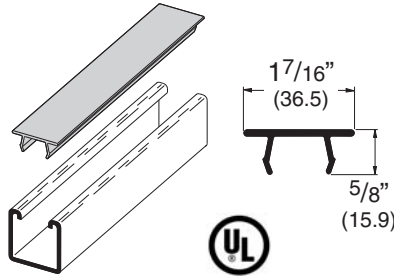
B217-20 SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- 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)



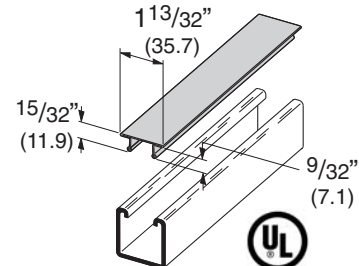
B217P PLASTIC SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- 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)



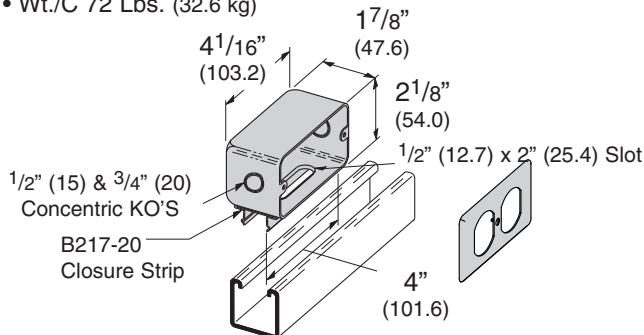
B217-24 SNAP CLOSURE STRIP FOR ALL 1⁵/₈" (41.3) WIDE CHANNELS

- 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)



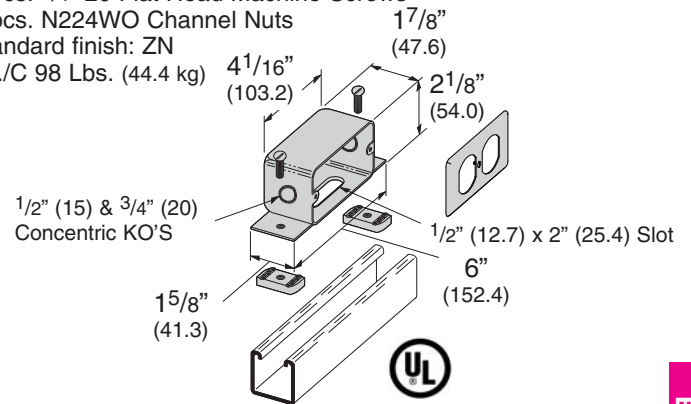
B516 SNAP-IN OUTLET BOX

- 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)



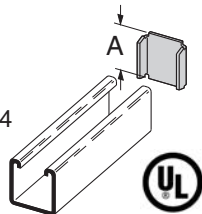
B516S OUTLET BOX

- 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

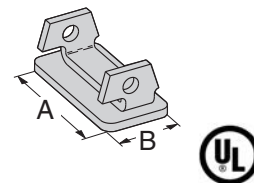
- Material: 12 Gauge (2.6)
- Standard finishes: ZN, GRN, HDG, SS4



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



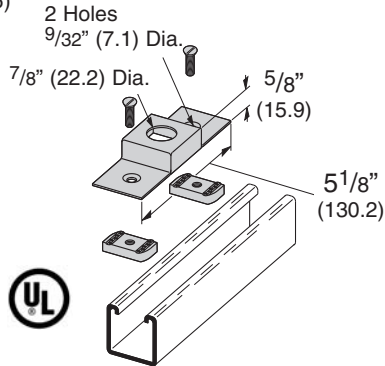
Part No.	Use With	A	B	Wt./C	
				Lbs.	kg
B283	B52	1 19/32" (40.5)	25/32" (19.8)	6	(2.7)
B284	B54 & B56	1 19/32" (40.5)	25/32" (19.8)	6	(2.7)
B285	B22	1 19/32" (40.5)	1 19/32" (40.5)	13	(5.9)
B286	B24 & B26	1 19/32" (40.5)	1 19/32" (40.5)	14	(6.3)

Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

Electrical Accessories

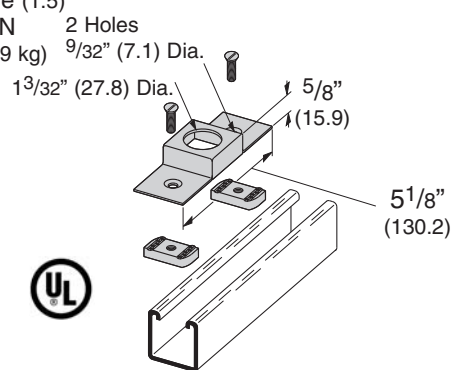
B447 CONDUIT CONNECTION PLATE FOR 1/2" (15) CONDUIT

- 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)



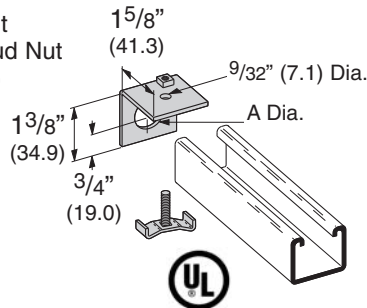
B447A CONDUIT CONNECTION PLATE FOR 3/4" (20) CONDUIT

- 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)



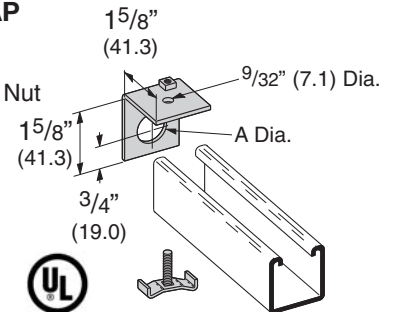
B392-32 SERIES CONNECTION END CAP

- 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

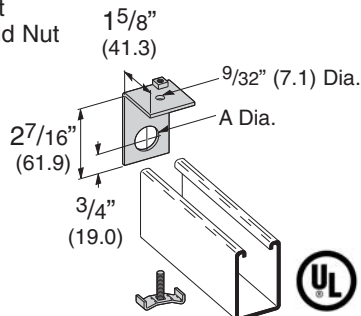


Part No.	A		Conduit Size		Wt./C	
					Lbs.	kg
B392-32-1/2	7/8"	(22.2)	1/2"	(15)	20	(9.1)
B392-32-3/4	1 1/16"	(27.0)	3/4"	(20)	19	(8.6)

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)

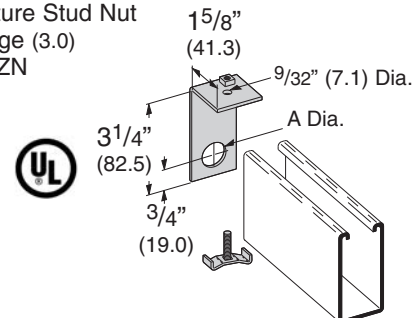
B392-12 SERIES CONNECTION END CAP

- 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)

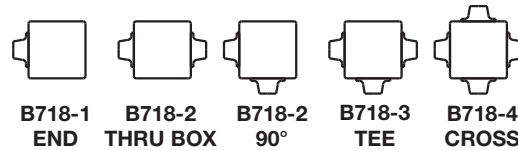
Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

B718

UNIVERSAL JUNCTION BOX

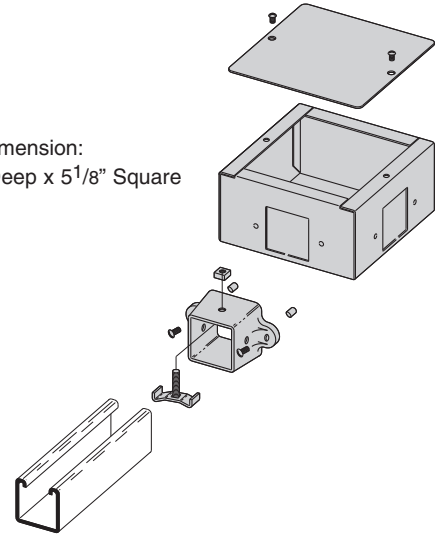
- Assemble B719 Hubs into B718 square knockouts
- Designed for use with B22, B24 & B26 Channel
- B718 Includes:
 - 1 pc. Junction Box only
 - 1 pc. Cover only
 - 2 pcs. #10-20 Round Head Machine Screws
- Standard finish: ZN
- Wt./C 180 Lbs. (81.6 kg)

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)



SELECTION GUIDE

Box Dimension:
2 1/2" Deep x 5 1/8" Square



B719AL

UNIVERSAL JUNCTION BOX HUB

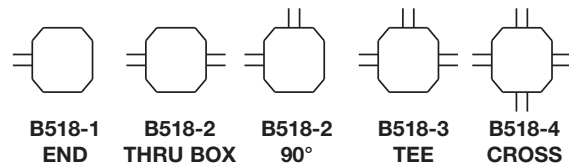
- B719AL Includes:
 - 1 pc. B719AL Hub only
 - 1 pc. B436S Fixture Stud Nut
 - 1 pc. 1/4"-20 Square Nut
 - 2 pcs. #10-24 Self Tapping Screws
 - 2 pcs. Rubber Caps
- Material: Aluminum
- Wt./C 25 Lbs. (11.3 kg)

B518-1 THRU B518-4

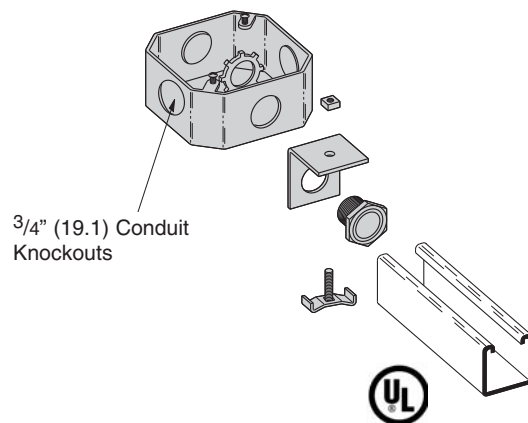
UNIVERSAL JUNCTION BOX AND HUBS

- Channel Connection Kits as shown in the chart above
- Includes:
 - 1 pc. Junction Box with Screws
 - 1 pc. Box Cover
- Standard finish: ZN

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)



SELECTION GUIDE



CHANNEL CONNECTION KIT

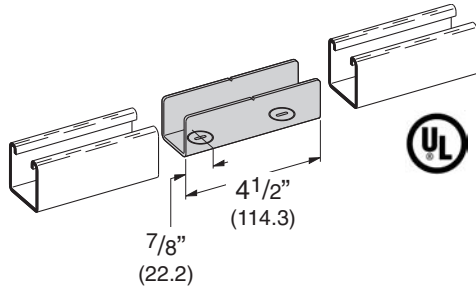
- For use with B22, B24 & B26 Channels.
- Box Dimension: Standard 4" Octagon Box
- Includes:
 - 1 pc. B392-22-3/4 End Connection (See page 160)
 - 1 pc. 3/4" (20) Insulated Chase Nipple
 - 1 pc. 3/4" (20) Lock Nut
- Standard finish: ZN

Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

Strut Joiners

B766 SERIES STRAIGHT STRUT JOINER

- Includes: 2 Cam Screws
- Material: 12 Gauge (2.6)
- Standard finish: ZN

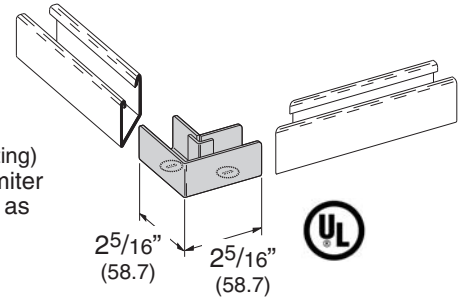


Part No.	For Channel Size	Wt./C	
		Lbs.	kg
B766-11	B11	94	(42.6)
B766-12	B12	72	(32.6)
B766-22 *	B22 & B24	50	(22.7)
B766-26	B26	53	(24.0)
B766-32	B32	44	(19.9)
B766-42	B42	34	(15.4)
B766-52	B52 & B54	28	(12.7)
B766-56	B56	31	(14.0)

B767 SERIES 90° ELBOW STRUT JOINER

- Includes: 2 Cam Screws
- Material: 12 Gauge (2.6)
- Standard finish: ZN

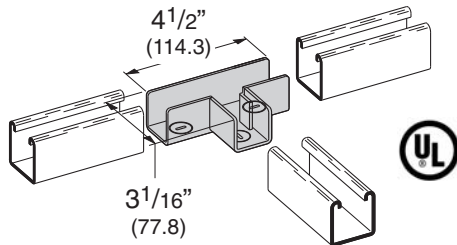
Note: B767-22
(Cast Aluminum Fitting)
does not require miter
cutting of channel as
shown in drawing.



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

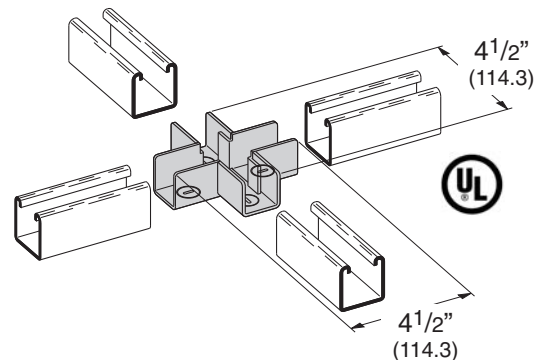


Part No.	For Channel Size	Wt./C	
		Lbs.	kg
B768-11	B11	142	(64.4)
B768-12	B12	112	(50.8)
B768-22 *	B22 & B24	79	(35.8)
B768-26	B26	79	(35.8)
B768-32	B32	72	(32.6)
B768-42	B42	62	(28.1)
B768-52	B52 & B54	57	(25.8)
B768-56	B56	60	(27.2)

* Cast Aluminum parts

B769 SERIES CROSS STRUT JOINER

- Includes: 4 Cam Screws
- Patented
- Material: 12 Gauge (2.6)
- Standard finish: ZN



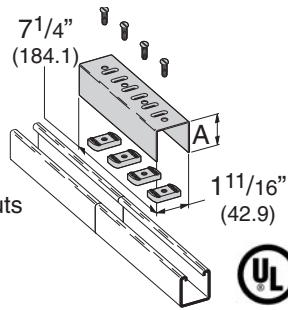
Part No.	For Channel Size	Wt./C	
		Lbs.	kg
B769-11	B11	148	(67.1)
B769-12	B12	120	(54.4)
B769-22 *	B22 & B24	87	(39.4)
B769-26	B26	93	(42.2)
B769-32	B32	78	(35.4)
B769-42	B42	65	(29.5)
B769-52	B52 & B54	58	(26.3)
B769-56	B56	62	(28.1)

Note: Strut joiners are not for structural support. A channel support is recommended within 24" (609 mm) of each joint.

Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

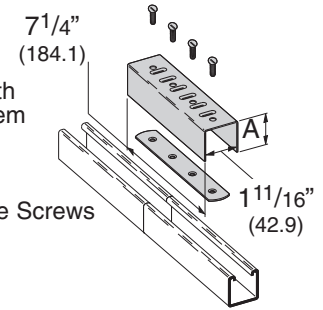
B166 FOUR HOLE SPLICE CLEVIS

- 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

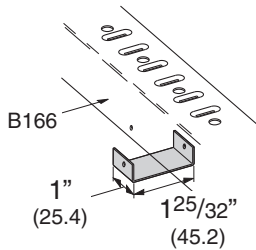


Part No.	A	For Channel Size	Wt./C Lbs. kg
B166-11	3 1/4" (82.5)	B11	128 (58.0)
B166-12	2 7/16" (61.9)	B12	108 (49.0)
B166-22	1 5/8" (41.3)	B22, B24, B26	91 (40.3)
B166-32	1 3/8" (34.9)	B32	83 (37.6)
B166-42	1" (25.4)	B42	75 (34.0)
B166-52	1 3/16" (20.6)	B52, B54, B56	71 (32.2)

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)

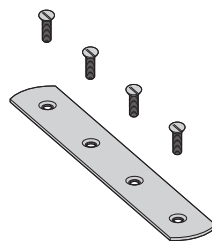
B166CL SPLICE CLEVIS CLIP

- Use to cover gap between strut
- Material: 18 Gauge (1.2)
- Standard finish: ZN
- Wt./C 4 Lbs. (1.8 kg)



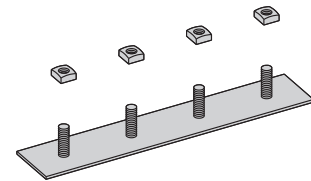
B466W TAPPED SPLICE PLATE

- 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



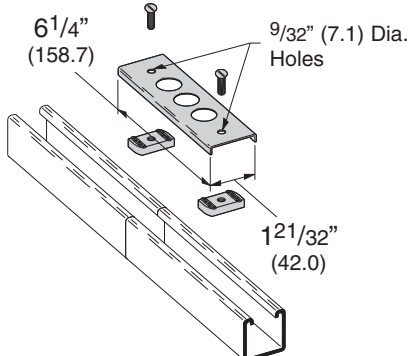
B466S STUD SPLICE PLATE

- 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



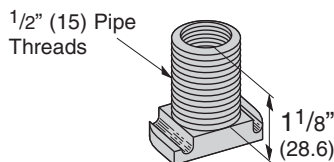
B619 KNOCK-OUT PLATE

- 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)



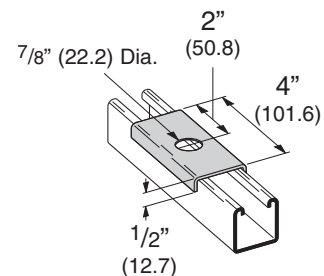
B393-1 WIRING STUD

- 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

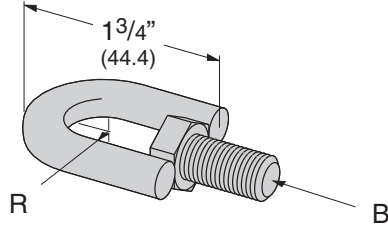
- Can be used with B393-1 wiring stud
- Material: 12 Gauge (2.6)
- Standard finish: ZN
- Wt./C 29 Lbs. (13.1 kg)



Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

B446B SWIVEL HANGER (MALE ONLY)

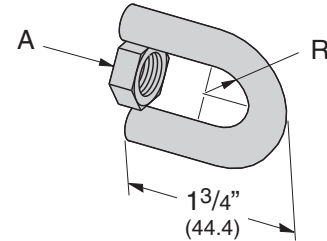
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446B-5/8	5/8"-11 HHCS	15/32" (11.9)	42	(19.0)
B446B-3/4	3/4"-10 HHCS	9/16" (14.3)	60	(27.2)

B446A SWIVEL HANGER (FEMALE ONLY)

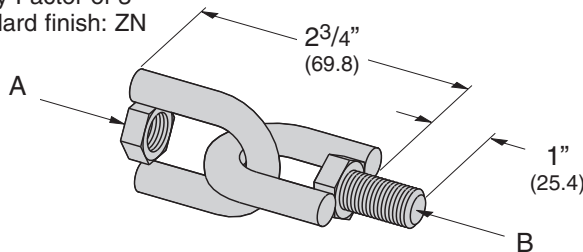
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446A-5/8	5/8"-11 HN	15/32" (11.9)	34	(15.4)
B446A-3/4	3/4"-10 HN	9/16" (14.3)	45	(20.4)

B446 SWIVEL HANGER (FEMALE-MALE)

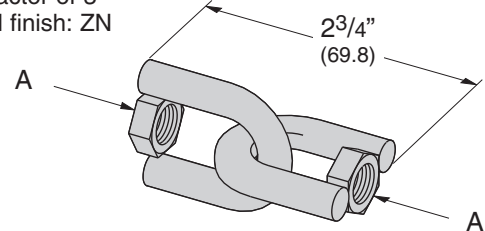
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446-5/8	5/8"-11 HN	5/8"-11 HHCS	78	(35.4)
B446-3/4	3/4"-10 HN	3/4"-10 HHCS	112	(50.8)

B446C SWIVEL HANGER (FEMALE-FEMALE)

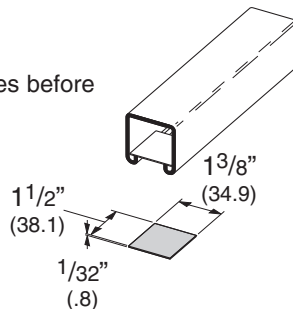
- Design Load:
 - (³/₈)-610 Lbs. (2.71 kN)
 - (¹/₂)-1130 Lbs. (5.02 kN)
 - (⁵/₈)-1810 Lbs. (8.05 kN)
 - (³/₄)-2710 Lbs. (12.05 kN)
- Safety Factor of 3
- Standard finish: ZN



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)
B446C-5/8	5/8"-11 HN	68	(30.8)
B446C-3/4	3/4"-10 HN	90	(40.8)

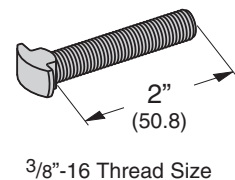
B590 FIBER WIRE RETAINER

- 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)

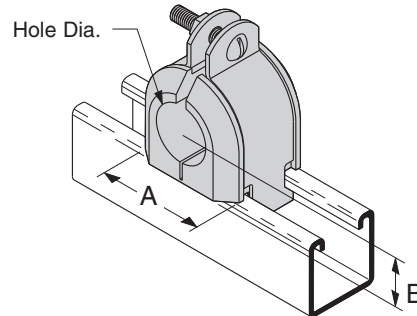


Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

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



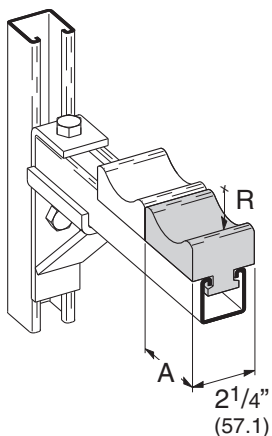
Part No.	Hole Dia.		Wt./C		A		B		Includes Clamp No.
			Lbs.	kg					
B4060	3/8"	(9.5)	25	(11.3)	1.36"	(34.5)	.56"	(14.2)	B2030
B4061	1/2"	(12.7)	25	(11.3)					
B4062	5/8"	(15.9)	25	(11.3)					
B4063	3/4"	(19.0)	37	(16.8)	1.86"	(47.2)	.81"	(20.8)	B2011
B4064	7/8"	(22.2)	37	(16.8)					
B4065	1"	(25.4)	37	(16.8)					
B4066	1 1/8"	(28.6)	37	(16.8)					
B4067	1 1/4"	(31.7)	58	(26.3)	2.36"	(59.9)	1.06"	(26.9)	B2038
B4068	1 3/8"	(34.9)	58	(26.3)					
B4069	1 1/2"	(38.1)	58	(26.3)					
B4070	1 5/8"	(41.3)	58	(26.3)					
B4071	1 3/4"	(44.4)	76	(34.5)	2.86"	(72.6)	1.31"	(33.3)	B2042
B4072	1 7/8"	(47.6)	76	(34.5)					
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)	3.36"	(85.3)	1.56"	(39.6)	B2046
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)					
B4079	2 3/4"	(69.8)	109	(49.4)	3.86"	(98.0)	1.81"	(46.0)	B2050
B4080	2 7/8"	(73.0)	109	(49.4)					
B4081	3"	(76.2)	109	(49.4)					
B4082	3 1/8"	(79.4)	109	(49.4)					
B4083	3 1/4"	(82.5)	130	(58.9)	4.36"	(110.7)	2.06"	(52.3)	B2054
B4084	3 3/8"	(85.7)	130	(58.9)					
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)					
B4091	4 1/4"	(107.9)	160	(72.6)	5.24"	(133.1)	2.50"	(63.5)	B2018
B4092	4 3/8"	(111.1)	160	(72.6)					
B4093	4 1/2"	(114.3)	160	(72.6)					

Reference page 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

Porcelain & Maple Clamps

B4050 & B4051 PORCELAIN CABLE CHANNEL SADDLE

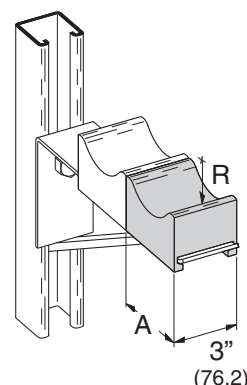
- Electrical porcelain has an dielectric strength of 50 volts/mil



Part No.	A		R		Wt./C	
					Lbs.	kg
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

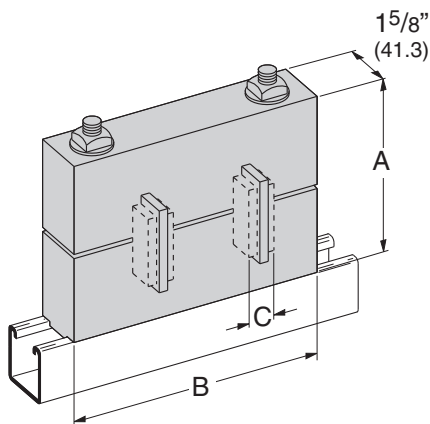
- Electrical porcelain has an dielectric strength of 50 volts/mil
- Designed for use with B449 Brackets



Part No.	A		R		Wt./C	
					Lbs.	kg
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)

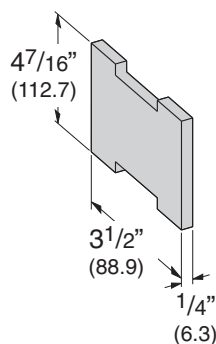
B4035A THRU B4035F 4" (101.6) BUS BAR MAPLE CLAMPS

- 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
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 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

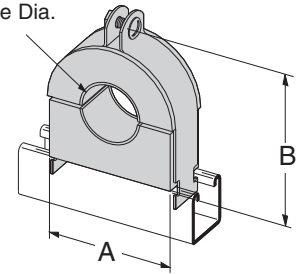
B4000 THRU B4007 MAPLE CABLE CLAMPS

- 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 173 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.

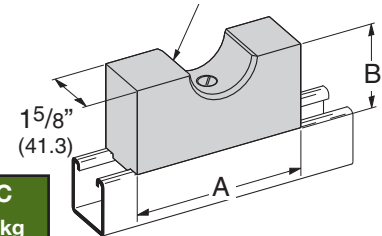


B4008 THRU B4017 SQUARE MAPLE CABLE SADDLE

- 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)

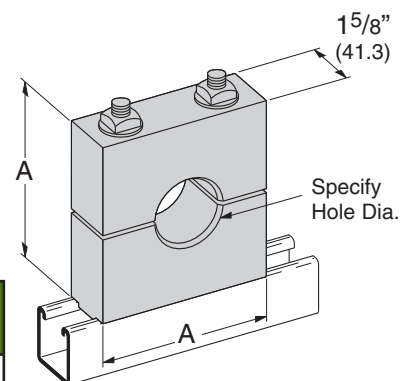
Specify Hole Dia.



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 162 for general fitting and standard finish specifications. U.L. Wire Fill Chart on pages 230 - 231.

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. Cooper 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 Cooper 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

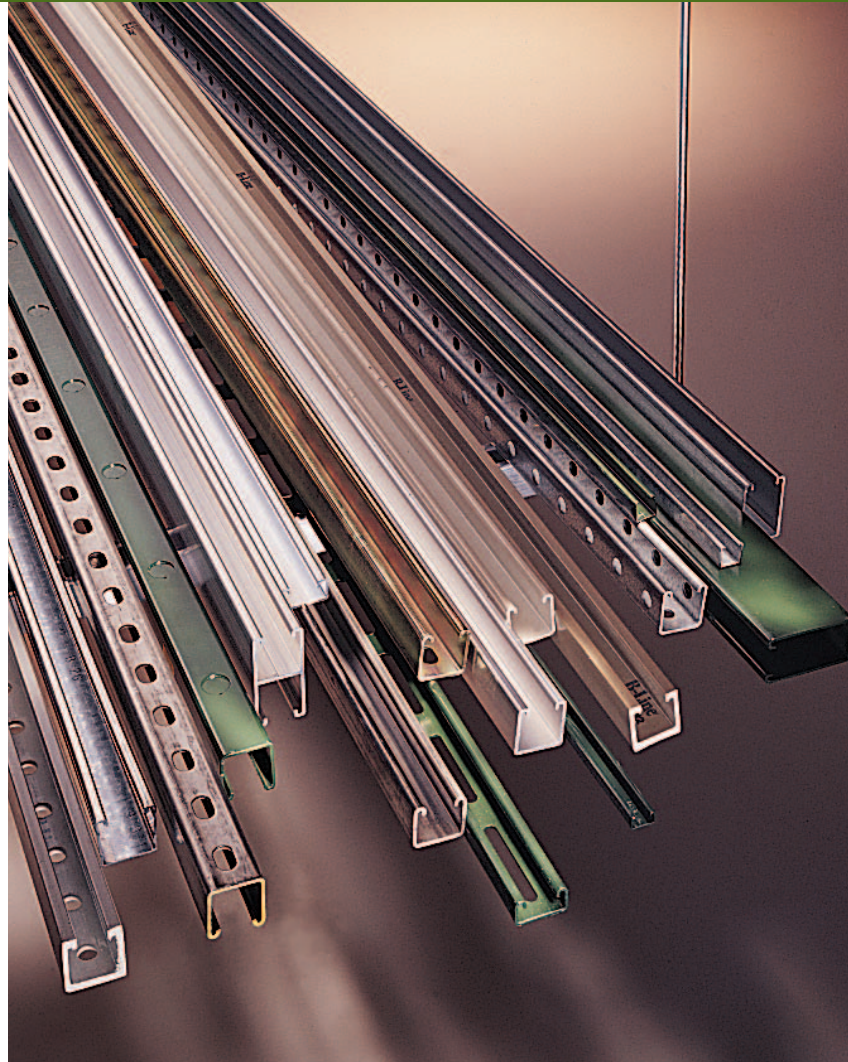
Channel's approximate load data can be determined by multiplying load data in the steel channel section of this catalog by a factor of 0.38.

Stainless Steel

Channel load data is the same as the data in the steel channel section of this catalog.

Metric

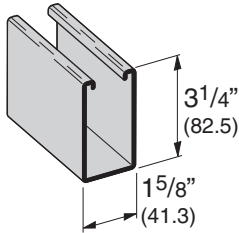
Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.



Aluminum Channel & Closure Strips

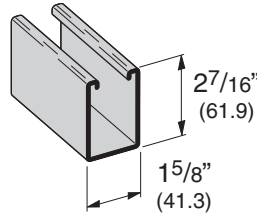
B11AL

- Thickness: .105 (2.6 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: Aluminum
- Weight: 1.06 Lbs./Ft. (1.58 kg/m)



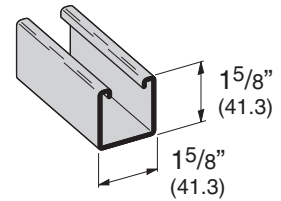
B12AL

- 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)



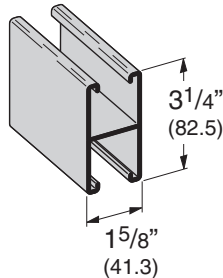
B22AL

- 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)



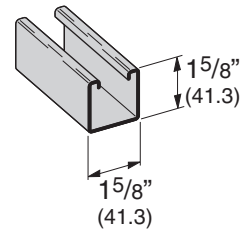
B22AAL

- 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)



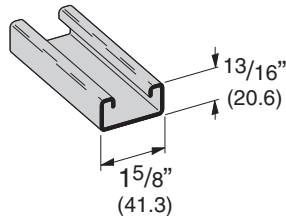
B24AL

- 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)



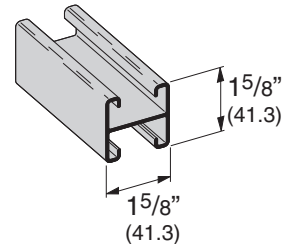
B54AL

- 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)



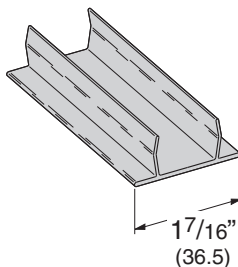
B54AAL

- 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)



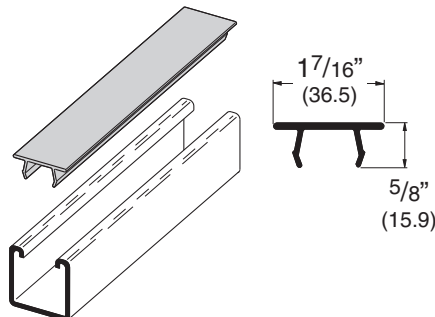
B217AL CLOSURE STRIP

- Standard Length: 10' (304.8 cm)
- Material: Aluminum
- Weight: .15 Lbs./Ft. (0.23 kg/m)



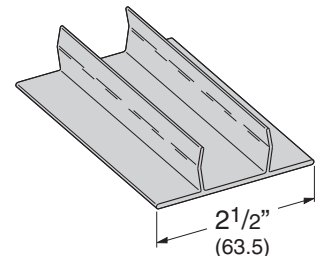
B217P PLASTIC CLOSURE STRIP

- 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)

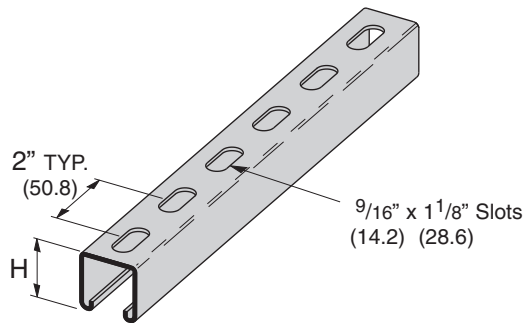


Reference page 176 for general fitting specifications. Other channel combinations available-see steel section for styles.

Aluminum

SH TYPE CHANNEL

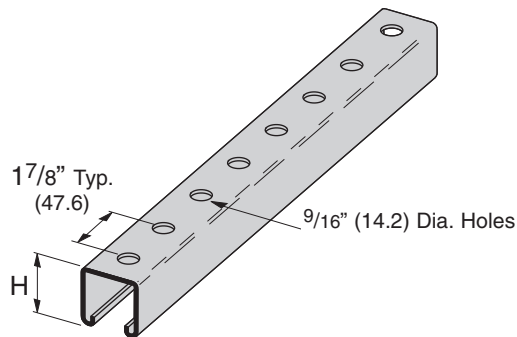
- Material: Aluminum



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

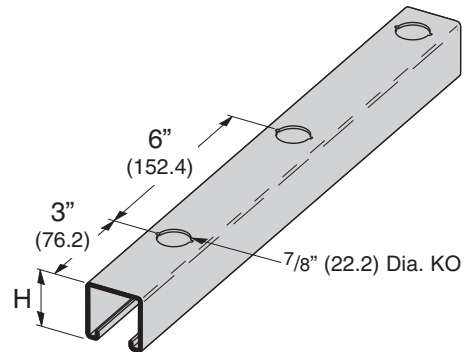
- Material: Aluminum



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

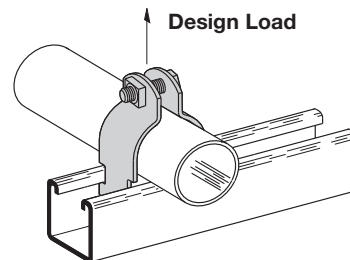
- Material: Aluminum



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
B2001 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)

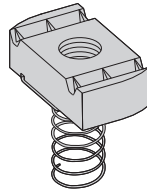
Reference page 176 for general fitting specifications. Other channel combinations available-see steel section for styles.

ALUMINUM FITTINGS

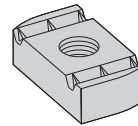
Most fittings, as shown in this catalog, can be supplied in aluminum. See "Fittings" section (page 72) of this catalog. Consult factory for possible minimum production quantities and set-up charges.

CHANNEL NUTS

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.



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

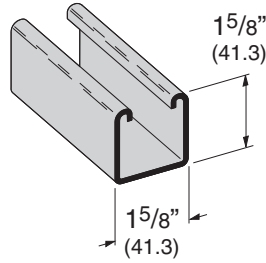
Part Number		Thread Size	Thickness		Wt./C	
With Spring	Without Spring				Lbs.	kg
N524SS6	N224WOSS6	1/4"-20	1/4"	(6.3)	6.6	(3.0)
N528SS6	N228WOSS6	3/8"-16	3/8"	(9.5)	10.6	(4.8)
N525SS6	N525WOSS6	1/2"-13	3/8"	(9.5)	9.7	(4.4)

Reference page 176 for general fitting specifications. Other channel combinations available-see steel section for styles.

Stainless Steel

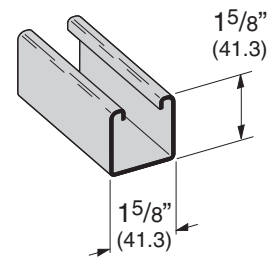
B22SS*

- *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)



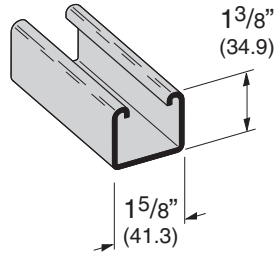
B24SS*

- *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)



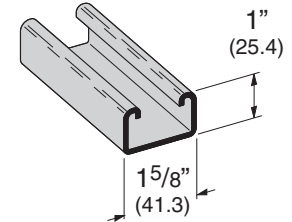
B32SS4

- 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)



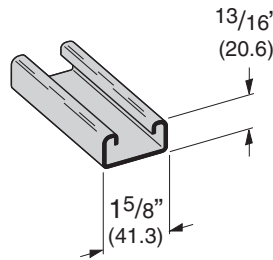
B42SS4

- 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)

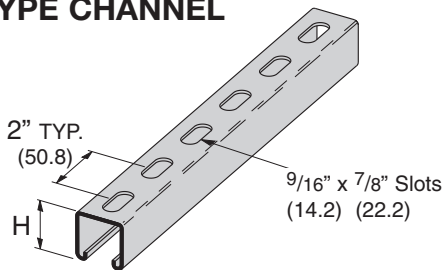


B54SS*

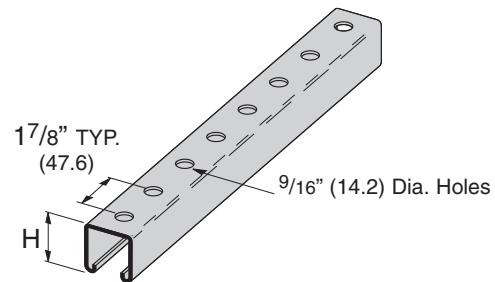
- *Substitute 4 for Stainless Steel Type 304 or 6 for Stainless Steel Type 316
- Thickness: 14 Ga. (1.9 mm)
- Standard Length: 10' (3.05 m) and 20' (6.09 m)
- Material: SS4, SS6
- Weight: .97 Lbs./Ft. (1.44 kg/m)



SH TYPE CHANNEL



H-17/8 TYPE CHANNEL



Part No.	Thickness	H	Wt./C Lbs./Ft. kg/m
B22SH SS4	12 Ga. (2.6)	15/8" (41.3)	1.82 (2.70)
B22SH SS6	12 Ga. (2.6)	15/8" (41.3)	1.82 (2.70)
B24SH SS4	14 Ga. (1.9)	15/8" (41.3)	1.34 (1.99)
B24SH SS6	14 Ga. (1.9)	15/8" (41.3)	1.34 (1.99)
B32SH SS4	12 Ga. (2.6)	13/8" (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)	13/16" (20.6)	.91 (1.35)
B54SH SS6	14 Ga. (1.9)	13/16" (20.6)	.91 (1.35)

Part No.	Thickness	H	Wt./C Lbs./Ft. kg/m
B22H17/8 SS4	12 Ga. (2.6)	15/8" (41.3)	1.85 (2.75)
B24H17/8 SS4	14 Ga. (1.9)	15/8" (41.3)	1.36 (2.02)
B24H17/8 SS6	14 Ga. (1.9)	15/8" (41.3)	1.36 (2.02)
B32H17/8 SS4	12 Ga. (2.6)	13/8" (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)	13/16" (20.6)	.93 (1.38)
B54H17/8 SS6	14 Ga. (1.9)	13/16" (20.6)	.93 (1.38)

Reference page 176 for general fitting specifications. Other channel combinations available-see steel section for styles.

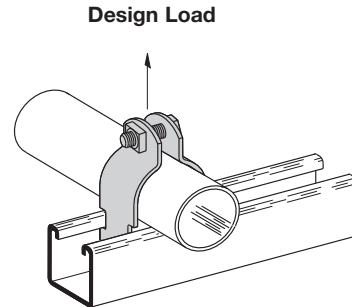
STAINLESS STEEL FITTINGS

Most fittings, as shown in this catalog, can be supplied in Type 304 or Type 316 stainless steel. See "Fittings" section (page 72) 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

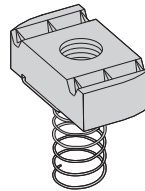
Part No.	Conduit Pipe Size		Material Thickness	Design Load		Wt./C	
				Lbs.	kN	Lbs.	kg
B2001 SS4	3/8"	(10)	16 Ga. (1.5)	400	(1.78)	10	(4.5)
B2008 SS4	1/2"	(15)	16 Ga. (1.5)	400	(1.78)	11	(5.0)
B2009 SS4	3/4"	(20)	14 Ga. (1.9)	600	(2.67)	15	(6.8)
B2010 SS4	1"	(25)	14 Ga. (1.9)	600	(2.67)	16	(7.2)
B2011 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)



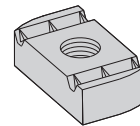
CHANNEL NUTS

- 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 176 for general fitting specifications. Other channel combinations available-see steel section for styles.

Fiberglass

Cooper 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 183.

Materials & Finishes

Cooper 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— $\frac{13}{32}$ " (10.3 mm) Dia.

Hole Spacing— $\frac{13}{16}$ " (20.6 mm) from end and $1\frac{7}{8}$ " (47.6 mm) on center.

Width— $1\frac{5}{8}$ " (41.3 mm)

Thickness— $\frac{1}{4}$ " (6.3 mm)

Metric

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



CHANNEL RESIN INFORMATION

Cooper 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%

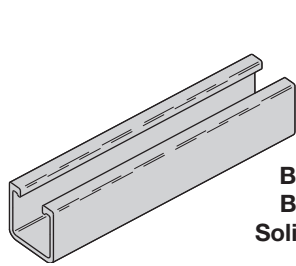
Flame Retardant Properties	BFP	BFV
Flame Resistance (FTMS 406-2023) ign/burn, seconds	75/75	75/75
Intermittent Flame Test (HLT-15), rating	100	100
Flammability Test (ASTM D635) Ignition Burning Time	none 0 sec.	none 0 sec.
Surface Burning Characteristics (ASTM E84), Flame spread index	25	25
UL 94 Flame Class	V-0	V-0

Reference page 182 for general fitting specifications.

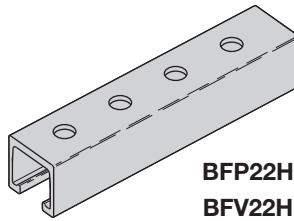
Fiberglass

BFP22 THRU BFV22SH

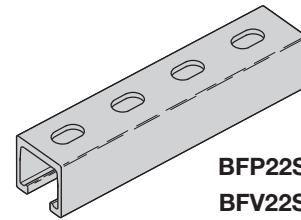
- Channel lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



**BFP22
BFV22
Solid Back**

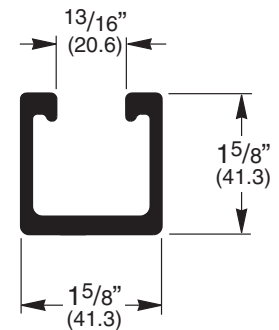


**BFP22H1^{7/8}
BFV22H1^{7/8}**
9/16" (14.3) holes
17/8" (47.6) on centers



**BFP22SH
BFV22SH**
9/16" (14.3) x 7/8" (22.2) slots
2" (50.8) on centers

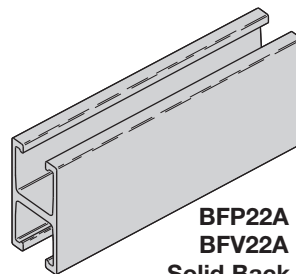
Part No.	Material	Description	Color	Weight	
				Lbs./ft.	kg/m
BFP22*	Polyester Resin	Solid Back	Gray	.63	(.94)
BFV22*	Vinyl Ester Resin	Solid Back	Beige	.63	(.94)
BFP22H1^{7/8}*	Polyester Resin	Holes in Back	Gray	.60	(.89)
BFV22H1^{7/8}*	Vinyl Ester Resin	Holes in Back	Beige	.60	(.89)
BFP22SH*	Polyester 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

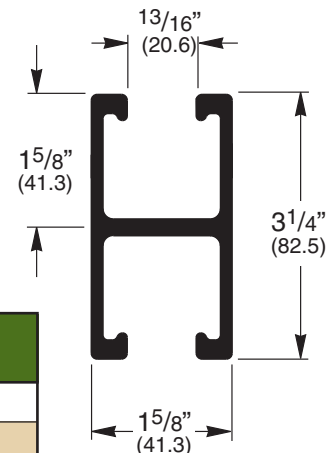
BFP22A BFV22A

- 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 185 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 182 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.

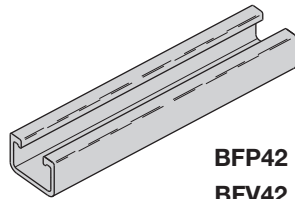
All beams should be supported in a manner to prevent rotation at supports. Long, deep beams should be tied between supports to prevent twist. For channels with holes or slots use 90% of recommended load shown in channel loading chart.

Reference page 182 for general fitting specifications.

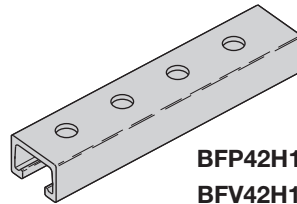
Fiberglass

BFP42 THRU BFV42SH

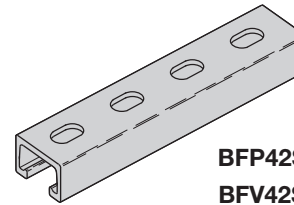
- Channel lengths: 10 Ft. (3.05 m) and 20 Ft. (6.09 m)
- Fiberglass strut meets specification of ASTM D-4385 Levels III and IV.



**BFP42
BFV42
Solid Back**

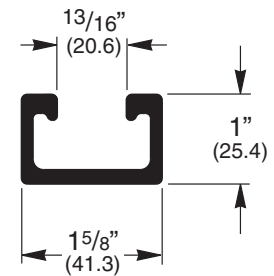


**BFP42H1^{7/8}
BFV42H1^{7/8}
9/16" (14.3) holes
1 7/8" (47.6) on centers**



**BFP42SH
BFV42SH
9/16" (14.3) x 7/8" (22.2) slots
2" (50.8) on centers**

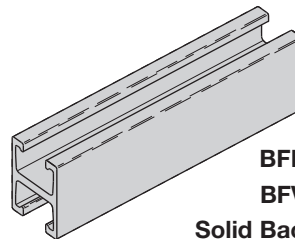
Part No.	Material	Description	Color	Weight	
				Lbs./ft.	kg/m
BFP42*	Polyester Resin	Solid Back	Gray	.48	(.71)
BFV42*	Vinyl Ester Resin	Solid Back	Beige	.48	(.71)
BFP42H1^{7/8}*	Polyester Resin	Holes in Back	Gray	.46	(.68)
BFV42H1^{7/8}*	Vinyl Ester Resin	Holes in Back	Beige	.46	(.68)
BFP42SH*	Polyester 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

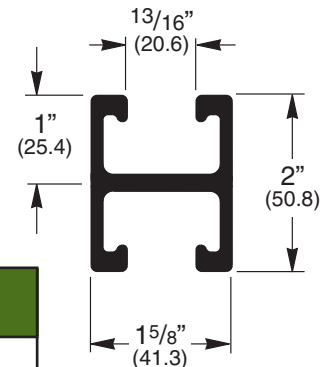
BFP42A BFV42A

- 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.



**BFP42A
BFV42A
Solid Back to Back**

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 187 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 182 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

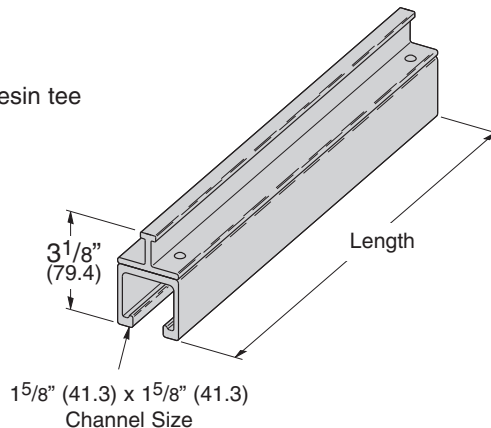
Beam Loads:

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 182 for general fitting specifications.

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



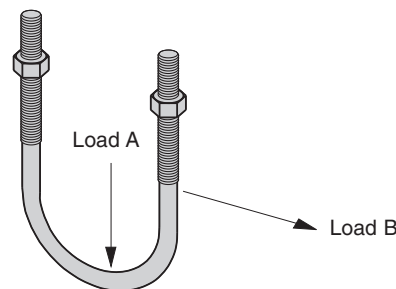
Field Cutting Sealant Kits

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

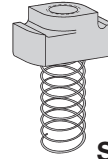


Part No.	Nominal Pipe Size		Thread Size	Design Load A		Design Load B		Maximum Torque		Wt./C	
	in.	mm		Lbs.	kN	Lbs.	kN	in.-Lbs.	N•m	Lbs.	kg
BFV501-1/2	1/2	(15)	3/8"-16	300	(1.33)	150	(.67)	30	(3.4)	3.5	(1.59)
BFV501-3/4	3/4	(20)	3/8"-16	300	(1.33)	150	(.67)	30	(3.4)	3.9	(1.77)
BFV501-1	1	(25)	3/8"-16	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)

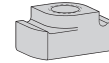
Reference page 182 for general fitting specifications.

CHANNEL NUTS

- Design Load Safety Factor of 3
- Overall Nut Height $\frac{5}{8}$ " (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 $\frac{3}{8}$ " and .60 for $\frac{1}{2}$ " thread size.
- Material: Glass Reinforced Polyurethane
- Spring Material: Zinc Plated Steel



**WITH
SPRING**



**W/O
(WITHOUT)
SPRING**

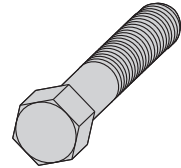
Part No. With Spring	Part No. W/O Spring	Thread Size	Pull-Out		Slip Resistance		Max. Torque		Wt./C	
			Lbs	kN	Lbs.	N	in.-Lbs.	N•m	Lbs.	kg
BFV-224	BFV-224WO	$\frac{1}{4}$ "-20	300	(1.33)	150	(.67)	200	(22.6)	2.4	(1.09)
BFV-223	BFV-223WO	$\frac{5}{16}$ "-18	300	(1.33)	150	(.67)	200	(22.6)	2.5	(1.13)
BFV-228	BFV-228WO	$\frac{3}{8}$ "-16	300	(1.33)	150	(.67)	200	(22.6)	2.3	(1.04)
BFV-225	BFV-225WO	$\frac{1}{2}$ "-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 $\frac{5}{16}$ x 1	$\frac{5}{16}$ "-18	190	(.84)	30	(3.4)	.4	(.18)
BFVHHCS $\frac{5}{16}$ x $1\frac{1}{4}$	$\frac{5}{16}$ "-18	190	(.84)	30	(3.4)	.5	(.23)
BFVHHCS $\frac{5}{16}$ x $1\frac{1}{2}$	$\frac{5}{16}$ "-18	190	(.84)	30	(3.4)	.6	(.27)
BFVHHCS $\frac{5}{16}$ x 2	$\frac{5}{16}$ "-18	190	(.84)	30	(3.4)	.8	(.36)
BFVHHCS $\frac{3}{8}$ x 1	$\frac{3}{8}$ "-16	300	(1.33)	45	(5.1)	.9	(.41)
BFVHHCS $\frac{3}{8}$ x $1\frac{1}{4}$	$\frac{3}{8}$ "-16	300	(1.33)	45	(5.1)	1.1	(.50)
BFVHHCS $\frac{3}{8}$ x $1\frac{1}{2}$	$\frac{3}{8}$ "-16	300	(1.33)	45	(5.1)	1.3	(.59)
BFVHHCS $\frac{3}{8}$ x 2	$\frac{3}{8}$ "-16	300	(1.33)	45	(5.1)	1.3	(.59)
BFVHHCS $\frac{3}{8}$ x $2\frac{1}{2}$	$\frac{3}{8}$ "-16	300	(1.33)	45	(5.1)	1.5	(.68)
BFVHHCS $\frac{1}{2}$ x 1	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	1.4	(.63)
BFVHHCS $\frac{1}{2}$ x $1\frac{1}{4}$	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	1.8	(.81)
BFVHHCS $\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	2.2	(1.00)
BFVHHCS $\frac{1}{2}$ x 2	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	3.0	(1.36)
BFVHHCS $\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	3.7	(1.68)
BFVHHCS $\frac{1}{2}$ x 3	$\frac{1}{2}$ "-13	490	(2.18)	110	(12.4)	4.5	(2.04)

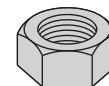


BFVHN

HEX NUTS

- $\frac{3}{4}$ " & 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 $\frac{5}{16}$	$\frac{5}{16}$ "-18	$\frac{17}{64}$	(6.7)	.2	(.09)
BFVHN $\frac{3}{8}$	$\frac{3}{8}$ "-16	$\frac{21}{64}$	(8.3)	.3	(.13)
BFVHN $\frac{1}{2}$	$\frac{1}{2}$ "-13	$\frac{7}{16}$	(11.1)	.7	(.32)
BFVHN $\frac{5}{8}$	$\frac{5}{8}$ "-11	$\frac{35}{64}$	(13.9)	1.4	(.63)



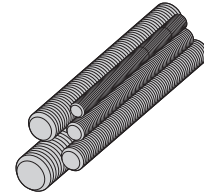
Reference page 182 for general fitting specifications.

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 1 7/32" (13.5) to obtain design load shown below.
- Material: Glass Reinforced Vinyl Ester

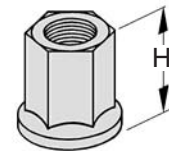
Part No.	Thread Size	Design Load (in tension)		Max. Torque		Wt./Ft.	
		Lbs.	kN	in.-Lbs.	N•m	Lbs.	kg
BFVATR 3/8 x 48"	3/8"-16	425	(1.89)	45	(5.1)	.08	(.04)
BFVATR 1/2 x 48"	1/2"-13	750	(3.33)	110	(12.4)	.13	(.06)
BFVATR 5/8 x 48"	5/8"-11	950	(4.22)	230	(26.0)	.21	(.09)



BFVATRHN 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

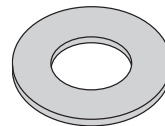
Part No.	Thread Size	H		Wt./C	
		in.	mm	Lbs.	kg
BFVATRHN 3/8	3/8"-16	3/4	(19)	.8	(.36)
BFVATRHN 1/2	1/2"-13	7/8	(22)	1.7	(.77)



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

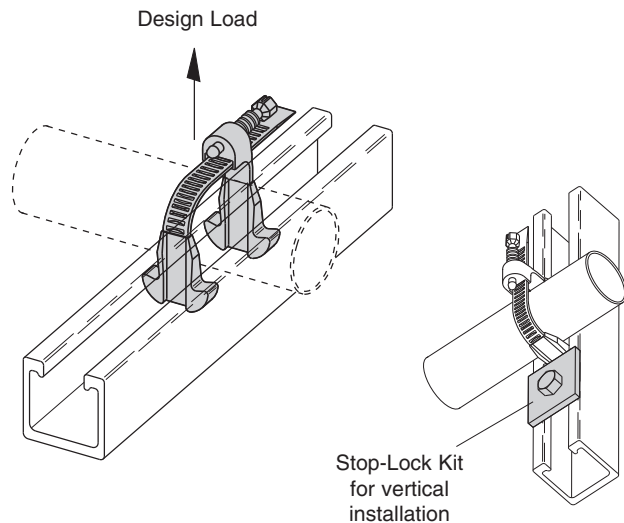
Part No.	Thread Size	Wt./C	
		Lbs.	kg
BFV655-3/8	3/8"-16	7.4	(3.35)
BFV655-1/2	1/2"-13	11.3	(5.12)
BFV655-5/8	5/8"-11	16.7	(7.57)



Reference page 182 for general fitting specifications.

BFV100 thru BFV300 ADJUSTABLE PIPE CLAMPS

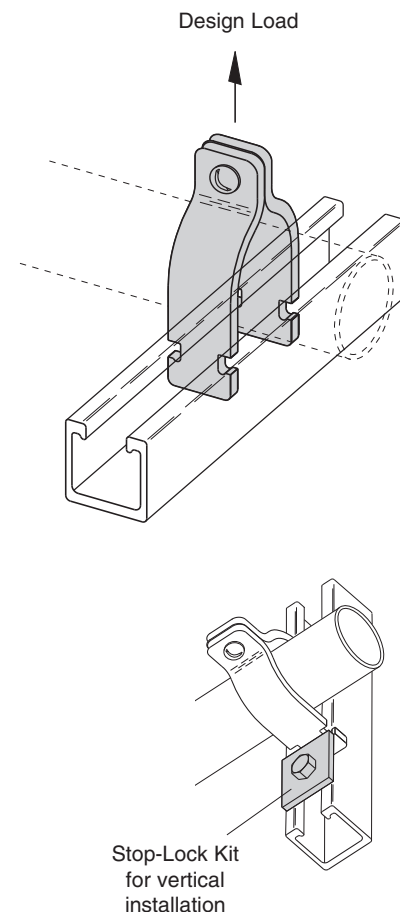
- Completely Non-Metallic
- Adjustable to U.S. & Metric Pipe Diameters
- Fits OD Sizes $\frac{3}{4}$ " (19.0) to $3\frac{1}{2}$ " (88.9)
- Easy To Install
- No Special Tools Required
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyurethane
- Not recommended for vertical installation without additional Stop-Lock Kit. Kit includes one square washer, channel nut and hex head cap screw. Order (Stop-Lock Kit) BFVSL- $\frac{3}{8}$ for $\frac{3}{8}$ "-16 hardware or BFVSL- $\frac{1}{2}$ for $\frac{1}{2}$ "-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	$\frac{1}{2}$ - $1\frac{1}{2}$	(15 - 40)	.75 - 1.90	(21.3 - 48.3)	135	(.60)	10	(1.13)
BFV200	$1\frac{1}{2}$ - 2	(40 - 51)	1.90 - 2.37	(48.3 - 60.3)	135	(.60)	36	(4.07)
BFV300	$2\frac{1}{2}$ - 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- $\frac{3}{8}$ for $\frac{3}{8}$ "-16 hardware or BFVSL- $\frac{1}{2}$ for $\frac{1}{2}$ "-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



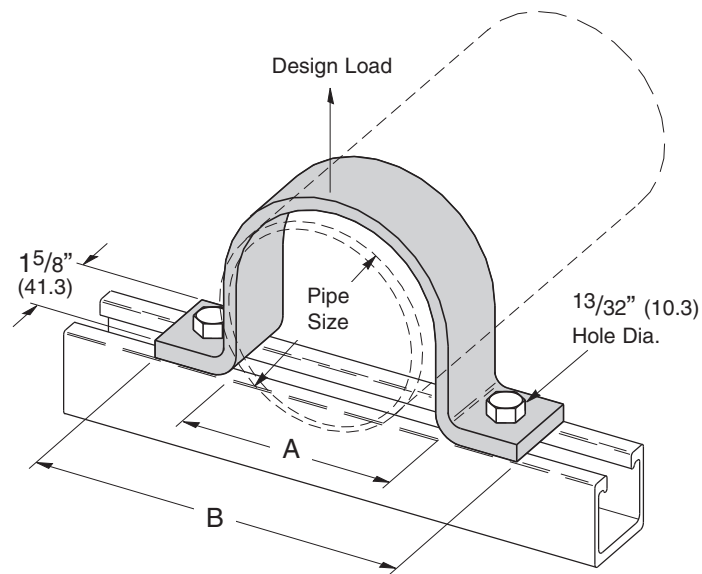
Part No.	Nominal Pipe Size		Design Load		Maximum Torque	
	in.	mm	Lbs.	kN	in.-Lbs.	N•m
BFV2008	$\frac{1}{2}$	(15)	300	(1.33)	10	(1.13)
BFV2009	$\frac{3}{4}$	(20)	300	(1.33)	10	(1.13)
BFV2010	1	(25)	300	(1.33)	10	(1.13)
BFV2011	$1\frac{1}{4}$	(32)	300	(1.33)	10	(1.13)
BFV2012	$1\frac{1}{2}$	(40)	300	(1.33)	10	(1.13)
BFV2013	2	(50)	300	(1.33)	10	(1.13)
BFV2014	$2\frac{1}{2}$	(65)	300	(1.33)	10	(1.13)
BFV2015	3	(80)	300	(1.33)	10	(1.13)
BFV2016	$3\frac{1}{2}$	(90)	300	(1.33)	10	(1.13)
BFV2017	4	(100)	300	(1.33)	10	(1.13)

Reference page 182 for general fitting specifications.

Fiberglass

BFP2400 SERIES 2-HOLE PIPE CLAMPS

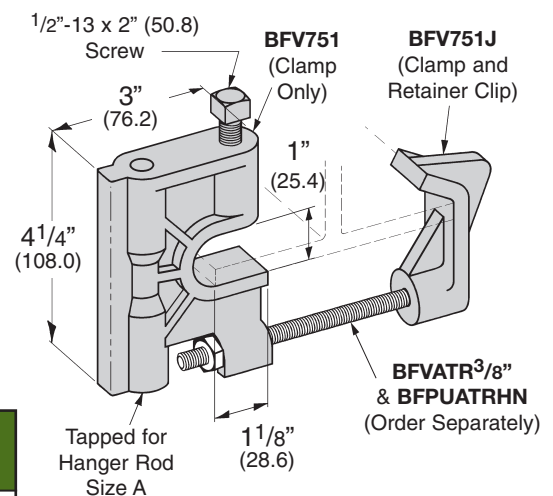
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyester



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

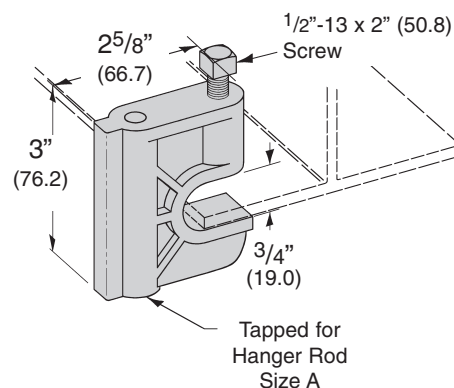


Part No.	For Hanger Rod Size A	Design Load		Torque	
		Lbs.	kN	ft.-Lbs.	N•m
BFV751-3/8	3/8"-16	500	(2.22)	10	(13)
BFV751J-3/8	3/8"-16	500	(2.22)	10	(13)
BFV751-1/2	1/2"-13	500	(2.22)	10	(13)
BFV751J-1/2	1/2"-13	500	(2.22)	10	(13)
BFV751-5/8	5/8"-11	500	(2.22)	10	(13)
BFV751J-5/8	5/8"-11	500	(2.22)	10	(13)

Reference page 182 for general fitting specifications.

BFV755 BEAM CLAMP

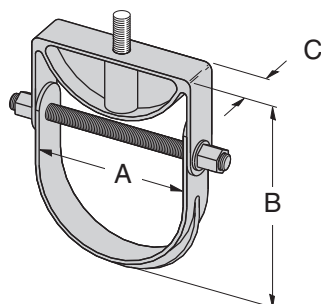
- Design Load Safety Factor of 3
- Material: Glass Reinforced Polyurethane
- Setscrew material: Stainless Steel 316
ASTM F593 Group 2, S4



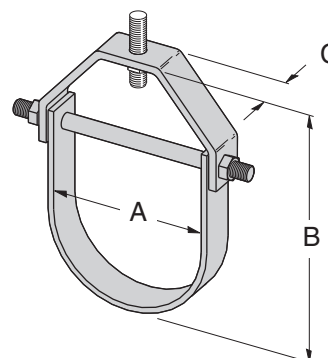
Part No.	For Hanger Rod Size A	Design Load Lbs.	kN	Torque ft.-Lbs.	N•m
BFV755-3/8	3/8"-16	400	(1.78)	10	(13)
BFV755-1/2	1/2"-13	400	(1.78)	10	(13)

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 182 for general fitting specifications.

Fiberglass

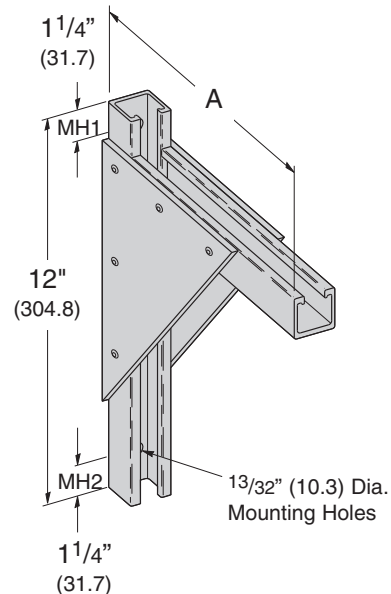
BF*409 SERIES

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



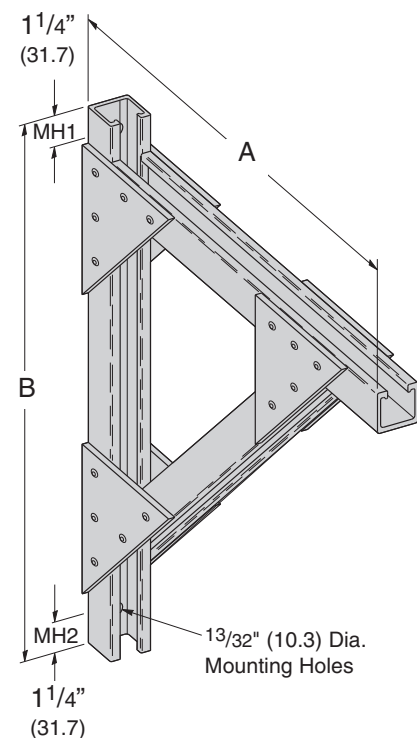
BF*494 SERIES

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)

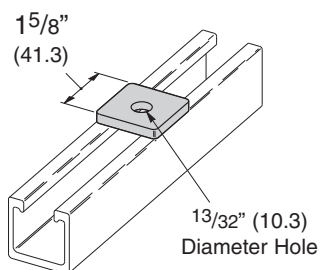
* Insert P for Glass Reinforced Polyester Resin or
V for Glass Reinforced Vinyl Ester Resin



Reference page 182 for general fitting specifications.

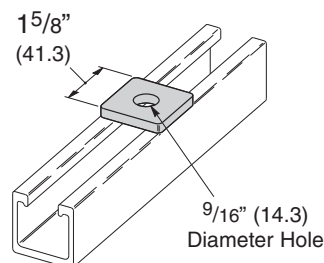
BFV201 SQUARE WASHER FOR 3/8" BOLT

- Material: Injection Molded Glass Reinforced Polyurethane



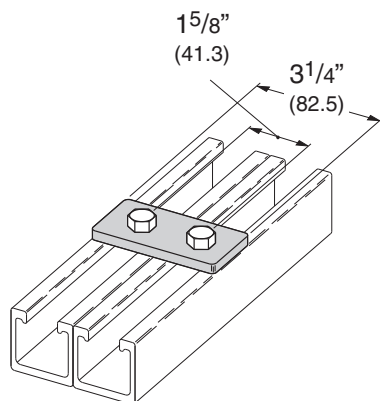
BFV202 SQUARE WASHER FOR 1/2" BOLT

- Material: Injection Molded Glass Reinforced Polyurethane



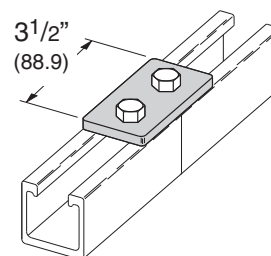
BFV340 TWO HOLE FLAT PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



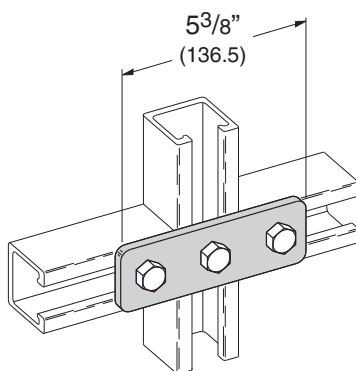
BFV129 TWO HOLE SPLICE PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



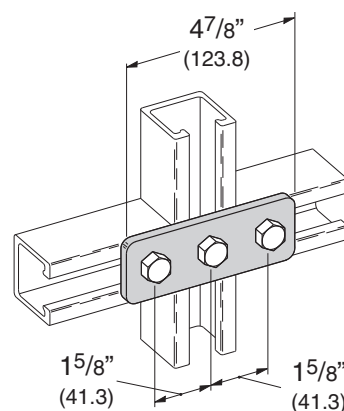
BFV141 THREE HOLE FLAT PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



BFV557 THREE HOLE FLAT PLATE

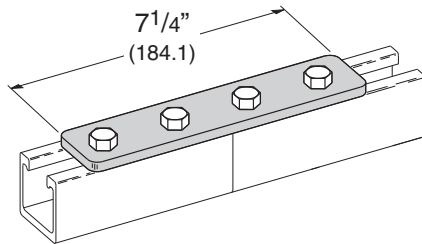
- Material: Injection Molded Glass Reinforced Polyurethane



Reference page 182 for general fitting specifications.

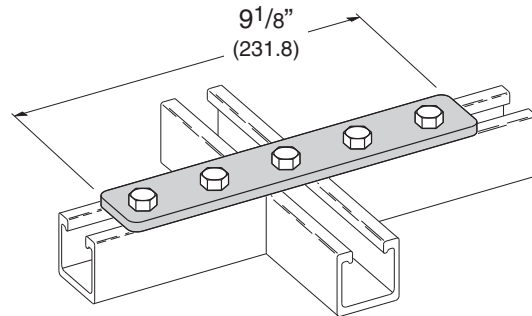
BFV341 FOUR HOLE SPLICE PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



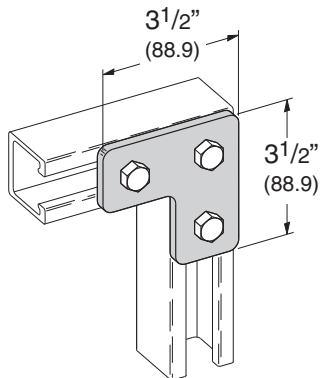
BFV342 FIVE HOLE FLAT PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



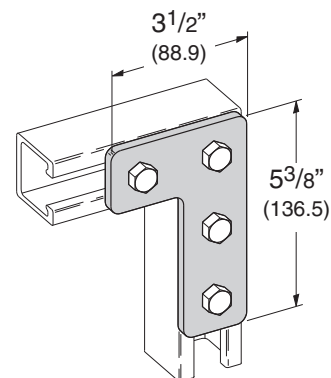
BFV140 THREE HOLE FLAT CORNER PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



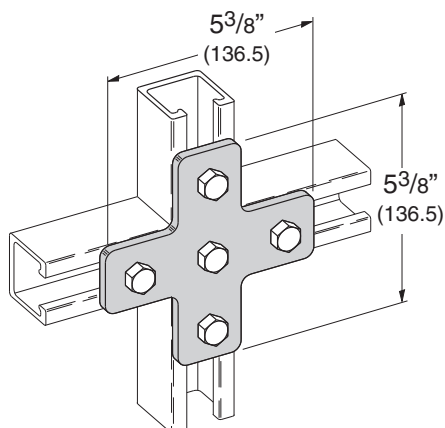
BFV143 FOUR HOLE FLAT CORNER PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



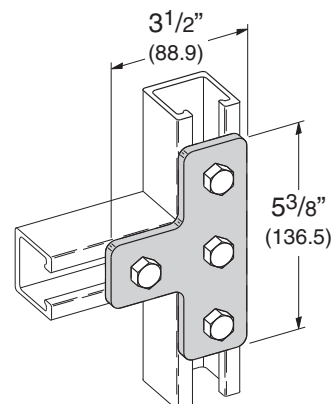
BFV132 FIVE HOLE FLAT CROSS PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



BFV133 FOUR HOLE FLAT TEE PLATE

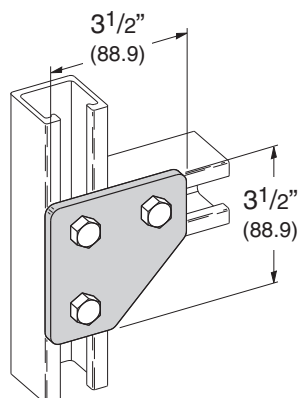
- Material: Injection Molded Glass Reinforced Polyurethane



Reference page 182 for general fitting specifications.

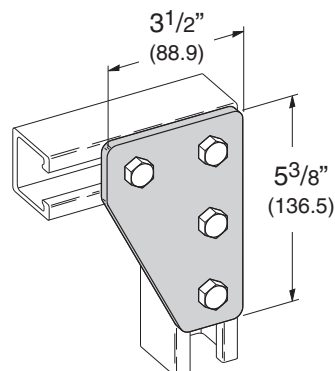
BFV135 THREE HOLE FLAT GUSSET CORNER PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



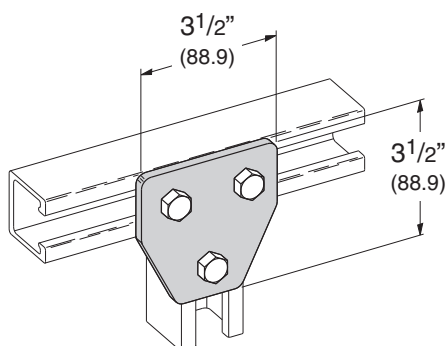
BFV142 FOUR HOLE FLAT GUSSET CORNER PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



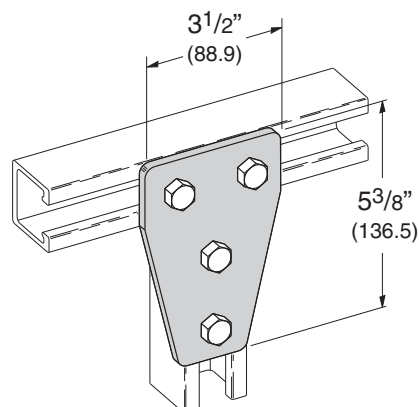
BFV337 THREE HOLE FLAT GUSSET TEE PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



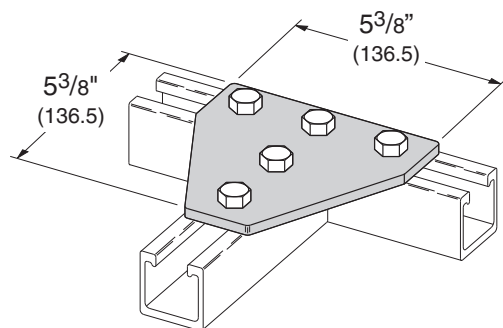
BFV136 FOUR HOLE FLAT GUSSET TEE PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



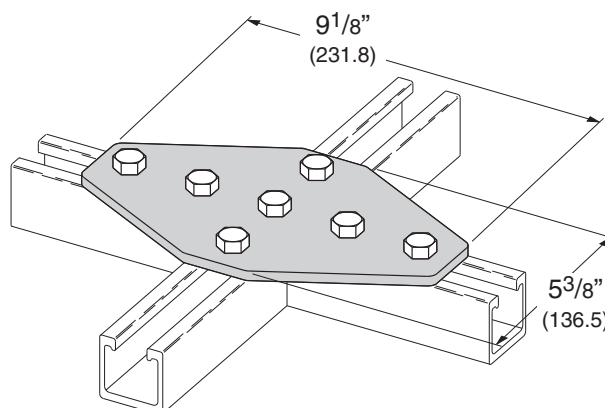
BFV532 FIVE HOLE FLAT GUSSET TEE PLATE

- Material: Injection Molded Glass Reinforced Polyurethane



BFV334 SEVEN HOLE FLAT GUSSET CROSS PLATE

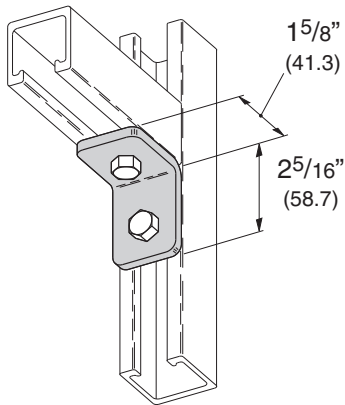
- Material: Injection Molded Glass Reinforced Polyurethane



Reference page 182 for general fitting specifications.

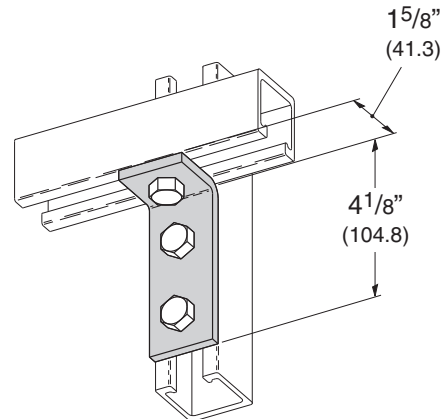
BFV101 TWO HOLE 90° CORNER ANGLE

- Material: Injection Molded Glass Reinforced Polyurethane



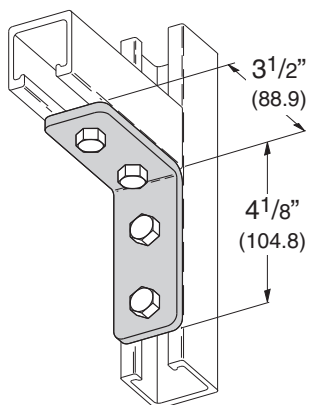
BFV103 THREE HOLE 90° CORNER ANGLE

- Material: Injection Molded Glass Reinforced Polyurethane



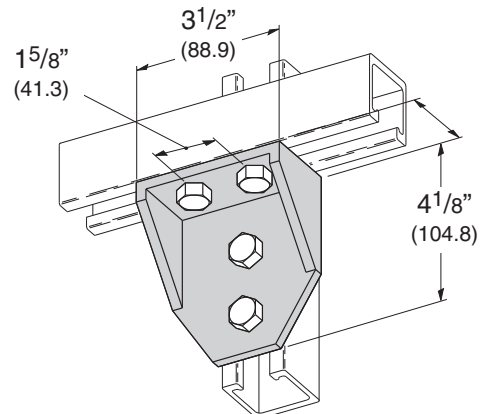
BFV104 FOUR HOLE 90° CORNER ANGLE

- Material: Injection Molded Glass Reinforced Polyurethane



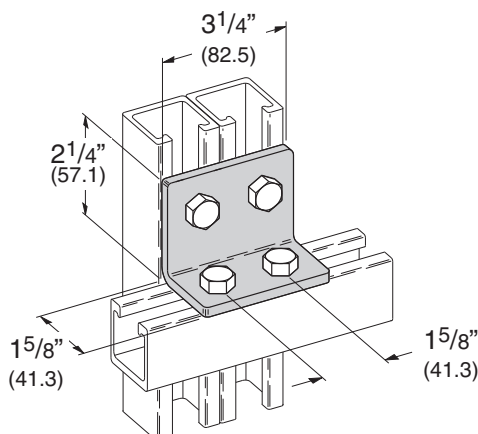
BFV118 FOUR HOLE 90° GUSSETED SHELF ANGLE

- Material: Injection Molded Glass Reinforced Polyurethane



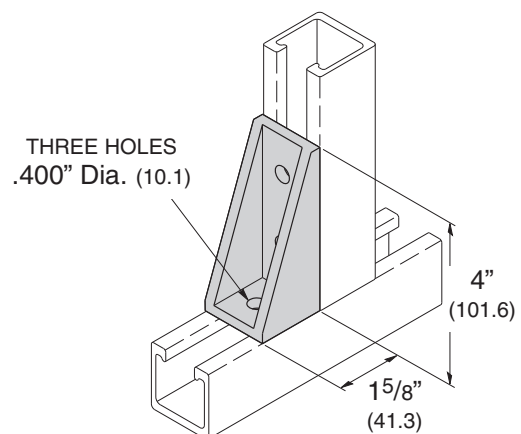
BFV558 FOUR HOLE 90° CORNER ANGLE

- Material: Injection Molded Glass Reinforced Polyurethane



BFV371-2G THREE HOLE 90° GUSSETED CORNER ANGLE

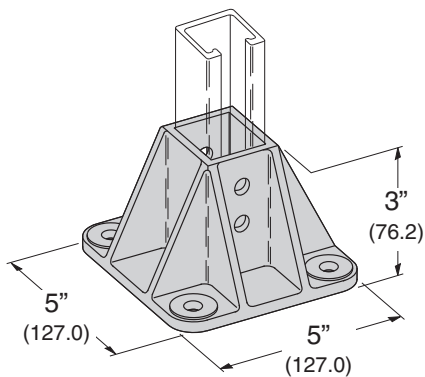
- Material: Injection Molded Glass Reinforced Polyurethane



Reference page 182 for general fitting specifications.

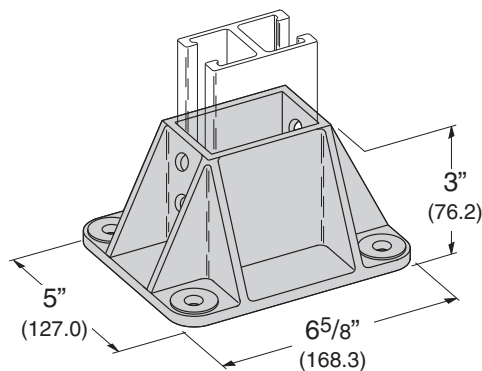
BFV280SQ POST BASE FOR BF*22

- Material: Glass Reinforced Polyurethane



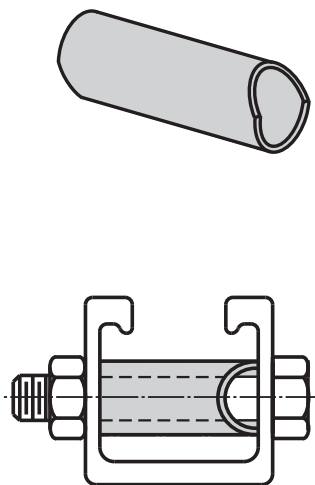
BFV281SQ POST BASE FOR BF*22A

- Material: Glass Reinforced Polyurethane



BFV650 CHANNEL SPACER

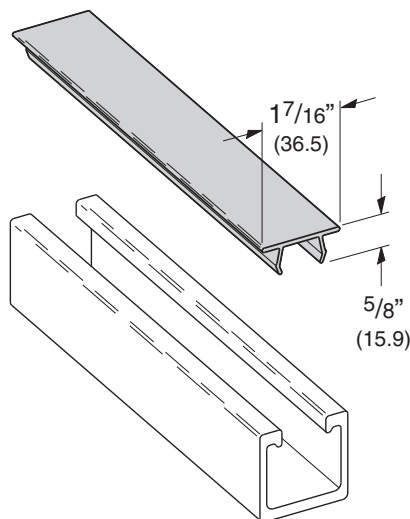
- Spacer I.D. accommodates 3/8" rod or bolts.
- Material: Polyurethane



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 182 for general fitting specifications.

Mini Channel & Fittings

Cooper 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— $\frac{9}{32}$ " (7.14 mm) Dia.

Hole Spacing— $\frac{13}{32}$ " (10.3 mm) from end and $1\frac{1}{16}$ " (27.0 mm) on center.

Width— $\frac{13}{16}$ " (20.6 mm)

Thickness— $\frac{1}{8}$ " (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	
GLV	Pre-Galvanized	ASTM A653 33,000 PSI min. yield
HDG	Hot-Dipped Galvanized	ASTM A123

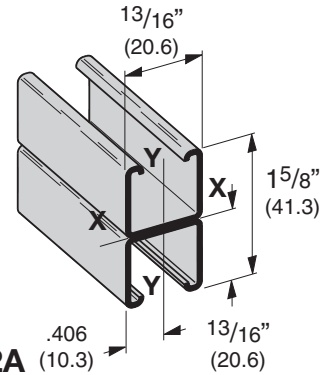
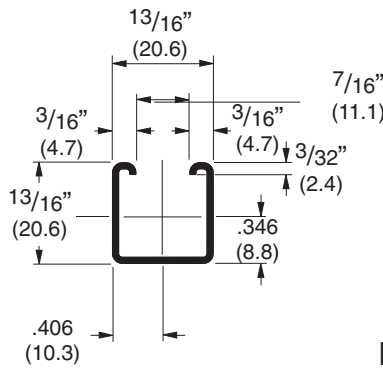
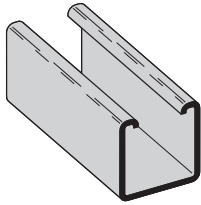
*Unless otherwise noted.

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	Weight lbs./ft. kg/m	X - X Axis				Y - Y Axis			
		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	
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	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

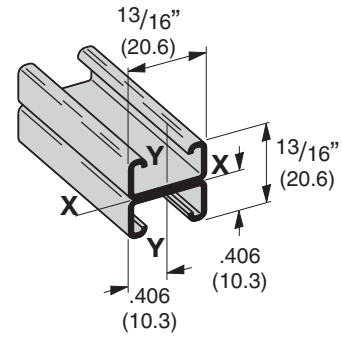
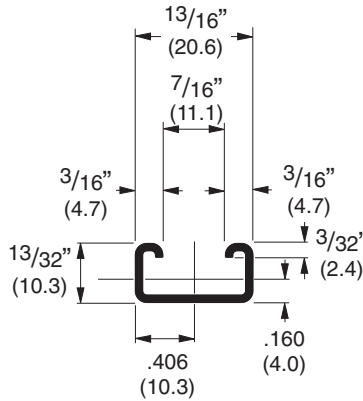
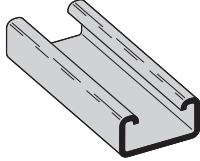
Unbraced Height		Channel Style	Max. Column Loading K = .80				Max. Column Loading (Loaded @ C.G.)					
In.	mm		Loaded @ C.G.		Loaded @ Slot Face		K = .65		K = 1.0		K = 1.2	
			Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N
12	(305)	B62 B62A	2052 4666	(9127.7) (20755.4)	820 1449	(3647) (6445)	2161 4710	(9612.6) (20951.1)	1890 4593	(8407.1) (20430.7)	1715 4503	(7628.7) (20030.3)
24	(609)	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	(914)	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	(1219)	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	(1524)	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	(1829)	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 200 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		Channel Style	Uniform Load and Deflection				Uniform Load @ Deflection =			
In.	mm		Lbs.	N	In.	mm	Lbs.	N	Lbs.	N
12	(305)	B72 B72A	116 210*	(516.0) (934.1)	.051 .020	(1.29) (.51)	113 210*	(502.6) (934.1)	75 210*	(324.7) (934.1)
24	(609)	B72 B72A	58 159	(258.0) (707.2)	.206 .125	(5.23) (3.17)	28 127	(124.5) (564.9)	19 85	(84.5) (378.1)
36	(914)	B72 B72A	39 106	(173.5) (471.5)	.465 .281	(11.81) (7.14)	13 57	(57.8) (253.5)	8 38	(35.6) (169.0)
36	(1219)	B72 B72A	29 80	(129.0) (355.8)	.827 .500	(21.00) (12.70)	7 32	(31.1) (142.3)	5 21	(22.2) (93.4)
60	(1524)	B72 B72A	23 64	(102.3) (284.7)	1.292 .782	(32.81) (19.86)	5 20	(22.2) (88.9)	3 14	(13.3) (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.

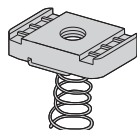
COLUMN LOADING

Unbraced Height		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)	B72 B72A	1598 3600	(7108) (16013)	539 986	(2397) (4386)	1712 3700	(7615) (16458)	1410 3433	(6272) (15271)	1181 3229	(5253) (14363)
24	(609)	B72 B72A	701 2710	(3118) (12054)	320 802	(1423) (3567)	1050 3113	(4670) (13847)	450 2043	(2001) (9088)	313** 1421	(1392) (6321)
36	(914)	B72 B72A	313** 1421	(1392) (6321)	188 569	(836) (2531)	473 2135	(2104) (9497)	201** 909	(894) (4043)	— 631**	(—) (2807)
36	(1219)	B72 B72A	177** 799	(787) (3554)	122 404	(542) (1797)	267** 1211	(1187) (5387)	— 512**	(—) (2277)	— 355**	(—) (1579)
60	(1524)	B72 B72A	113** 512**	(502) (2277)	85 298	(378) (1325)	171** 775	(760) (3447)	— 327**	(—) (1454)	— —	(—) (—)

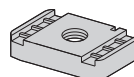
**Where the slenderness ratio $\frac{KL}{r}$ exceeds 200, and K = end fixity factor, L = actual length and r = radius of gyration.

Reference page 200 for general fitting specifications.

NUTS FOR B62, B72 CHANNEL



SPRING NUT



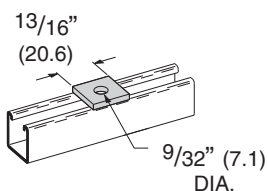
NUT WITHOUT SPRING

Part Number				Thread Size	Thickness		Wt./C Lbs. kg	
B62		B72						
With Spring	Without Spring	With Spring	Without Spring					
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

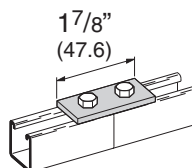
B6202 SQUARE WASHER

- Standard finishes: ZN, GRN
- Wt./C 2 Lbs. (.9 kg)



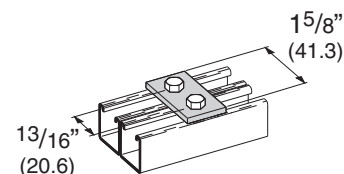
B6129 TWO HOLE SPLICE PLATE

- 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)

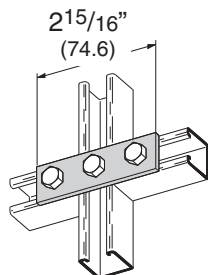


Reference page 200 for general fitting specifications.

Mini Fittings

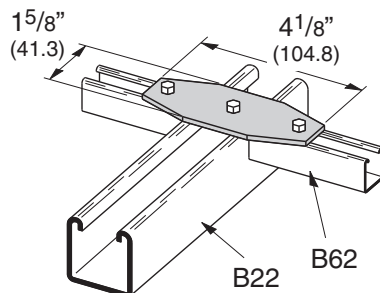
B6141 THREE HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



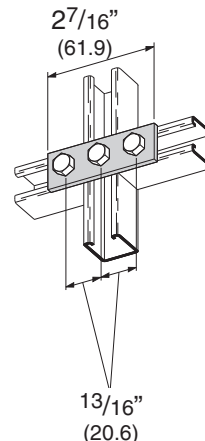
B600-62 THREE HOLE FLAT ADAPTER PLATE

- Standard finishes: ZN, GRN
- Wt./C 19 Lbs. (8.6 kg)



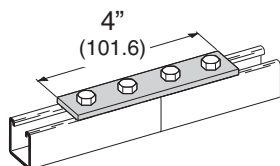
B6557 THREE HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



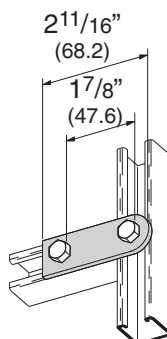
B6341 FOUR HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



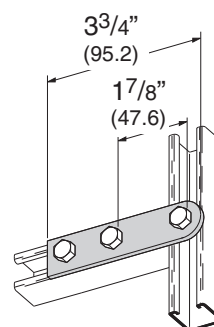
B6138 TWO HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



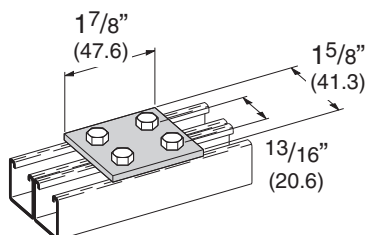
B6139 THREE HOLE SWIVEL PLATE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



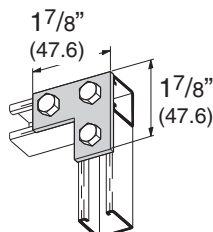
B6504 FOUR HOLE SPLICE PLATE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



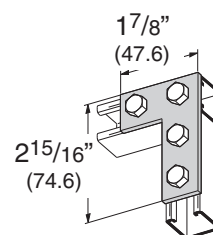
B6140 THREE HOLE CORNER PLATE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



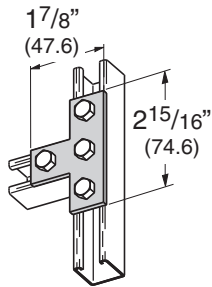
B6143 FOUR HOLE CORNER PLATE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)

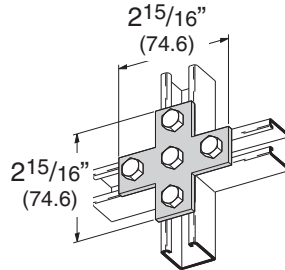


Reference page 200 for general fitting specifications.

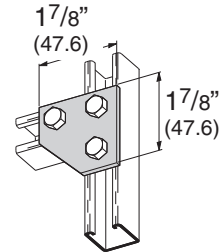
- B6133**
FOUR HOLE TEE PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 11 Lbs. (5.0 kg)



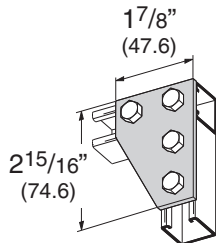
- B6132**
FIVE HOLE CROSS PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 13 Lbs. (5.9 kg)



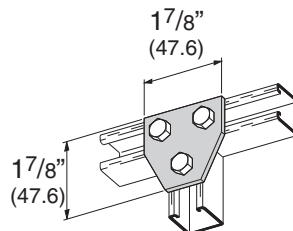
- B6135**
THREE HOLE CORNER GUSSET PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 9 Lbs. (4.1 kg)



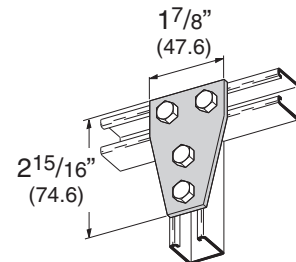
- B6142**
FOUR HOLE CORNER GUSSET PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 15 Lbs. (6.8 kg)



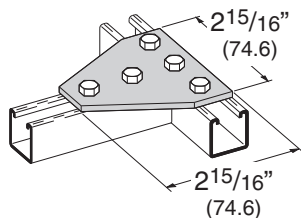
- B6337**
THREE HOLE TEE GUSSET PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 10 Lbs. (4.5 kg)



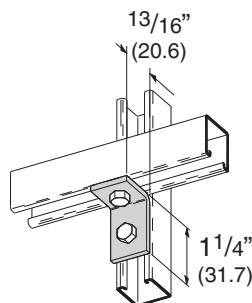
- B6136**
FOUR HOLE TEE GUSSET PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 15 Lbs. (6.8 kg)



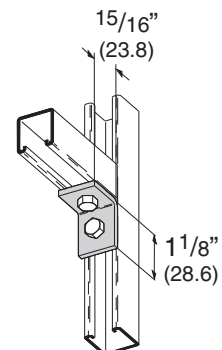
- B6532**
FIVE HOLE TEE GUSSET PLATE
 • Standard finishes: ZN, GRN
 • Wt./C 22 Lbs. (10.0 kg)



- 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)

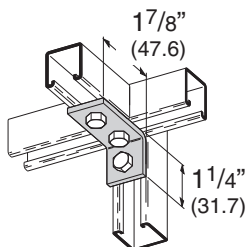


Reference page 200 for general fitting specifications.

Mini Fittings

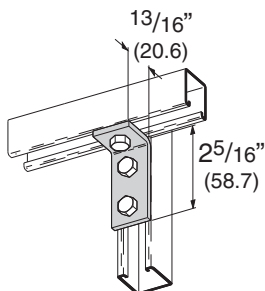
B6102 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



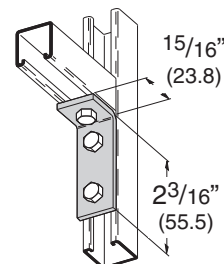
B6103 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



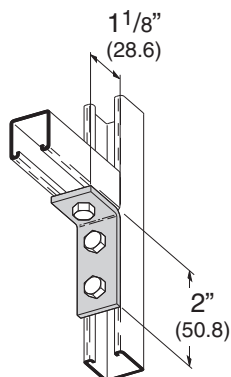
B6232 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



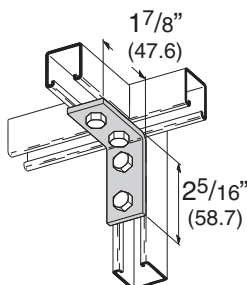
B6374 THREE HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



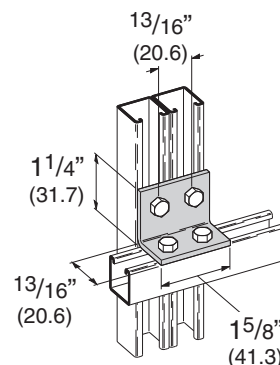
B6104 FOUR HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



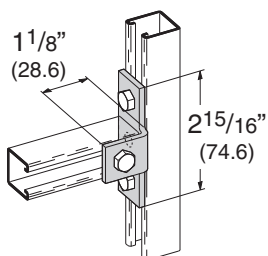
B6558 FOUR HOLE CORNER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



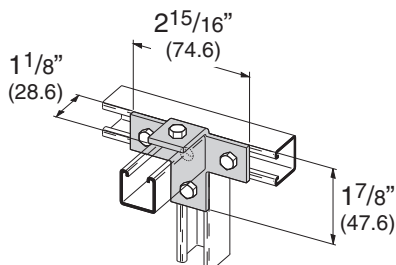
B6357 FOUR HOLE OFFSET BENT TEE

- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



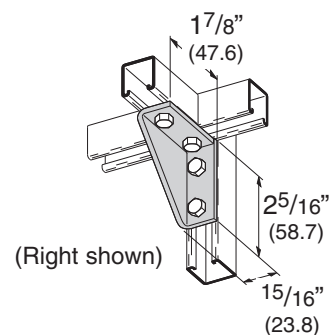
B6239 FIVE HOLE OFFSET BENT TEE

- Standard finishes: ZN, GRN
- Wt./C 14 Lbs. (6.3 kg)



B6144R&L FOUR HOLE SHELF BRACKET

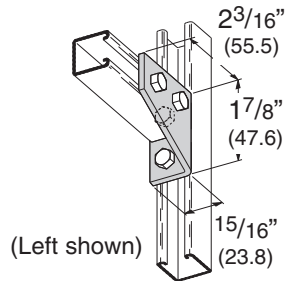
- Standard finishes: ZN, GRN
- Wt./C 19 Lbs. (8.6 kg)



Reference page 200 for general fitting specifications.

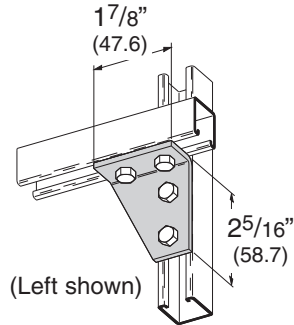
B6134R&L FOUR HOLE CORNER GUSSET

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



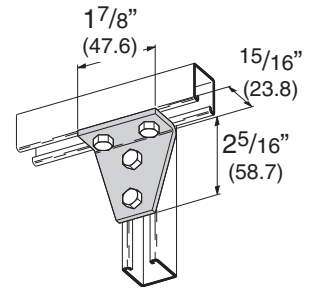
B6234 R&L FOUR HOLE CORNER GUSSET

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



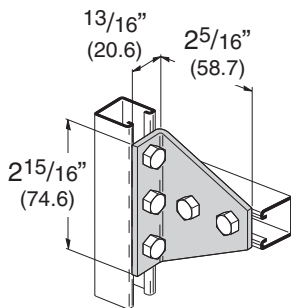
B6118 FOUR HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



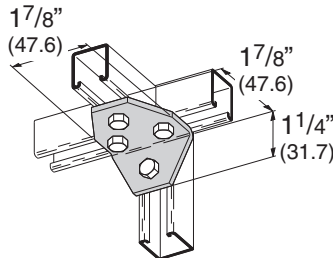
B6533 FIVE HOLE GUSSETED SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 22 Lbs. (10.0 kg)



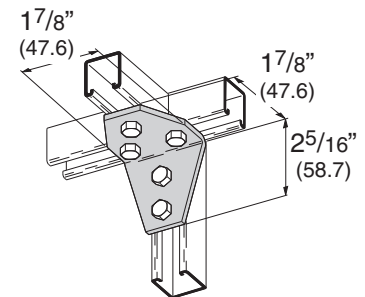
B6126 FOUR HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



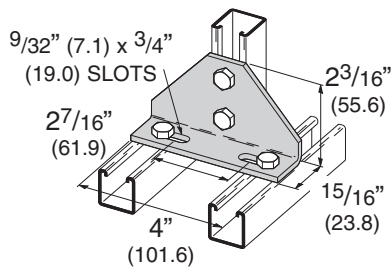
B6127 FIVE HOLE GUSSETED THREE WAY SHELF ANGLE

- Standard finishes: ZN, GRN
- Wt./C 18 Lbs. (8.1 kg)



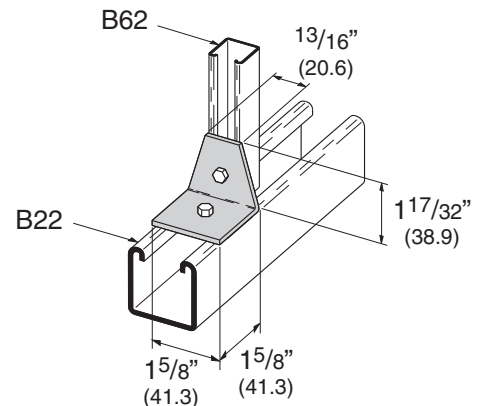
B6112 FOUR HOLE ADJUSTABLE CORNER ANGLE

- 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)

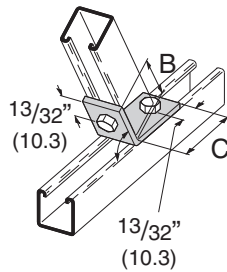


Reference page 200 for general fitting specifications.

Mini Fittings

B6147-B6152 TWO HOLE OPEN ANGLE

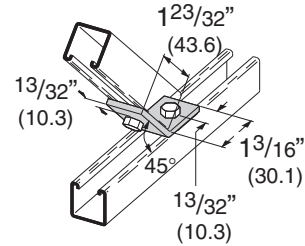
- Standard finishes: ZN, GRN



Part No.	A	B	C	Wt./C	
				Lbs.	kg
B6147	82 1/2°	2 1/32" (51.6)	27/32" (21.4)	8.0	(3.6)
B6148	75°	2 1/32" (51.6)	27/32" (21.4)		
B6149	67 1/2°	2" (50.8)	7/8" (22.2)		
B6150	60°	1 31/32" (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)	29/32" (23.0)		

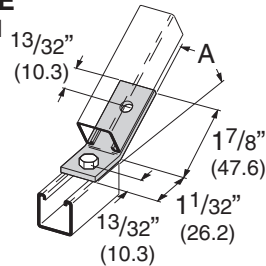
B6154 TWO HOLE OPEN ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



B6162-B6165 TWO HOLE OPEN ANGLE

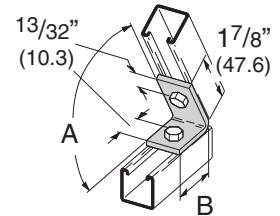
- Standard finishes: ZN, GRN



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

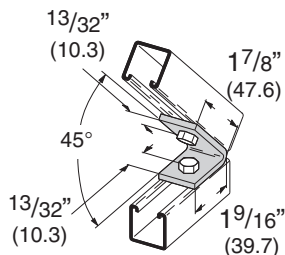
- Standard finishes: ZN, GRN



Part No.	A	B	Wt./C	
			Lbs.	kg
B6156	82 1/2°	19/32" (32.5)	8.0	(3.6)
B6157	75°	15/16" (33.3)		
B6158	67 1/2°	13/8" (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)		

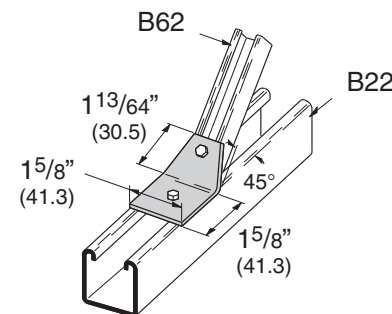
B6155 TWO HOLE CLOSED ANGLE

- Standard finishes: ZN, GRN
- Wt./C 8 Lbs. (3.6 kg)



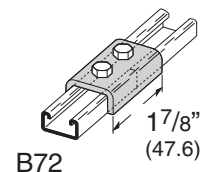
B601-62 TWO HOLE 45° ADAPTER ANGLE

- Standard finishes: ZN, GRN
- Wt./C 14 Lbs. (6.3 kg)



B6169 TWO HOLE SPLICE CLEVIS FOR B72

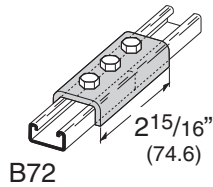
- Standard finishes: ZN, GRN
- Wt./C 11 Lbs. (5.0 kg)



Reference page 200 for general fitting specifications.

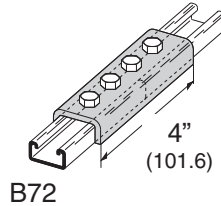
B6168 THREE HOLE SPLICE CLEVIS FOR B72

- Standard finishes: ZN, GRN
- Wt./C 16 Lbs. (7.2 kg)



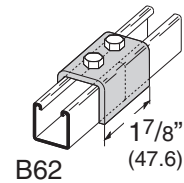
B6167 FOUR HOLE SPLICE CLEVIS FOR B72

- Standard finishes: ZN, GRN
- Wt./C 24 Lbs. (10.9 kg)



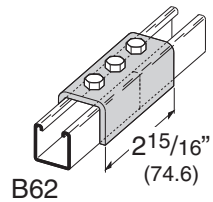
B6170 TWO HOLE SPLICE CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 17 Lbs. (7.7 kg)



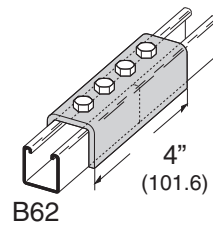
B6171 THREE HOLE SPLICE CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 26 Lbs. (11.8 kg)



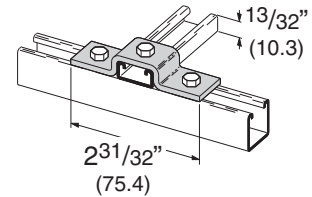
B6172 FOUR HOLE SPLICE CLEVIS FOR B62

- Standard finishes: ZN, GRN
- Wt./C 36 Lbs. (16.3 kg)



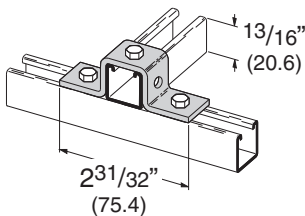
B7116 THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 10 Lbs. (4.5 kg)



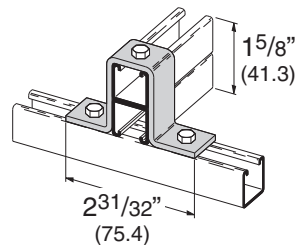
B6107 THREE HOLE U-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 12 Lbs. (5.4 kg)



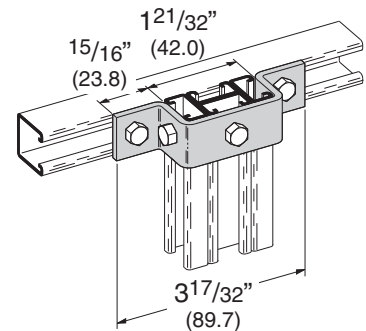
B6107-62A THREE HOLE U-SUPPORT

- 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)

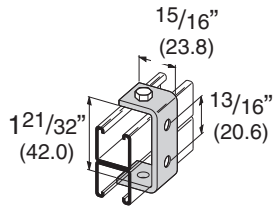


Reference page 200 for general fitting specifications.

Mini Fittings

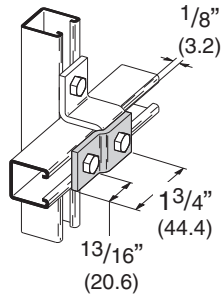
B6173 FOUR HOLE CLEVIS

- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



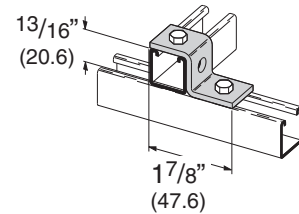
B6526 TWO HOLE OFFSET Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 5 Lbs. (2.2 kg)



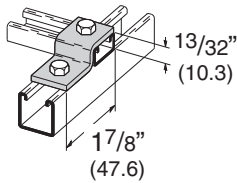
B6105 TWO HOLE Z-SUPPORT FOR B62

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



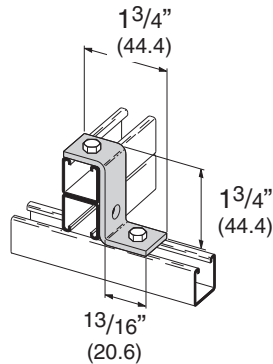
B7105 TWO HOLE Z-SUPPORT FOR B72

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



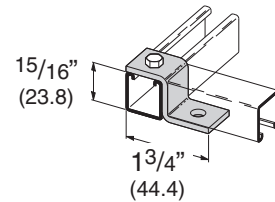
B6110 TWO HOLE Z-SUPPORT FOR B62A

- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



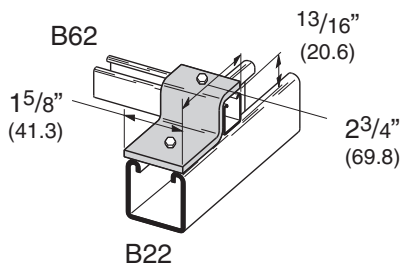
B6108 TWO HOLE OFFSET Z-SUPPORT

- Standard finishes: ZN, GRN
- Wt./C 7 Lbs. (3.2 kg)



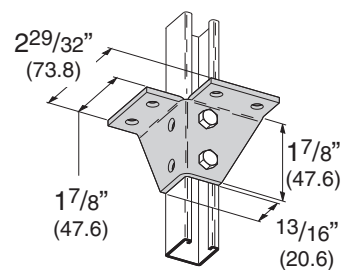
B598-62 TWO HOLE Z-ADAPTER PLATE

- Standard finishes: ZN, GRN
- Wt./C 28 Lbs. (12.7 kg)



B6571 EIGHT HOLE WING CONNECTION

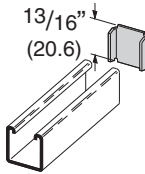
- Standard finishes: ZN, GRN
- Wt./C 28 Lbs. (12.7 kg)



Reference page 200 for general fitting specifications.

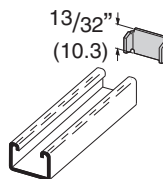
B6205 END CAP FOR B62

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN
- Wt./C 3 Lbs. (1.3 kg)



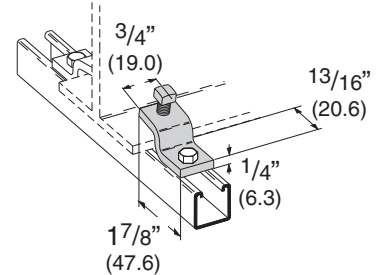
B7205 END CAP FOR B72

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN
- Wt./C 1 Lb. (.4 kg)



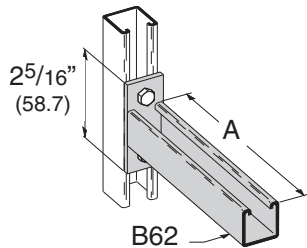
B6211 Z-BEAM CLAMP

- 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

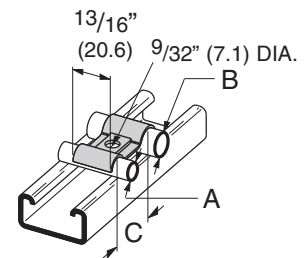
- Safety Factor of 2
- Uniform Design Load 40 Lbs. (.18 kN)
- Standard finishes: ZN, GRN



Part No.	A	Wt./C	
		Lbs.	kg
B6409-6	6"	(152.4)	28.0 (12.7)
B6409-9	9"	(228.6)	35.0 (15.8)

B2350-B2355 ONE HOLE DOUBLE TUBING STRAP

- Material: ASTM A1008 SS Gr. 33 Type 1
- Standard finishes: ZN, GRN

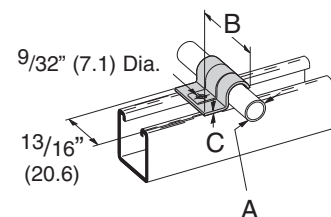


Part No.	O.D. Size A		O.D. Size B		C		Wt./C	
							Lbs.	kg
B2350	1/4"	(6.3)	1/4"	(6.3)	3/4"	(19.0)	1.2	(.5)
B2351	3/8"	(9.5)	3/8"	(9.5)	1"	(25.4)	2.0	(.9)
B2352	1/2"	(12.7)	1/2"	(12.7)	1 1/4"	(31.7)	2.9	(1.3)
B2353	1/4"	(6.3)	3/8"	(9.5)	7/8"	(22.2)	1.6	(.7)
B2354	1/4"	(6.3)	1/2"	(12.7)	1"	(25.4)	2.1	(.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 200 for general fitting specifications.

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.

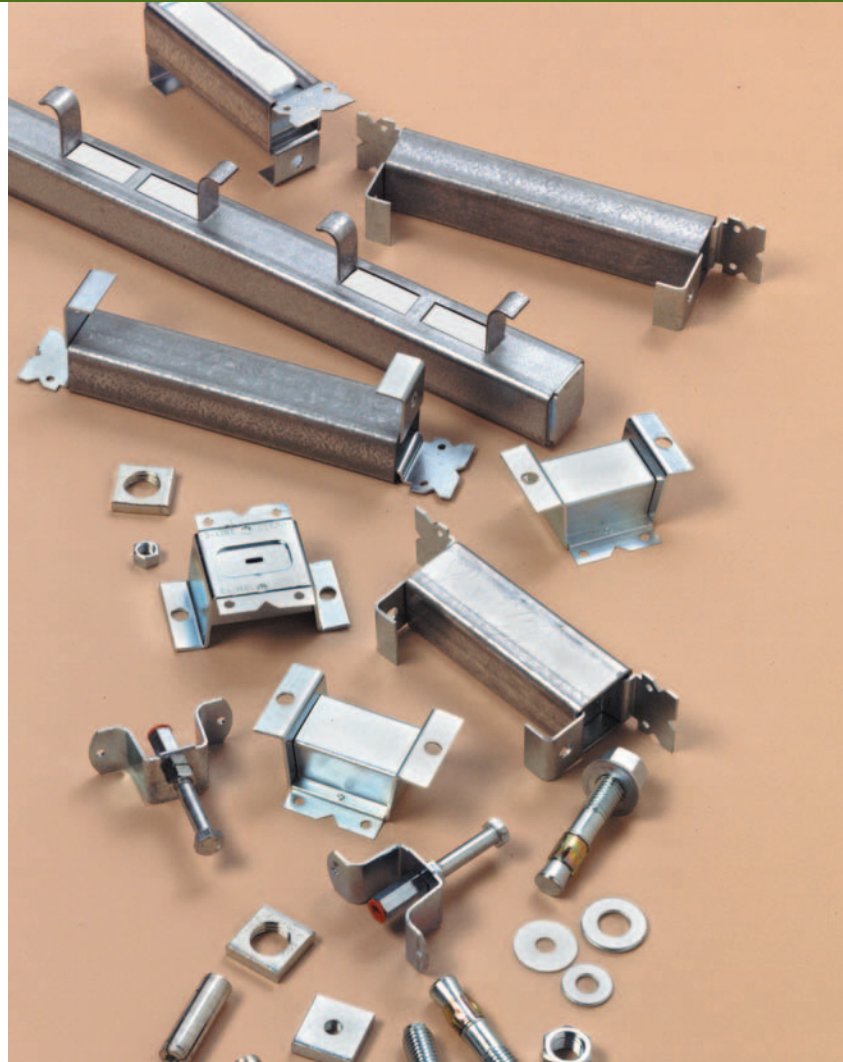
Continuous Concrete Inserts, manufactured from Cooper B-Line's standard channels, have formed anchors spaced on 4 inch (101.6 mm) centers. $\frac{3}{16}$ " (4.8 mm) nail-holes are provided for securing the inserts to the forms.

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

Cooper 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

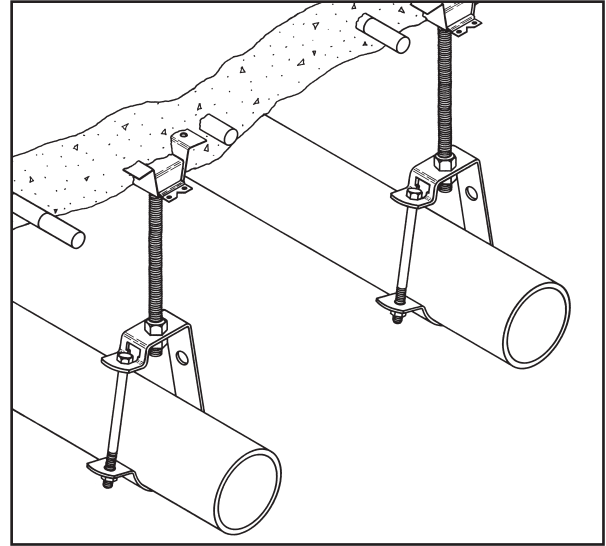
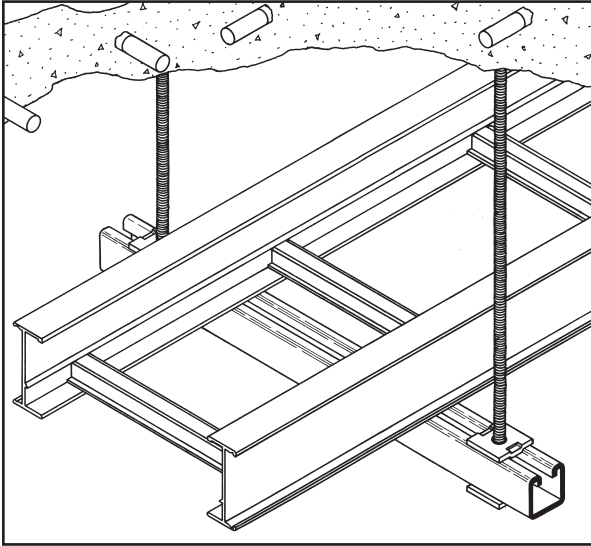
Pre-stressed inserts, inserts with studs welded to the back of the channel, and other types of special inserts are available from Cooper B-Line.

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.

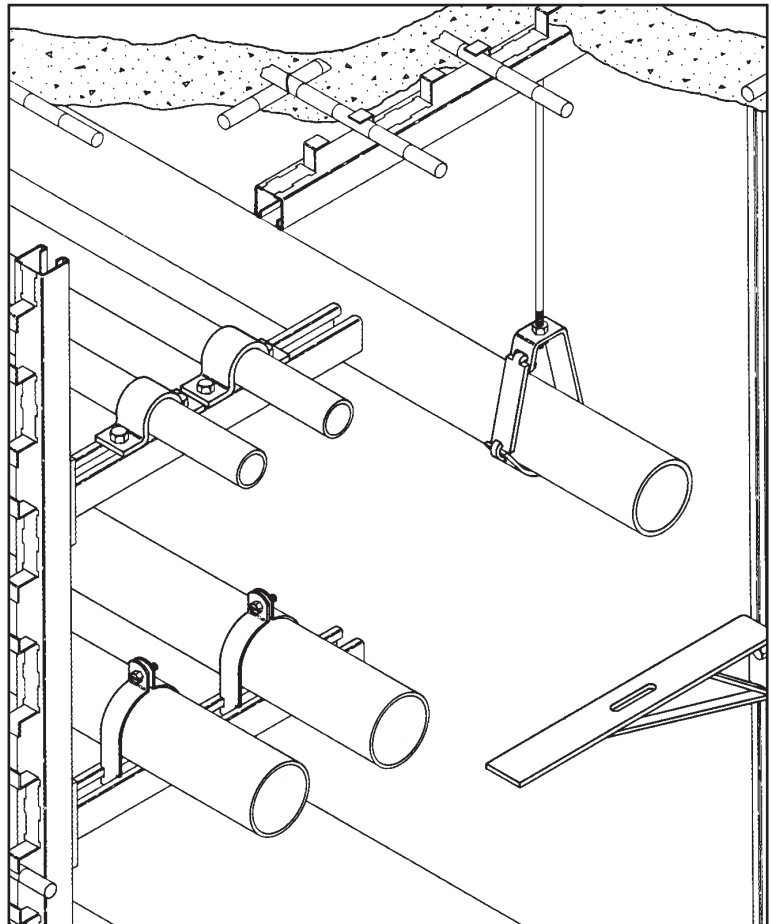


Continuous concrete inserts, installed in the ceiling, can be used to support trapeze hangers, suspended pipe racks, cable trays and single or multiple pipe hangers.

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.

Cooper 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.

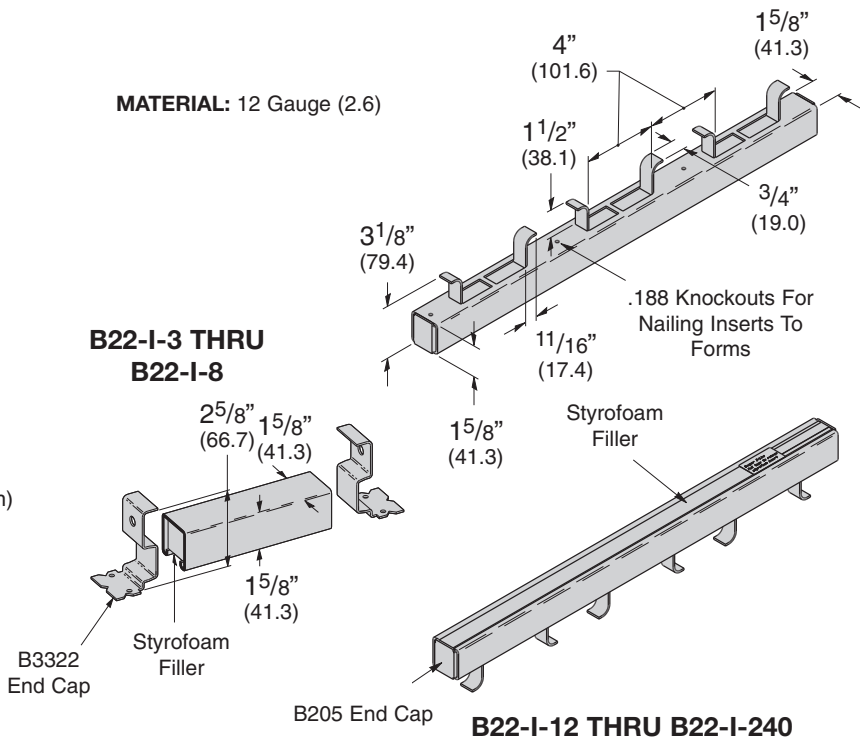


Reference page 212 for general fitting and standard finish specifications.

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)

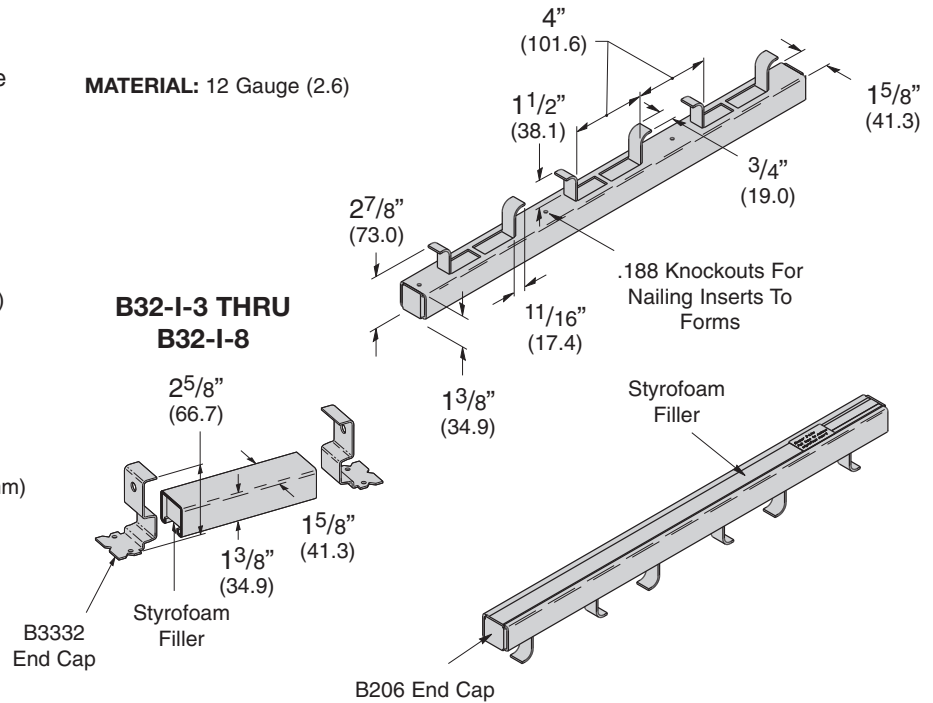
Part No.	Length		Wt./C	
	in.	mm	Lbs.	kg
B22-I-12	12"	(305)	224	(101.6)
B22-I-16	16"	(406)	289	(131.1)
B22-I-20	20"	(508)	353	(160.1)
B22-I-24	24"	(609)	420	(190.5)
B22-I-32	32"	(813)	553	(250.8)
B22-I-36	36"	(914)	620	(281.2)
B22-I-40	40"	(1016)	686	(311.1)
B22-I-48	48"	(1219)	820	(371.9)
B22-I-60	60"	(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 212 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

MATERIAL: 12 Gauge (2.6)



B32-I-12 THRU B32-I-240

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)

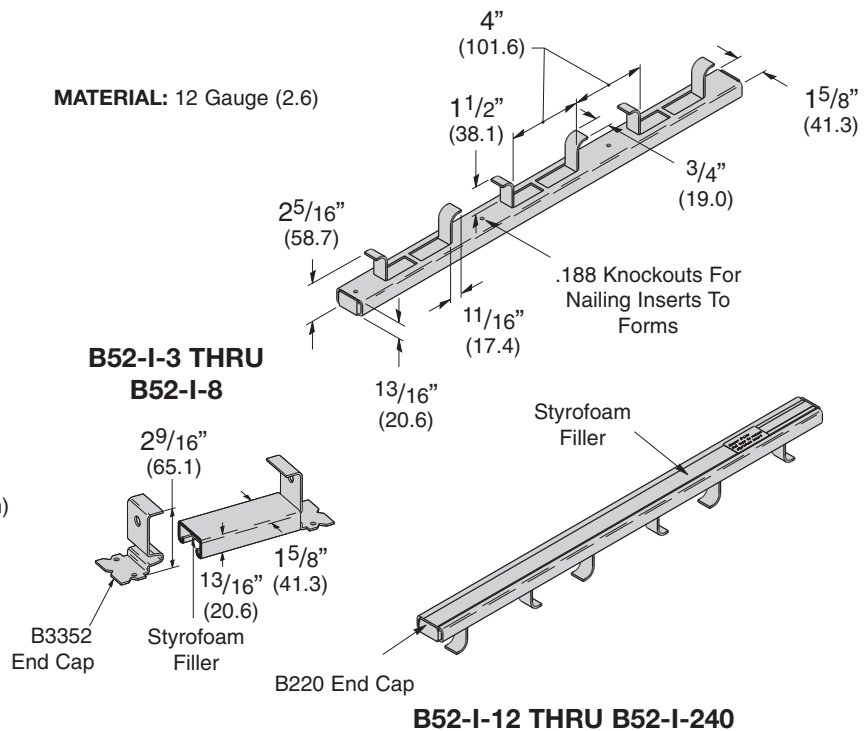
Reference page 212 for general fitting and standard finish specifications.

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. (3.33kN).
- 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

MATERIAL: 12 Gauge (2.6)



B52-I-12 THRU B52-I-240

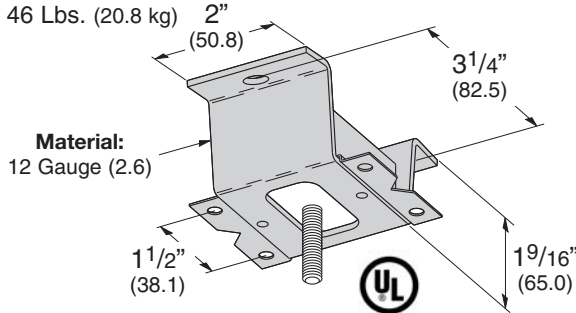
Part No.	Length		Wt./C		Design Load	
	in.	mm	Lbs.	kg	Lbs.	kN
B52-I-3	3"	(76)	53	(24.0)	400	(1.78)
B52-I-4	4"	(101)	63	(28.6)	500	(2.22)
B52-I-6	6"	(152)	85	(38.5)	750	(3.33)
B52-I-8	8"	(203)	106	(48.1)	1000	(4.45)

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 212 for general fitting and standard finish specifications.

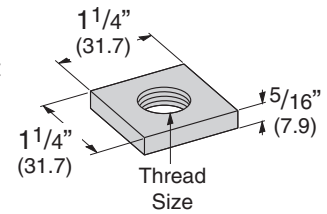
B2500 SPOT INSERT

- 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

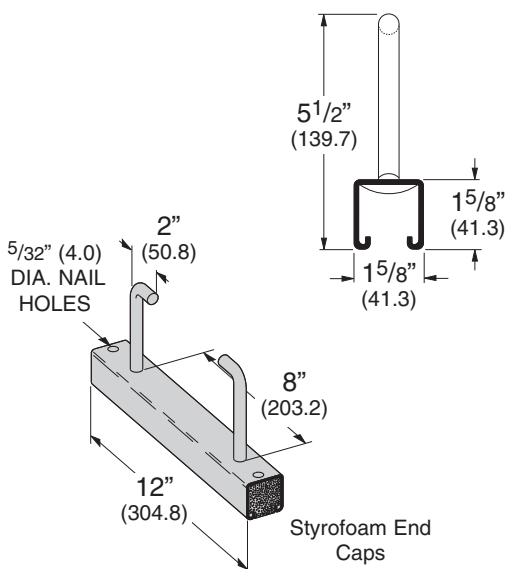
- For use in B2500 Spot Insert
- Material: Steel ASTM A36
- Standard finish: ZN



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)

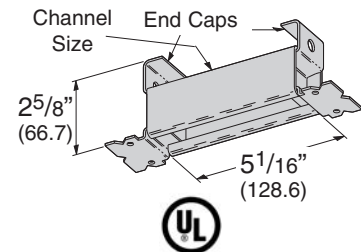
B2503 HEAVY DUTY SPOT INSERT

- 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

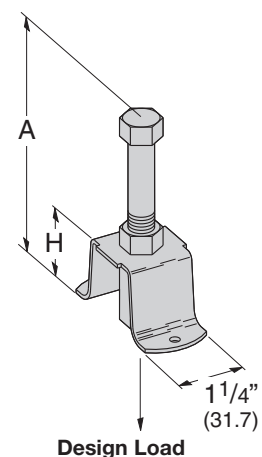
- Safety Factor of 5
- To support 10" (250) pipe use B2505 insert with 5/8"-11 Channel Nuts.
- To support up to and including 8" (200) pipes use B2506, B2507 and B2508 inserts with the desired Channel Nuts.
- Standard finish: ZN



Part No.	Channel Style	End Cap Part No.	Design Load Lbs.	kN	Maximum Pipe Size	Wt./C 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)



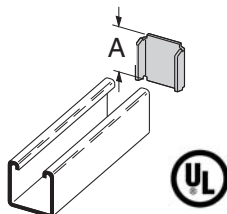
Part No. & Size	Height A	Height H	Design Load Lbs.	kN	Wt./C Lbs.	kN
B2501-1/4	2 7/16" (61.9)	7/8" (22.2)	250	(1.11)	16	(7.2)
B2501-3/8	3 1/16" (77.8)	1 7/8" (47.6)	610	(2.71)	22	(9.9)
B2501-1/2	4 1/8" (104.8)	1 7/8" (47.6)	880	(3.91)	26	(11.7)

Reference page 212 for general fitting and standard finish specifications.

Insert Accessories

B205, B206, B220 X TYPE END CAPS

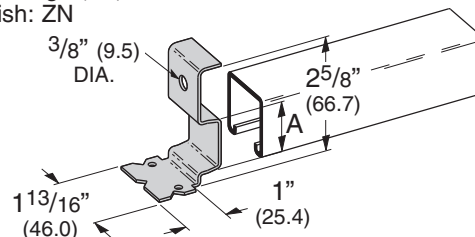
- UL listed for raceway use only
- Material: 12 Gauge (2.6)
- Standard finish: ZN



Part No.	Use With	A	Wt./C	
			Lbs.	kg
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

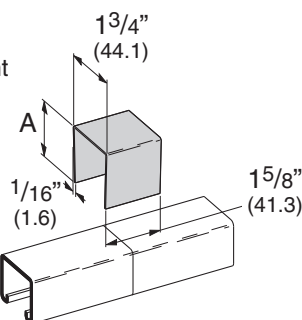
- UL listed for raceway use only
- Material: 14 Gauge (1.9)
- Standard finish: ZN



Part No.	Use With	A	Wt./C	
			Lbs.	kg
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)

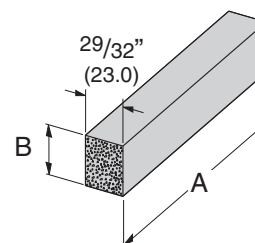
B380 JOINT SPLICE PLATE

- 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
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)

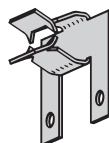
B22IFS-B52IFS STYROFOAM FILLER STRIP



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.

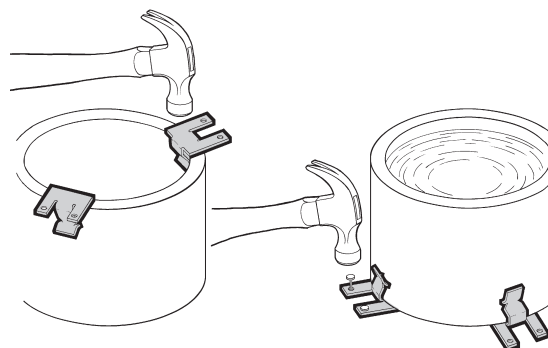


BD40



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

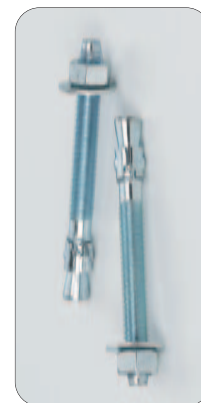


Reference page 212 for general fitting and standard finish specifications.

WEDGE ANCHOR

Catalog Number	Thread Size	Size		Thread Length		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
AWA-37-225	3/8"-16	3/8" x 2 1/4"	(9 x 57)	1 1/4"	(32)	3/8"	(9)	760	(3.38)	940	(4.18)
AWA-37-275	3/8"-16	3/8" x 2 3/4"	(9 x 70)	1 5/8"	(41)						
AWA-37-300	3/8"-16	3/8" x 3"	(9 x 76)	1 7/8"	(47)						
AWA-37-350	3/8"-16	3/8" x 3 1/2"	(9 x 89)	2 3/8"	(60)						
AWA-37-375	3/8"-16	3/8" x 3 3/4"	(9 x 95)	2 5/8"	(66)						
AWA-37-500	3/8"-16	3/8" x 5"	(9 x 127)	3 7/8"	(98)	1/2"	(13)	1390	(6.18)	1700	(7.56)
AWA-50-275	1/2"-13	1/2" x 2 3/4"	(13 x 70)	1 3/8"	(35)						
AWA-50-375	1/2"-13	1/2" x 3 3/4"	(13 x 95)	2 3/8"	(60)						
AWA-50-450	1/2"-13	1/2" x 4 1/2"	(13 x 114)	3 1/8"	(79)						
AWA-50-550	1/2"-13	1/2" x 5 1/2"	(13 x 140)	4 1/8"	(105)						
AWA-50-700	1/2"-13	1/2" x 7"	(13 x 178)	5 5/8"	(143)						

Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.



HOLLOW BASE DROP-IN ANCHORS

Catalog Number	Rod Size	Overall Length		Sleeve Length		Drill/Hole Diameter		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ADH-25	1/4"-20	7/8"	(22)	5/8"	(16)	3/8"	(9)	285	(1.27)	300	(1.33)
ADH-37	3/8"-16	1 5/16"	(33)	1 5/16"	(24)	5/8"	(16)	520	(2.31)	640	(2.84)
ADH-50	1/2"-13	1 3/4"	(44)	1 1/4"	(32)	3/4"	(19)	1005	(4.47)	1005	(44.70)
9323	1/4"	--	--	--	--	--	--	--	--	--	--
9343	3/8"	--	--	--	--	--	--	--	--	--	--
9353	1/2"	--	--	--	--	--	--	--	--	--	--

Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.



RAPID ROD™ HANGERS FOR CONCRETE

Catalog Number	Rod Size	Shank Size & Length		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
ARC-25-125	1/4"-20	1/4" x 1 1/4"	(6 x 32)	1/4"	(6)	485	(2.16)	610	(2.71)
ARC-37-150	3/8"-16	1/4" x 1 1/2"	(6 x 38)	1/4"	(6)	650	(2.89)	660	(2.93)
ARC-50-275	1/2"-13	3/8" x 2 3/4"	(9 x 70)	1/4"	(6)	1510	(6.71)	1580	(7.03)

Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.



RAPID ROD™ HANGERS FOR STEEL

Catalog Number	Rod Size	Shank Size & Length		Load Cap. Tension* In 12 Ga.		Load Cap. Tension* In 1/4"	
		in.	mm	Lbs.	kN	Lbs.	kN
ARS-25-100	1/4"-20	1/4" x 1"	(6 x 25)	390	(1.75)	1260	(5.60)
ARS-37-100HN	3/8"-16	1/4" x 1" *	(6 x 25)	512	(2.28)	1260	(5.60)
ARS-37-150	3/8"-16	1/4" x 1 1/2"	(6 x 38)	390	(1.75)	1260	(5.60)
ARS-37-150HN	3/8"-16	1/4" x 1 1/2"	(6 x 38)	512	(2.28)	1260	(5.60)
ARS-37-200	3/8"-16	1/4" x 2"	(6 x 51)	390	(1.75)	1260	(5.60)

Note: Loads shown for ASTM A36 beams and ASTM A572 steel purlins include a safety factor of 4. For UL and FM listings, steel rapid rod must be installed with a retaining nut.

Reference page 212 for general fitting and standard finish specifications.



Anchors

PLASTIC SCREW ANCHORS

- Kits contain 100 anchors, 100 screws, and 1 concrete drill bit



Catalog Number	Screw Size	Load Cap. Tension*		Load Cap. Shear*	
		Lbs.	kN	Lbs.	kN
APC-8K	#8 x 1"	110	(0.49)	70	(0.31)
APC-10K	#10 x 1"	140	(0.62)	90	(0.40)
APC-12K	#12 x 1"	140	(0.62)	90	(0.40)

Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

WOOD-KNOCKER™ ANCHORS



Catalog Number	Rod Size	Color	Insert Thread Length		Overall Length		Load Cap. Tension*		Load Cap. Shear*	
			in.	mm	in.	mm	lbs.	kN	lbs.	kN
ACPW-25	1/4"-20	Brown	3/8"	(9)	17/8"	(47)	930	(4.13)	370	(1.64)
ACPW-37	3/8"-16	Green	5/8"	(16)	17/8"	(47)	1200	(5.33)	1330	(5.91)
ACPW-50	1/2"-13	Yellow	11/16"	(17)	17/8"	(47)	1200	(5.33)	1840	(8.18)
ACPW-62	5/8"-11	Red	15/16"	(24)	17/8"	(47)	1160	(5.16)	2800	(12.45)
ACPW-75	3/4"-10	Purple	11/8"	(28)	17/8"	(47)	1160	(5.16)	2800	(12.45)

Notes: Based on normal weight concrete with minimum compression strength of 3,000 psi.
Allowable load capacities are calculated using applied safety factor of 4.
Minimum embedment is 2" (51mm).

Wood-Knocker™ is a trademark of Powers® Fasteners

BANG-IT™ ANCHORS



Catalog Number	Rod Size	Color	Insert Thread Length		Upper Deck Tension Load*		Lower Deck Tension Load*		Upper Deck Shear Load*		Lower Deck Shear Load*	
			in.	mm	lbs.	kN	lbs.	kN	lbs.	kN	lbs.	kN
ACPD-25	1/4"-20	Brown	3/8"	(9)	1112	(4.94)	830	(3.69)	625	(2.78)	625	(2.78)
ACPD-37	3/8"-16	Green	5/8"	(16)	1435	(6.38)	830	(3.69)	837	(3.72)	837	(3.72)
ACPD-50	1/2"-13	Yellow	11/16"	(17)	1775	(7.89)	830	(3.69)	837	(3.72)	837	(3.72)
ACPD-62	5/8"-11	Red	15/16"	(24)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)
ACPD-75	3/4"-10	Purple	11/8"	(28)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)
ACPD-87	7/8"-9	Black	15/16"	(33)	2200	(9.78)	990	(4.40)	837	(3.72)	837	(3.72)

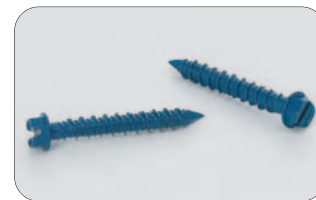
Notes: Based on normal weight concrete with minimum compression strength of 3,000 psi.
Allowable load capacities are calculated using applied safety factor of 4.
Minimum insert spacing of 12" (305mm), minimum end spacing of 12" (305mm).
Minimum embedment is 2" (51mm).
Length of sleeve is 3 3/8" (86mm).

Bang-It™ is a trademark of Powers® Fasteners

Reference page 212 for general fitting and standard finish specifications.

1/4" CONCRETE SCREWS

Catalog Number	Rod Size		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ACS-125H	1/4" x 1 1/4"	(6 x 32)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-175H	1/4" x 1 3/4"	(6 x 44)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-225H	1/4" x 2 1/4"	(6 x 57)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-275H	1/4" x 2 3/4"	(6 x 70)	3/16"	(5)	265	(1.18)	205	(0.91)
ACS-325H	1/4" x 3 1/4"	(6 x 82)	3/16"	(5)	265	(1.18)	205	(0.91)



Note: Based on 1" (25mm) embedment with concrete compression strength of 4,000 psi using applied safety factor of 4. Consult factory for loading of other embedment depths.

SELF-TAPPING MACHINE SCREW ANCHOR

Catalog Number	Rod Size	Thread Depth		Drill/Hole Size		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
ATM-37	3/8"-16	1 1/16"	(17)	1/2"	(13)	540	(2.40)	825	(3.67)



Note: Based on concrete compression strength of 4,000 psi in uncracked concrete using applied safety factor of 4. Minimum concrete thickness 4" (101mm) with minimum embedment of 1 5/8" (41mm)

WALL SCREWS

Catalog Number	Head Type	Thread Depth		Minimum Embedment		Load Cap. Tension*		Load Cap. Shear*	
		in.	mm	in.	mm	Lbs.	kN	Lbs.	kN
AWS-CH	Combo	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)
AWS-OH	Oval	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)
AWS-PH	Pan	3/16" x 1 1/4"	(5 x 32)	3/4"	(19)	90	(0.40)	260	(1.15)



Note: Based on concrete compression strength of 4,000 psi. Allowable load capacities are calculated using an applied safety factor of 4.

SLEEVE TYPE EXPANSION ANCHORS

Catalog Number	Anchor Size & Length		Thread Length		Drill/Hole Diameter		Minimum Embedment		Load Cap. Tension*		Load Cap. Shear*	
	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kN	lbs.	kN
ASA-37-187HN	3/8" x 1 7/8"	(9 x 47)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-37-300HN	3/8" x 3"	(9 x 76)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-37-400HN	3/8" x 4"	(9 x 101)	1 5/8"	(41)	3/8"	(9)	1 5/8"	(41)	670	(2.98)	610	(2.71)
ASA-50-225HN	1/2" x 2 1/4"	(13 x 57)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-300HN	1/2" x 3"	(13 x 76)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-400HN	1/2" x 4"	(13 x 101)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-525HN	1/2" x 5 1/4"	(13 x 133)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)
ASA-50-600HN	1/2" x 6"	(13 x 152)	2 1/4"	(57)	1/2"	(13)	2 1/4"	(57)	1255	(5.58)	1055	(4.69)



Note: Based on concrete compression strength of 4,000 psi using applied safety factor of 4.

Reference page 212 for general fitting and standard finish specifications.

Slotted Angle

Cooper 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

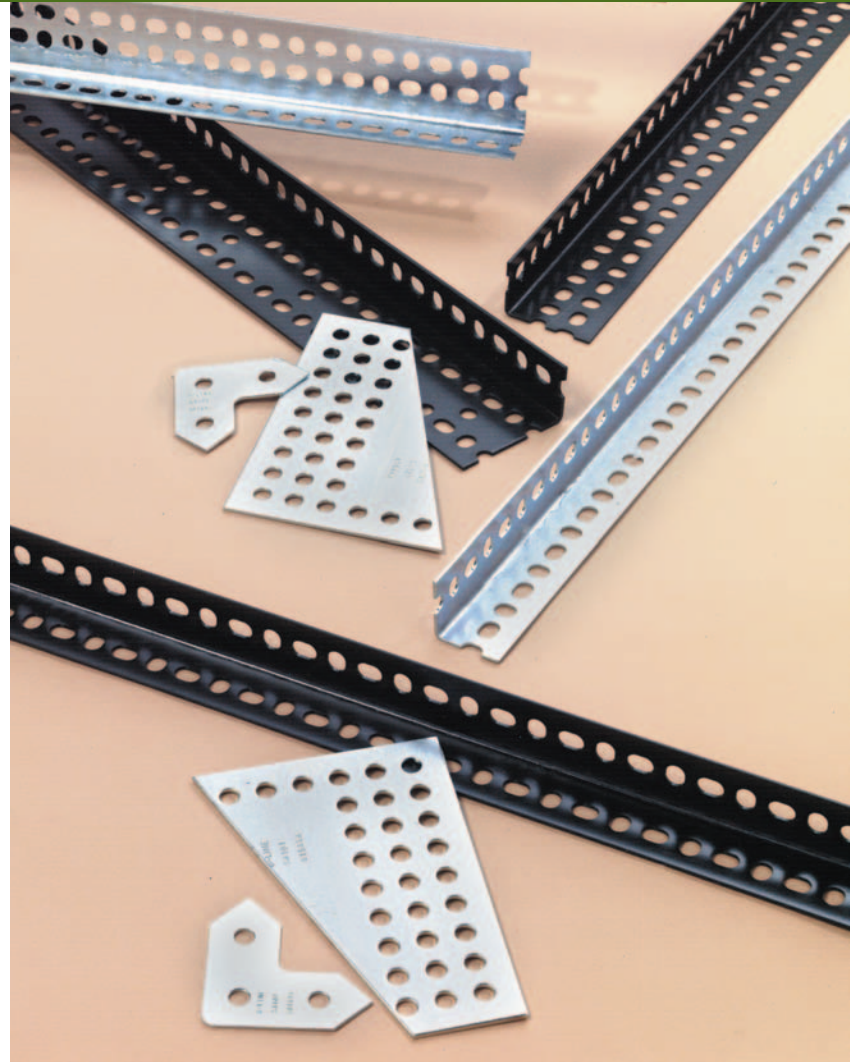
*Unless otherwise noted.

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.

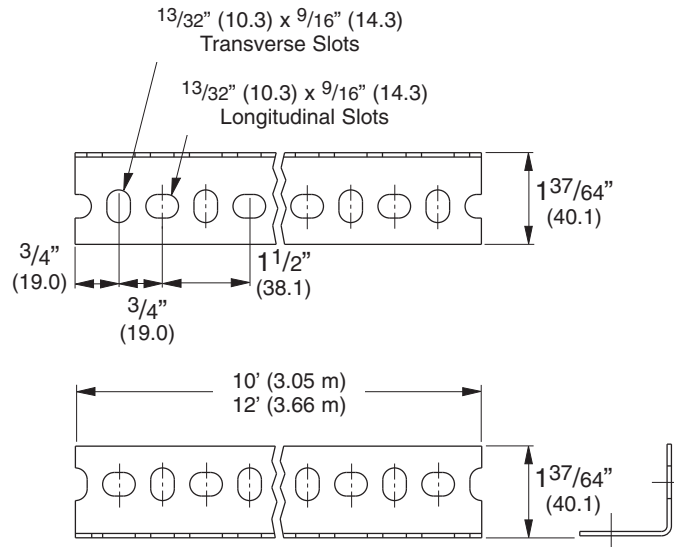
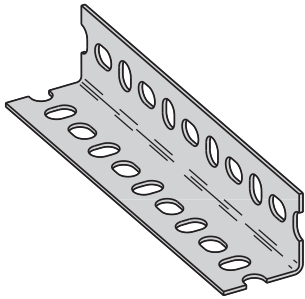
Metric

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



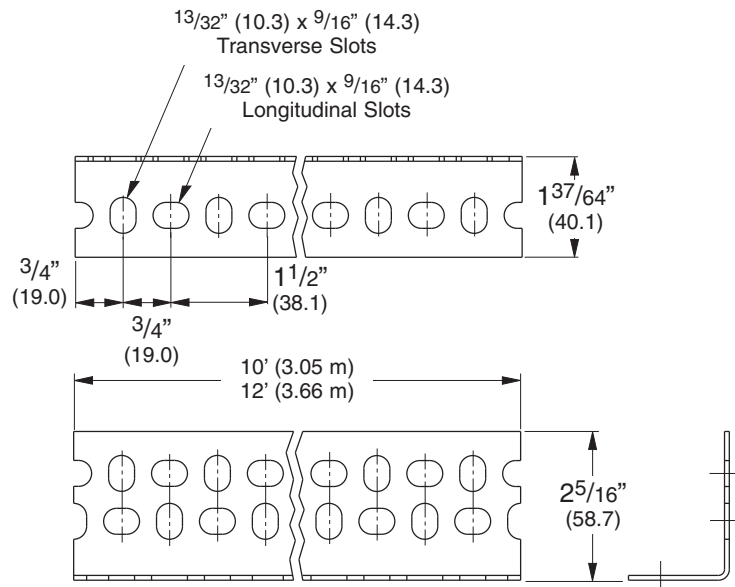
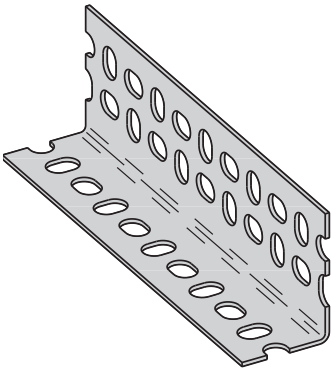
SA158

- 14 Gauge (1.9)
- 15/8" x 15/8"
- Standard finishes: ZN, GRN
- Wt./Ft. .66 Lbs. (.98 kg/m)



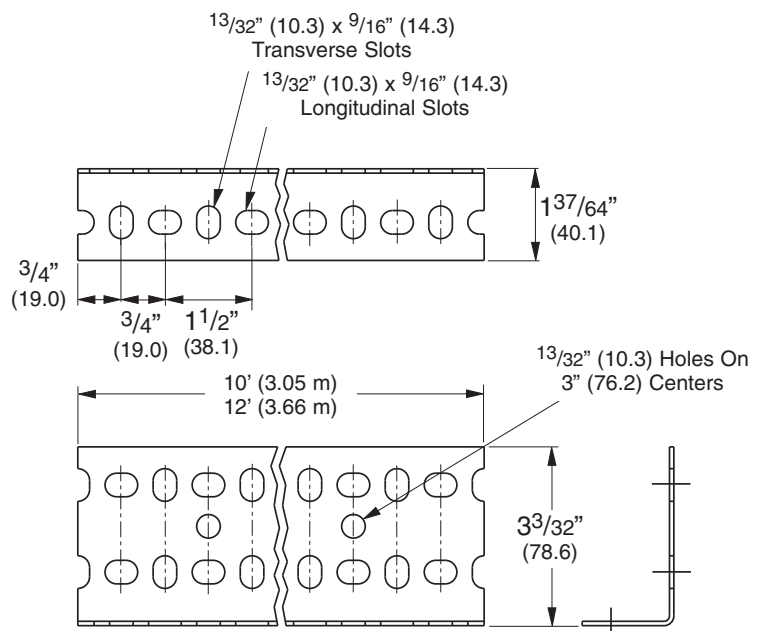
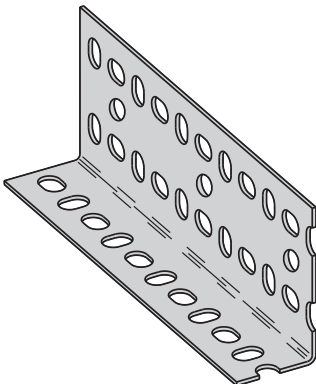
SA276

- 14 Gauge (1.9)
- 15/8" x 2 3/8"
- Standard finishes: ZN, GRN
- Wt./Ft. .78 Lbs. (1.17 kg/m)



SA318

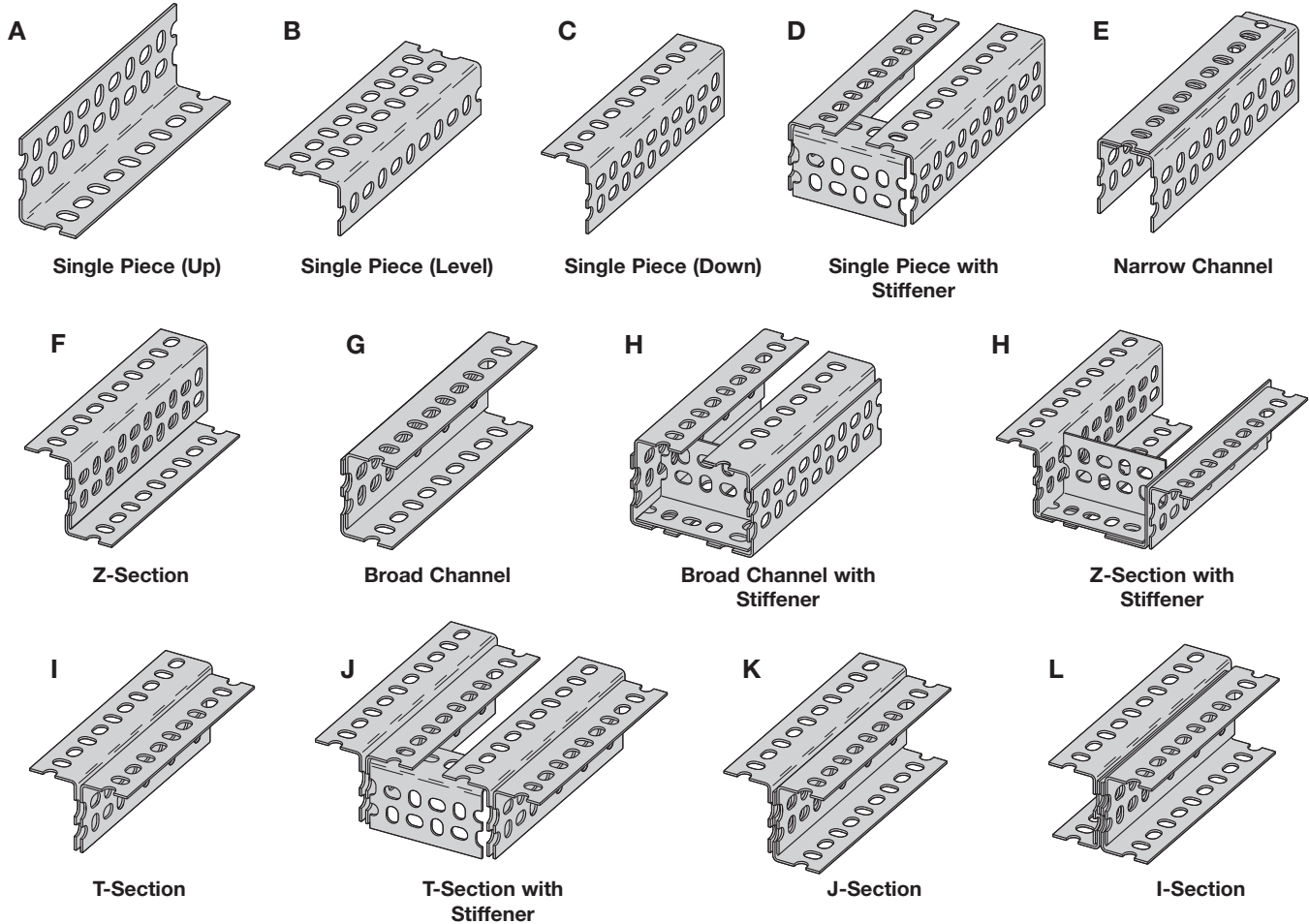
- 12 Gauge (2.6)
- 15/8" x 3 1/8"
- Standard finishes: ZN, GRN
- Wt./Ft. 1.32 Lbs. (1.96 kg/m)



Reference page 222 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 222 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)

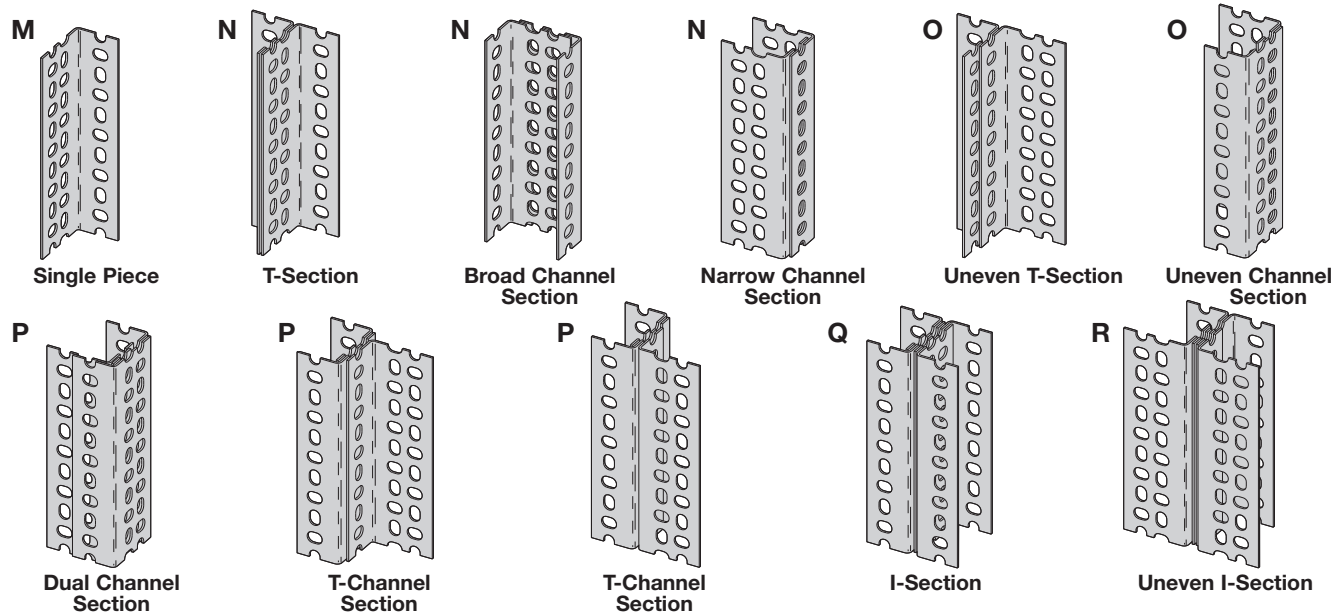
	Beam Span																	
	24" (609 mm)		36" (914 mm)		48" (1219 mm)		60" (1524 mm)		72" (1829 mm)		84" (2133 mm)		96" (2438 mm)		108" (2743 mm)		120" (3048 mm)	
	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N	Lbs.	N
A	–	–	1140	(5071)	850	(3781)	690	(3069)	–	–	–	–	–	–	–	–	–	–
B	–	–	1250	(5560)	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 222 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)	
	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)
P	7270	(32338)	6920	(30781)	6370	(28335)	5840	(25977)	4930	(21930)	3850	(17125)	2870	(12766)
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)

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)	
	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)
P	12560	(55869)	11970	(53245)	11360	(50532)	10480	(46617)	9470	(42124)	8370	(37231)	6880	(30604)
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)

Column Loads assume no lateral support.

Reference page 222 for general fitting and standard finish specifications.

Slotted Angle Kits & Fittings

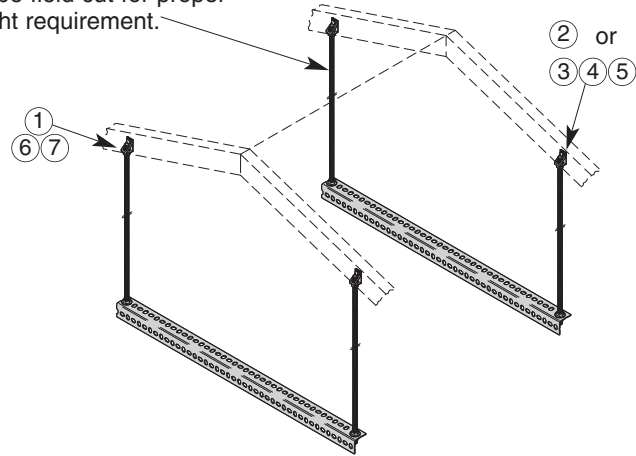
AHHK-1/4 & AHHK-3/8 AIR HANDLER HANGING KIT

- 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.

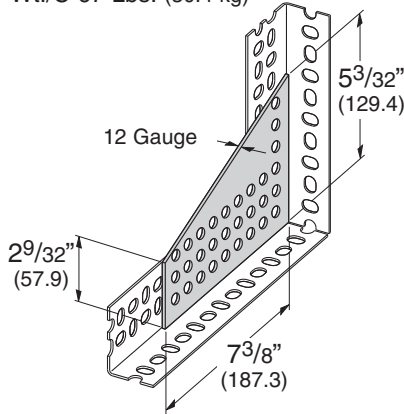
Item #	Description	Quantity	
		AHHK 1/4	AHHK 3/8
①	Rod Hanger Fitting	4	4
②	Lag Screw	4	4
③	Hex Head Cap Screw	4	4
④	Flat Washer (For HHCS)	4	4
⑤	Hex Nuts (For HHCS)	4	4
⑥	Hex Nuts (For Hanging Rods)	16	16
⑦	Flat Washer (See Note 1)	16	-
⑧	Hanging Rods (72" Long)	4	4
⑨	SA158 (36" Long)	2	2

Note 1: Flat washers are required for 1/4"-20 hanging rods only.



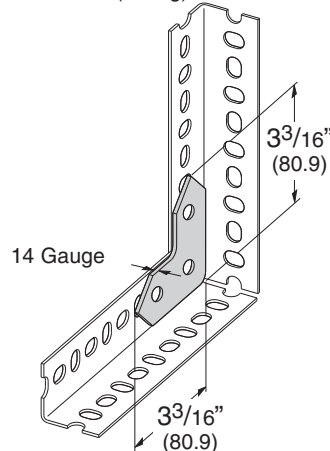
SA101 CONNECTION PLATE

- Standard finishes: ZN, GRN
- Wt./C 67 Lbs. (30.4 kg)



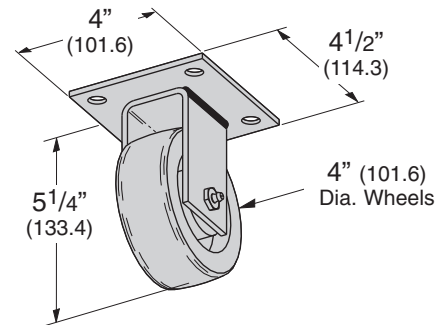
SA102 ANGLE BRACE

- Standard finishes: ZN, GRN
- Wt./C 15 Lbs. (6.8 kg)



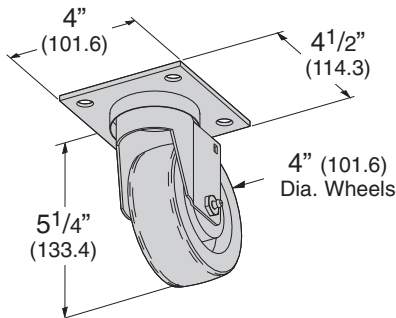
SA154 RIGID CASTER

- 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)



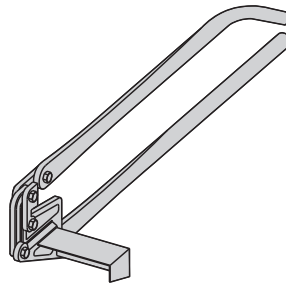
SA155 SWIVEL CASTER

- 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)



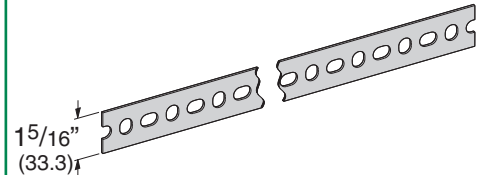
SA110 SLOTTED ANGLE CUTTER

- 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 222 for general fitting and standard finish specifications.

Reference Data

METRIC CONVERSION CHART

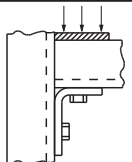
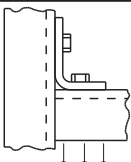
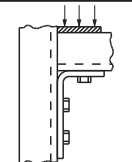
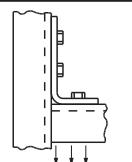
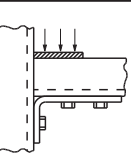
To Convert From	To	Multiply By	To Convert From	To	Multiply By
Angle			Length		
degree	radian (rad)	0.01745329	foot (ft)	meter (m)	0.3048
radian (rad)	degree	57.29578	inch (in)	meter (m)	0.0254
Area			mil	meter (m)	0.0000254
			inch (in)	micrometer (μm)	25400.00
			meter (m)	foot (ft)	3.280840
			meter (m)	inch (in)	39.37008
			meter (m)	mil	39370.08
			micrometer (μm)	inch (in)	0.00003937008
			Volume		
			foot³	cubic meter (m³)	0.02831685
			inch³	cubic meter (m³)	0.00001638706
			cubic centimeter (cm³)	cubic inch (in³)	0.06102374
			cubic meter (m³)	foot³	35.31466
			cubic meter (m³)	inch³	61023.76
			gallon (U.S. liquid)	cubic meter (m³)	0.003785412
Temperature			Section Properties		
degree Fahrenheit	degree Celsius	$t^{\circ}\text{C} = (t^{\circ}\text{F} - 32)/1.8$	section modulus S (in³)	S (m³)	0.00001638706
degree Celsius	degree Fahrenheit	$t^{\circ}\text{F} = 1.8t^{\circ}\text{C} + 32$	moment of inertia I (in⁴)	I (m⁴)	0.0000004162314
Force			modulus of elasticity E (psi)	E (Pa)	6894.757
			section modulus S (m³)	S (in³)	61023.74
pounds-force (lbf)	newtons (N)	4.448222	moment of inertia I (m⁴)	I (in⁴)	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 ÷ 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 per 100 pieces
kilogram (kg)	ounce (avoirdupois)	35.27396	
kilogram (kg)	pound (avoirdupois)	2.204622	
kilogram (kg)	ton (short, 2000 lb)	0.001102311	
kilogram (kg)	ton (long, 2240 lb)	0.0009842064	
Mass Per Unit Length			
lb/ft	kilogram per meter (kg/m)	1.488164	
lb/in	kilogram per meter (kg/m)	17.85797	
kg/m	lb/ft	0.6719689	
kg/m	lb/in	0.5599741	
Mass Per Unit Volume			
lb/ft³	kilogram per cubic meter (kg/m³)	16.01846	
lb/in³	kilogram per cubic meter (kg/m³)	27679.9	
kg/m³	lb/ft³	0.06242797	
kg/m³	lb/in³	0.0000361273	
lbs/ft³	lbs/in³	1728.0	
Mass Per Unit Area			
lb/ft²	kilogram per square meter (kg/m²)	4.882428	
kg/m²	pound per square foot (lb/ft²)	0.2048161	
Pressure or Stress			
lbf/in² (psi)	pascal (Pa)	6894.757	
kip/in² (ksi)	pascal (Pa)	6894757.0	
lbf/in² (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/in² (psi)	145.0377	

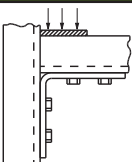
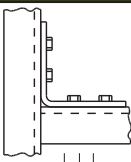
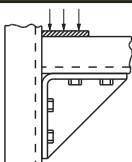
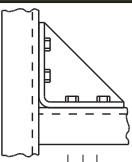
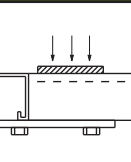
Metric Symbols

m = meter
cm = centimeter
mm = millimeter
μm = micrometer
kg = kilogram
N = newton
kN = kilonewton
Pa = pascal
MPa = megapascal

DESIGN LOAD DATA (For typical channel-fitting connections when USED IN PAIRS).

90° Fittings											
Channel Thickness											
		Lbs.	kN	Lbs.	kN	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)
14 ga.	(1.9)	1000	(4.45)	650	(2.89)	1500	(6.67)	1150	(5.12)	1000	(4.45)
16 ga.	(1.5)	750	(3.34)	500	(2.22)	900	(4.00)	650	(2.89)	1000	(4.45)

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	Lbs.	kN	Lbs.	kN
12 ga.	(2.6)	2500	(11.12)	2000	(8.90)	3000	(13.34)	2500	(11.12)	1000	(4.45)
14 ga.	(1.9)	2000	(8.90)	1650	(7.34)	2000	(8.90)	1650	(7.34)	500	(3.56)
16 ga.	(1.5)	1500	(6.67)	1250	(5.56)	1500	(6.67)	1250	(5.56)	600	(2.67)

General Notes for Strut-Type Channel Raceway

UL Catagory 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 Cooper B-Line's strut-type channel raceway. See tables 1, 2 and 3 below for a listing of the approved conductors for Cooper 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 Cooper 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 Cooper 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

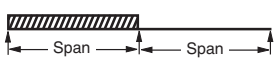
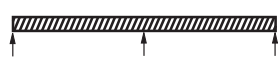
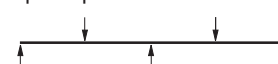
Also suitable for the number of wires in table below when installed to support and supply *electric discharge type lighting fixtures* when raceway wiring is suitable for 75°C, **or** wiring suitable for 60°C **if a minimum clearance between fixture and raceway is at least 1/2"**. In all cases, a snap-in 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

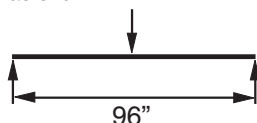
The data shown in the beam load charts for appropriate channels on page(s) 17 thru 39 is for simply supported, single span beams with a uniformly distributed load. For other loading and/or support conditions, use the appropriate factor from the chart below.

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.

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

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

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.

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

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

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)	
		Clamp Coating		Clamp Coating	
		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)	
		Clamp Coating		Clamp Coating	
		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

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

Nominal Pipe Sizes								
Length of Trapeze Bar	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.

Tolco™ to Cooper B-Line Cross Reference

Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #
2 STR 1/2"	B2400-1/2	BC-14-5/8	B321-4	BR-22-12	B409-12
2 STR 3/4"	B2400-3/4	BC-14-3/4	B321-5	BR-22-18	B409-18
2 STR 1"	B2400-1	BC-16	B314	BR-22-24	B409-25
2 STR 1 1/4"	B2400-1 1/4	BC-17	B441-22	C SAFETY END CAP	B852
2 STR 1 1/2"	B2400-1 1/2	BC-18-3/8	B212-3/8	C-14	B54
2 STR 2"	B2400-2	BC-18-1/2	B212-1/2	C-14 END CAP	B204
2 STR 2 1/2"	B2400-2 1/2	BC-19	B427	CL-10	B217-20
2 STR 3"	B2400-3	BC-20	B355	CR ISOLATOR	ISO
2 STR 3 1/2"	B2400-3 1/2	BC-21	B211	CUSH CLP 1/4	BVT025
2 STR 4"	B2400-4	BC-23	B614	CUSH CLP 3/8	BVT037
2 STR 5"	B2400-5	BC-70	B760-22 Series	CUSH CLP 1/2	BVT050
2 STR 6"	B2400-6	BC-71	B760-22A Series	CUSH CLP 5/8	BVT062
2 STR 8"	B2400-8	BC-72	B761-22 Series	CUSH CLP 3/4	BVT075
65XT	N/C	BC-73	B761-22A Series	CUSH CLP 1	BVT100
69	B3367	BR-10-8L	B185SHL	CUSH CLP 1 1/8	BVT112
69R	N/C	BR-10-8R	B185SHR	CUSH CLP 1 1/4	BVT125
75	N/C	BR-10-10L	B186SHL	CUSH CLP 1 3/8	BVT137
98	SC228	BR-10-10R	B186SHR	CUSH CLP 1 1/2	BVT150
98B	N/C	BR-10-12L	B178SHL	CUSH CLP 1 5/8	BVT162
310	B2501	BR-10-12R	B178SHR	CUSH CLP 1 3/4	BVT175
310N 1/4	N2501-1/4	BR-10-18L	B181SHL	CUSH CLP 2	BVT200
310N 3/8	N2501-3/8	BR-10-18R	B181SHR	CUSH CLP 2 1/8	BVT212
310N 1/2	N2501-1/2	BR-10-20L	B182SHL	CUSH CLP 2 1/2	BVT250
310N 5/8	N2501-5/8	BR-10-20R	B182SHR	CUSH CLP 2 5/8	BVT262
310N 3/4	N2501-3/4	BR-11-8 1/2	B187	CUSH CLP 3	BVT300
310N 7/8	N2501-7/8	BR-11-10 1/2	B541	CUSH CLP 3 1/8	BVT312
902	B335V	BR-11-12 1/2	B289-12	CUSH CLP 3 5/8	BVT362
912	B335-1	BR-11-14 1/2	B289-14	CUSH CLP 4	BVT400
913	B335-2	BR-11-22	B292	CUSH CLP 4 5/8	N/A
914	B335	BR-12	B290	CUSH CLP 5 1/8	N/A
915	B634	BR-13	B194	CUSH CLP 6 1/8	BVT612
915D	B635	BR-14	B370	CUSH CLP IPS 1/4	BVP025
A SAFETY END CAP	B822	BR-15-18	B196-18	CUSH CLP IPS 3/8	BVP037
A-12	B22	BR-15-24	B196-24	CUSH CLP IPS 1/2	BVP050
A-12 End Cap	B205	BR-16-6	B198A-6	CUSH CLP IPS 3/4	BVP075
A-12 End Spot	B3322	BR-16-12	B198A-12	CUSH CLP IPS 1	BVP100
A-14	B24	BR-17-12	B297-12	CUSH CLP IPS 1 1/4	BVP125
A-14 End Cap	B223	BR-17-18	B297-18	CUSH CLP IPS 1 1/2	BVP150
BC-09	B312 Series	BR-17-24	B297-24	CUSH CLP IPS 2	BVP200
BC-10	B751	BR-17-30	B297-30	CUSH CLP IPS 2 1/2	BVP250
BC-11	B751-J Series	BR-17-36	B297-36	CUSH CLP IPS 3	BVP300
BC-12	B751-J Series	BR-18-6	B293-6	CUSH CLP IPS 3 1/2	BVP350
BC-13-1/4	B303	BR-18-12	B293-12	CUSH CLP IPS 4	BVP400
BC-13-5/16	B304	BR-19-18	B293A-18	CUSH CLP IPS 5	BVP500
BC-13-3/8	B305	BR-18-24	B293-24	CUSH CLP IPS 6	BVP600
BC-13-1/2	B307	BR-19-6	B293A-6	CUSH STRIP	B1999
BC-13-5/8	B309	BR-18-12	B293-12	D-12	B12
BC-13-3/4	B321-5	BR-19-18	B293A-18	D-12 END CAP	B221
BC-14-1/4	B303	BR-19-24	B293A-24	E SAFETY END CAP	B822-A
BC-14-5/16	B304	BR-20	B439	E-12	B11
BC-14-3/8	B321-1	BR-21	B356	E-12 END CAP	B222
BC-14-1/2	B321-2	BR-22-6	B409-6	EMTC-1/2	B2001

Tolco™ to Cooper B-Line Cross Reference

Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #
EMTC-3/4	B2002	L-23 U	B844	OD 3/4	B2027
EMTC-1	B2003	L-24 L	B503L	OD 7/8	B2028
EMTC-1 1/4	B2004	L-24 R	B503R	OD 1	B2029
EMTC-1 1/2	B2005	L-25 L	B503L	OD 1 1/8	B2030
EMTC-2	B2006	L-25	B503R	OD 1 1/4	B2031
F-09	B129	L-26 L	B236L	OD 1 3/8	B2032
F-10	B200D	L-26 R	B236R	OD 1 1/2	B2004
F-11	B201D	L-27	B357	OD 1 5/8	B2011
F-12-1/2	B202-D	L-28	B237	OD 1 3/4	B2005
F-12-5/8	B202-1D	L-29	B240-378	OD 1 7/8	B2036
F-12-3/4	B202-2D	L-30	B558	OD 2	B2037
F-13	B200	L-31 L	B235L	OD 2 1/8	B2038
F-14	B201	L-31 R	B235R	OD 2 1/4	B2039
F-15	B202	L-32	B126	OD 2 3/8	B2013
F-15	B202	L-33	B127	OD 2 1/2	B2041
F-16	B202-1	L-34	B118	OD 2 5/8	B2042
F-17	B202-2	L-35	B239	OD 2 3/4	B2043
F-18	N/C	L-36 L	B234L	OD 2 7/8	B2014
F-20	B141	L-36 R	B234R	OD 3	B2045
F-21	B342	L-37	B112	OD 3 1/8	B2046
F-22	B340	L-38	B113	OD 3 1/4	B2047
F-23	B341	L-39	B461	OD 3 3/8	B2048
F-24	B504	L-40	B533	OD 3 1/2	B2015
F-25	B133	L-41	B485	OD 3 5/8	B2050
F-26	B138	L-42 L	B134L	OD 3 3/4	B2051
F-27	B139	L-42 R	B134R	OD 3 7/8	B2052
F-28	B132	L-43	B125	OD 4	B2016
F-29	B339	L-44-12	B261-12	OD 5 1/8	B2062
F-30	B337	L-44-16	B261-16	OD 5 1/4	B2063
F-31	B136	L-44-18	B261-18	OD 5 3/8	B2064
F-32	B532	L-45-30	B162	OD 5 1/2	B2019
F-33	B142	L-45-45	B154	OD 5 5/8	B2066
F-34	B556	L-45-60	B150	OD 5 3/4	B2067
F-35	B135	L-46-30	B246	OD 5 7/8	B2068
F-36	B140	L-46-45	B248	OD 6	B2069
F-37	B143	L-46-60	B250	OD 6 1/8	B2110
F-38	B334	L-47-30	N/C	OD 6 1/4	B2111
HEX HEAD BOLTS	HHCS	L-47-45	B155	OD 6 3/8	B2112
L-08	B231	L-47-60	B159	OD 6 1/2	B2113
L-10	B101	L-48-30	N/C	OD 6 5/8	B2020
L-11	B230	L-48-45	B368	OD 6 3/4	B2115
L-12-3	B359	L-48-60	B366	OD 6 7/8	B2116
L-12-3 1/2	B360	NUT 1/4	N224WO	OD 7	B2117
L-12-4	B361	NUT 3/8	N228WO	OD 7 1/8	B2118
L-15	B372	NUT 1/2	N225WO	OD 7 1/4	B2119
L-16	B496-1	NUT 5/8	N255WO	OD 7 3/8	B2120
L-17	B496	NUT 3/4	N275WO	OD 7 1/2	B2121
L-18	B102	NUT 7/8	N278WO	OD 7 5/8	B2021
L-19	B232	OD 1/4	B2023	OD 7 3/4	B2123
L-20	B103	OD 3/8	B2024	OD 7 7/8	B2124
L-21	B371-2	OD 1/2	B2025	OD 8	B2125
L-22	B104	OD 5/8	B2026	OD 8 1/8	B2126

Tolco™ to Cooper B-Line Cross Reference

Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #	Tolco Fig#	Cooper B-Line Pt. #
OD 8 ¹ / ₄	B2127	RIGID 1 ¹ / ₂	B2014	TSN 1 ¹ / ₄	TN224
OD 8 ³ / ₈	B2128	RIGID 2	B2015	TSN 3 ³ / ₈	TN228
OD 8 ¹ / ₂	B2129	RIGID 2 ¹ / ₂	B2016	TSN 1 ¹ / ₂	TN225
OD 8 ⁵ / ₈	B2022	RIGID 3	B2017	U-10	B107
OD 8 ³ / ₄	N/C	RIGID 3 ¹ / ₂	B2019	U-11	B116-52
OD 8 ⁷ / ₈	N/C	RIGID 4	B2020	U-12	B116-12
OD 9	N/C	RIGID 5	B2022	U-13-7 ¹ / ₄	B333-1
OD 9 ¹ / ₂	N/C	RIGID 6	B2130	U-13-8 ¹ / ₂	B333-2
OD 9 ⁵ / ₈	N/C	RIGID 8	B2132	U-13-10 ³ / ₈	B333-3
OD 10	N/C	ROL-10	B377	U-16	B107-22A
OD 10 ³ / ₄	B2130	ROL-11	B376	U-18	B398-1
OD 11	N/C	ROL-12*	B218	U-22	B169, B170
OD 11 ⁵ / ₈	N/C	ROL-13	B219 Series	U-24	B167, B172
OD 12	N/C	ROL-14	B379	U-26	B173
OD 12 ³ / ₄	B2132	ROL-15	B479	U-29	B400-1
OD CP 3 ³ / ₈	B2024DCU	ROL-16	B3126 Series	U-30	B400-3
OD CP 1 ¹ / ₂	B2025DCU	SPRA 1 ¹ / ₄	N224	U-31	B425
OD CP 5 ⁵ / ₈	B2026DCU	SPRA 3 ³ / ₈	N228	U-32	B519
OD CP 3 ³ / ₄	B2027DCU	SPRA 1 ¹ / ₂	N225	U-33	B581
OD CP 7 ⁷ / ₈	B2028DCU	SPRA 5 ⁵ / ₈	N255	U-34	N/C
OD CP 1 ¹ / ₈	B2030DCU	SPRA 3 ³ / ₄	N275	UNIV-1 ¹ / ₂	B2208
OD CP 1 ³ / ₈	B2032DCU	SPRA 7 ⁷ / ₈	N278	UNIV-3 ³ / ₄	B2209
OD CP 1 ⁵ / ₈	B2011DCU	SPRC 1 ¹ / ₄	N524	UNIV-1	B2210
OD CP 2 ¹ / ₈	B2038DCU	SPRC 3 ³ / ₈	N528	UNIV-1 ¹ / ₄	B2211
OD CP 2 ⁵ / ₈	B2042DCU	SPRC 1 ¹ / ₂	N525	UNIV-1 ¹ / ₂	B2212
OD CP 3 ¹ / ₈	B2046DCU	SPRC 5 ⁵ / ₈	N555	UNIV-2	B2213
OD CP 3 ⁵ / ₈	B2050DCU	SPRC 3 ³ / ₄	N575	W-10 L	B267L
OD CP 4 ¹ / ₈	B2054DCU	SPRD 1 ¹ / ₄	N724	W-10 R	B267R
OD CP 5 ¹ / ₈	B2062DCU	SPRD 3 ³ / ₈	N728	W-11 L	B269L
OD CP 6 ¹ / ₈	B2110DCU	SPRD 1 ¹ / ₂	N725	W-11 R	B269R
P-09	B280FL	SPRD 5 ⁵ / ₈	N755	W-12	B119
P-10	B279	SPRD 3 ³ / ₄	N775	W-13	B120
P-10 F	B279FL	SPRM 1 ¹ / ₄	SN224	W-14	B121
P-10 SQ	B279SQ	SPRM 3 ³ / ₈	SN228	W-16	B271
P-11	B280	SPRM 1 ¹ / ₂	SN225	W-17	B272
P-11 F	B280FL	SPRM 5 ⁵ / ₈	SN255	W-18	B273
P-11 SQ	B280SQ	SWF 3 ³ / ₈	B446A-3 ³ / ₈	W-19	B122
P-12	B281A	SWF 1 ¹ / ₂	B446A-1 ¹ / ₂	W-20	B124
P-12 F	B281AFL	SWF 5 ⁵ / ₈	B446A-5 ⁵ / ₈	W-21	B123
P-12 SQ	B281ASQ	SWF 3 ³ / ₄	B446A-3 ³ / ₄	W-22 L	B274L
P-13	B281	SWFF 3 ³ / ₈	B446C-3 ³ / ₈	W-22 R	B274R
P-13 F	B281FL	SWFF 1 ¹ / ₂	B446C-1 ¹ / ₂	W-23	B276
P-13 SQ	B281SQ	SWFF 5 ⁵ / ₈	B446C-5 ⁵ / ₈	W-24	B495
P-14	B585	SWFF 3 ³ / ₄	B446C-3 ³ / ₄	W-25	B362
P-15	B278	SWM 3 ³ / ₈	B446B-3 ³ / ₈	Z-10	B105
PIPE PIER	DURA-BLOKS	SWM 1 ¹ / ₂	B446B-1 ¹ / ₂	Z-15	B108
RIGID 1 ¹ / ₄	B2008	SWM 5 ⁵ / ₈	B446B-5 ⁵ / ₈	Z-17	B586
RIGID 3 ³ / ₈	B2009	SWM 3 ³ / ₄	B446B-3 ³ / ₄	Z-25	B515
RIGID 1 ¹ / ₂	B2010	SWMF 3 ³ / ₈	B446-3 ³ / ₈		
RIGID 3 ³ / ₄	B2011	SWMF 1 ¹ / ₂	B446-1 ¹ / ₂		
RIGID 1	B2012	SWMF 5 ⁵ / ₈	B446-5 ⁵ / ₈		
RIGID 1 ¹ / ₄	B2013	SWMF 3 ³ / ₄	B446-3 ³ / ₄		

65XT-3/8 114	B22A3 21	B24KO6 41	B42S 40
69 115	B22A4 21	B24KO6AL 178	B42S58 42
69R 115	B22AAL 177	B24M 42	B42SH 40
75 55	B22AD3 21	B24S 40	B42SHSS4 180
98 57	B22AL 177	B24S58 42	B42SS4 180
98B 57	B22B 21	B24SH 40	B44M 42
ACPD Series 220	B22B3 21	B24SHAL 178	B52 32,33
ACPW Series 220	B22C 21	B24SHSS4 180	B52A 32,33
ACS Series 221	B22C3 21	B24SHSS6 180	B52B3 32
ADH Series 219	B22D 21	B24SS4 180	B52B4 32
AHHK-1/4 227	B22D3 21	B24SS6 180	B52H17/8 40
AHHK-3/8 227	B22E 21	B26 26,27	B52H25 42
APC Series 220	B22E3 21	B26A 26,27	B52-I Series 216
ARC Series 219	B22H17/8 40	B26B 26	B52-IFS 218
ARS Series 219	B22H17/8AL 178	B26C 26	B52KO6 41
ASA Series 221	B22H17/8SS4 180	B26H17/8 40	B52M 42
ATM-37 221	B22H25 42	B26H25 42	B52S 40
ATR 58	B22-I Series 214	B26KO6 41	B52S58 42
AWA Series 219	B22-IFS 218	B26S 40	B52SH 40
AWS-CH 221	B22KO6 41	B26S58 42	B54 34,35
AWS-OH 221	B22KO6AL 178	B26SH 40	B54A 34,35
AWS-PH 221	B22LPL 21	B32 28,29	B54AAL 177
B11 16,17	B22M 42	B32A 28,29	B54AL 177
B11A 16,17	B22PL 21	B32B 28	B54B3 34
B11AL 177	B22S 40	B32C 28	B54B4 34
B11B 17	B22S58 42	B32H17/8 40	B54H17/8 40
B11H17/8 40	B22SH 40	B32H17/8SS4 180	B54H17/8AL 178
B11KO6 41	B22SHA 41	B32H25 42	B54H17/8SS4 180
B11S 40	B22SHAL 178	B32-I Series 215	B54H17/8SS6 180
B11S58 42	B22SHSS4 180	B32-IFS 218	B54H25 42
B11SH 40	B22SHSS6 180	B32KO6 41	B54KO6 41
B12 18,19	B22SS4 180	B32M 42	B54KO6AL 178
B12A 18,19	B22SS6 180	B32S 40	B54M 42
B12AL 177	B22TH 38,39,41	B32S58 42	B54S 40
B12B 18	B22X 20-23	B32SH 40	B54S58 42
B12H17/8 40	B24 24,25	B32SHSS4 180	B54SH 40
B12H17/8AL 178	B24A 24,25	B32SS4 180	B54SHAL 178
B12KO6 41	B24AL 177	B42 30,31	B54SHSS4 180
B12KO6AL 178	B24B 24	B42A 30,31	B54SHSS6 180
B12S 40	B24C 24	B42B 30	B54SS4 180
B12S58 42	B24H17/8 40	B42H17/8 40	B54SS6 180
B12SH 40	B24H17/8AL 178	B42H17/8SS4 180	B56 36,37
B12SHAL 178	B24H17/8SS4 180	B42H25 42	B56A 36,37
B22 20-23	B24H17/8SS6 180	B42KO6 41	B56B3 36
B22A 20,22,23	B24H25 42	B42M 42	B56B4 36

B56H17/8	40	B129	73	B174SHR	101	B202-1	73
B56H25	42	B132	74	B175SHL	101	B202-1D	73
B56KO6	41	B133	74	B175SHR	101	B202-2	73
B56S	40	B134L	79	B176SHL	101	B202-2D	73
B56S58	42	B134R	79	B176SHR	101	B202D	73
B56SH	40	B135	74	B177SHL	101	B203	110,167
B62	201	B136	75	B177SHR	101	B204	110,167
B62A	201	B137	75	B178SHL	101	B205	110,167,218
B72	202	B138	74	B178SHR	101	B206	110,167,218
B72A	202	B139	74	B179SHL	101	B210	116
B101	76	B140	74	B179SHR	101	B210A	116
B102	77	B141	73	B180SHL	101	B211	122
B103	77	B142	74	B180SHR	101	B212-1/4	122
B104	77	B143	74	B181SHL	101	B212-3/8	122
B104SH	81	B147	82	B181SHR	101	B213	122
B105	91	B148	82	B182SHL	101	B214L	106
B106-12	91	B149	82	B182SHR	101	B214R	106
B106-32	91	B150	82	B183SHL	101	B215S	165
B106-42	91	B151	82	B183SHR	101	B216S	165
B106-52	91	B152	82	B184SHL	101	B217-20	167
B107	87	B154	82	B184SHR	101	B217-24	167
B107-22A	87	B155	83	B185SHL	101	B217AL	177
B107S	88,125	B156	83	B185SHR	101	B217FFAL	177
B108	91	B157	83	B186SHL	101	B217P ...	167,177,199
B109S	81	B158	83	B186SHR	101	B218	147
B110	91	B159	83	B187	99	B219 Series ..	148,149
B111	92	B160	83	B188	99	B220	110,167,218
B112	81	B161	83	B189	99	B221	110,167
B113	81	B162	82	B190	99	B222	110,167
B115	77	B163	82	B191-18	99	B223	110,167
B116-12	87	B164	82	B191-24	100	B230	76
B116-32	87	B165	82	B192	100	B231	76
B116-32A	87	B166 Series	171	B194	102	B232	77
B116-42	87	B166-46 Series ...	171	B195	103	B234L	79
B116-52	87	B166CL	171	B196-18	102	B234R	79
B118	79	B167	86	B196-24	102	B235L	78
B119	94	B168	86	B198-6	102	B235R	78
B120	95	B169	86	B198-12	102	B236L	78
B121	95	B170	86	B198A-6	102	B236R	78
B122	95	B171	86	B198A-12	102	B237	78
B123	95	B172	86	B200	73	B238L	78
B124	95	B172-12	86	B200D	73	B238R	78
B125	79	B172-22A	86	B201	73	B239	78
B126	80	B173	89	B201D	73	B241S	165
B127	80	B174SHL	101	B202	73	B243	82

B244 82	B286 110,167	B337 75	B392-22 Series ... 168
B245 82	B287 110	B339 75	B392-32 Series ... 168
B246 82	B288 110	B340 73	B393-1 171
B247 82	B289-12 100	B341 73	B394 Series 144
B248 82	B289-14 100	B342 73	B398-1 90
B249 82	B290 100	B346L 95	B400 90
B250 82	B291 100	B346R 95	B400-1 90
B251 82	B292 101	B349 108	B400-2 90
B252 82	B293 Series 102	B350 108	B400-3 90
B253 82	B293A Series 102	B351L Series 113	B400-4 90
B261 Series 85	B293PL 103	B355 122	B405 89,123
B266 88	B297 Series 101	B356 146	B405A 123
B267L 94	B300 98	B357 78	B407 Series 92
B267R 94	B303 117	B358 Series 89	B408 Series 89
B268L 94	B304 117	B359 76	B409 Series 101
B268R 94	B305 117	B360 76	B410-11 93
B269L 94	B306 117	B361 77	B410-12 93
B269R 94	B307 117	B362 96	B410-22 93
B270L 94	B308 117	B363 83	B410-32 93
B270R 94	B309 117	B364 83	B410-52 93
B271 95	B312 Series 117	B365 83	B411 Series 107
B272 95	B314 121	B366 83	B412 88
B273 95	B318 123	B367 83	B415 90
B274L 96	B319 123	B368 83	B420-378 76
B274R 96	B320 123	B369 83	B420-578 76
B276 95	B321 Series 117	B370 103	B420-778 76
B277 96	B322 82	B371 80	B420-978 76
B278 98	B323 82	B371-2 81	B422 Series .. 125,140
B279 97	B324 82	B372 80	B425 88
B279FL 97	B325 82	B374 77	B427 123
B279SQ 97	B326 82	B376 109	B428 93
B280 97	B327 82	B377 109	B432 75
B280FL 97	B328 82	B379 150	B435 122
B280SQ 97	B329 82	B380 Series 218	B436 166
B281 98	B330 82	B381 107	B436S 166
B281A 97	B331 82	B382 107	B437 Series 139
B281AFL 97	B332 82	B383 107	B438 107
B281ASQ 97	B333-1 89	B384 107	B439 107
B281FL 98	B333-2 89	B385 107	B440 103
B281M 98	B333-3 89	B386 Series 144	B441-22 Series ... 121
B281MSQ 98	B334 75	B387 Series 92	B441-22A Series .. 121
B281SQ 98	B335 83	B390BX 166	B441Z-22 121
B283 110,167	B335-1 83	B390S 166	B441Z-22A 121
B284 110,167	B335-2 Series 83	B392-11 Series ... 168	B444 Series 116
B285 110,167	B335V Series 83	B392-12 Series ... 168	B446 Series ... 54,172

B446A Series .. 54,172	B515 93	B601-62 208	B767 Series 170
B446B Series .. 54,172	B516 167	B602-A 123	B768 Series 170
B446C Series .. 54,172	B516S 167	B602-B 123	B769 Series 170
B447 168	B518 Series 169	B602-C 123	B802D Series 104
B447A 168	B519 88	B613 108,125	B809B Series 105
B449-4 103	B521 81	B613A 108,125	B810 Series 104
B449-8 103	B522 82	B614 108,125	B811 Series 105
B449-12 103	B526 91	B616 Series 164	B812 Series 105
B449-18 103	B527 87	B616-22A Series .. 164	B816 104
B450 Series 86	B528 73	B616S Series 164	B822 110
B451-1 89	B529 77	B616S-22A Series 165	B822A 110
B451-2 89	B532 75	B616TG-9/16 165	B823-22 111
B451-3 89	B533 80	B617 55,172	B823-22A 111
B460 Series 166	B534 92	B619 171	B823-42 111
B461 81	B535 92	B631 Series 85	B823-52 111
B464 Series 166	B536 90	B632 Series 85	B825-22 111
B465 166	B538 92	B633 Series 84	B825-52 111
B466S 171	B539 92	B634 84	B844 79
B466W 171	B541 99	B635 84	B844W 79
B472 106	B556 75	B650 Series 84	B852 110
B473 106	B557 73	B655 Series 58	B852S Series 104
B474 106	B558 77	B656 Series 58	B888W 79
B475 106	B560 108	B663 80	B1508 132
B477 109	B562 108	B664 107	B1508S 132
B477H 109	B568 75	B670 Series 140	B1512 132
B477HP 109	B570 98	B671 Series 140	B1512S 132
B477P 109	B570A 98	B700 Series 120	B1516 132
B478 109	B571 96	B701 Series 118	B1516S 132
B478H 109	B578 88	B702 119	B1520 132
B478HP 109	B580 93	B705 Series 119	B1520S 132
B478P 109	B581 88	B718 Series 169	B1524S 132
B479 151	B585 98	B719AL 169	B1532S 132
B485 80	B586 91	B750 Series 120	B1534S 132
B488 82	B587 Series 107	B751 118	B1540S 132
B494 Series 101	B588 87	B751-J Series 118	B1548S 132
B495 96	B589 171	B752 118	B1556S 132
B496 81	B589-62 207	B753 Series 118	B1564S 132
B496-1 81	B590 172	B755 119	B1999 137
B500 Series ... 52,120	B591 Series 145	B755-3/8-J Series . 119	B2000 128
B501 Series 52	B593 125	B756-3/8 119	B2001 128
B503L 80	B594 88	B760-22 Series ... 124	B2001AL 178
B503R 80	B595 89	B760-22A Series .. 124	B2001SS4 181
B504 74	B596 88	B761-22 Series ... 124	B2002 128
B514L 106	B598-62 210	B761-22A Series .. 124	B2003 128
B514R 106	B600-62 204	B766 Series 170	B2004 128,130

B2005 128,130	B2023 130	B2067 131	B2208 127
B2006 128	B2024 130	B2068 131	B2209 127
B2008 128,130	B2024DCU 129	B2069 131	B2210 127
B2008AL 178	B2025 130	B2070 139	B2211 127
B2008DCU 129	B2025DCU 129	B2071 139	B2212 127
B2008SS4 181	B2026 130	B2072 139	B2213 127
B2009 128	B2026DCU 129	B2073 139	B2301 Series 141
B2009AL 178	B2027 130	B2074 139	B2302 Series 141
B2009SS4 181	B2027DCU 129	B2075 139	B2308 211
B2010 128	B2029 130	B2076 139	B2309 211
B2010AL 178	B2030 130	B2077 139	B2310 211
B2010SS4 181	B2030DCU 129	B2078 139	B2311 211
B2011 128,130	B2031 130	B2079 139	B2312 211
B2011AL 178	B2032 130	B2080 139	B2313 211
B2011DCU 129	B2032DCU 129	B2084 141	B2314 211
B2011SS4 181	B2036 130	B2085 141	B2315 211
B2012 128	B2037 130	B2086 141	B2350 211
B2012AL 178	B2038 130	B2087 141	B2351 211
B2012SS4 181	B2038DCU 129	B2088 141	B2352 211
B2013 128,130	B2039 130	B2089 141	B2353 211
B2013AL 178	B2041 130	B2090 141	B2354 211
B2013SS4 181	B2042 130	B2091 141	B2355 211
B2014 128,130	B2042DCU 129	B2110 131	B2400 Series 138
B2014AL 178	B2043 130	B2110DCU 129	B2417 Series 139
B2014SS4 181	B2045 130	B2111 131	B2500 217
B2015 128,130	B2046 130	B2112 131	B2501 Series 217
B2015AL 178	B2046DCU 129	B2113 131	B2503 217
B2015SS4 181	B2047 130	B2115 131	B2505 217
B2016 128,130	B2048 130	B2116 131	B2506 217
B2016AL 178	B2050 130	B2117 131	B2507 217
B2016SS4 181	B2050DCU 129	B2118 131	B2508 217
B2017 128,130	B2051 130	B2119 131	B2601 133
B2017AL 178	B2052 130	B2120 131	B2602 133
B2017SS4 181	B2054 130	B2121 131	B2603 133
B2018 128,131	B2054DCU 129	B2123 131	B2608 133
B2018AL 178	B2055 130	B2124 131	B2609 133
B2018SS4 181	B2056 130	B2125 131	B2610 133
B2019 128,131	B2058 130	B2126 131	B3033 Series 114
B2019AL 178	B2059 131	B2126DCU 129	B3034 Series 114
B2019SS4 181	B2060 131	B2127 131	B3036L Series 113
B2020 128,131	B2062 131	B2128 131	B3037Z 115
B2020AL 178	B2062DCU 129	B2129 131	B3322 110,218
B2020SS4 181	B2063 131	B2130 128,131	B3332 110,218
B2021 128,131	B2064 131	B2132 128,131	B3342 110,218
B2022 128,131	B2066 131	B2207 127	B3352 110,218

B3362 Series	113	B4051	174	B6110	210	B6202	203
B3363 Series	113	B4060	173	B6112	207	B6205	211
B3364 Series	113	B4061	173	B6118	207	B6211	211
B3365 Series	113	B4062	173	B6126	207	B6230	205
B3367 Series	115	B4063	173	B6127	207	B6232	206
B3367S-1 Series	140	B4064	173	B6129	203	B6234L	207
B3367S-2 Series	140	B4065	173	B6132	205	B6234R	207
B3373 Series	142	B4066	173	B6133	205	B6239	206
B3690 Series	143	B4067	173	B6134L	207	B6337	205
B3690F Series	143	B4068	173	B6134R	207	B6340	203
B4000	175	B4069	173	B6135	205	B6341	204
B4001	175	B4070	173	B6136	205	B6357	206
B4002	175	B4071	173	B6138	204	B6374	206
B4003	175	B4072	173	B6139	204	B6409 Series	211
B4004	175	B4073	173	B6140	204	B6504	204
B4005	175	B4074	173	B6141	204	B6526	210
B4006	175	B4075	173	B6142	205	B6532	205
B4007	175	B4076	173	B6143	204	B6533	207
B4008	175	B4077	173	B6144L	206	B6557	204
B4009	175	B4078	173	B6144R	206	B6558	206
B4010	175	B4079	173	B6147	208	B6571	210
B4011	175	B4080	173	B6148	208	B6594	209
B4012	175	B4081	173	B6149	208	B7105	210
B4013	175	B4082	173	B6150	208	B7116	209
B4014	175	B4083	173	B6151	208	B7205	211
B4015	175	B4084	173	B6152	208	BC442	116
B4016	175	B4085	173	B6154	208	BD40	218
B4017	175	B4086	173	B6155	208	BE-5-8	218
B4033A	175	B4087	173	B6156	208	BE-9-12	218
B4033B	175	B4088	173	B6157	208	BFP22	184,185
B4033C	175	B4089	173	B6158	208	BFP22A	184,185
B4033D	175	B4090	173	B6159	208	BFP22H1 ^{7/8}	184
B4033E	175	B4091	173	B6160	208	BFP22I	188
B4033F	175	B4092	173	B6161	208	BFP22SH	184
B4033G	175	B4093	173	B6162	208	BFP42	186,187
B4033H	175	B4094	174	B6163	208	BFP42A	186,187
B4033I	175	B4095	174	B6164	208	BFP42H1 ^{7/8}	186
B4035A	174	B6101	205	B6165	208	BFP42SH	186
B4035B	174	B6102	206	B6167	209	BFP409 Series	194
B4035C	174	B6103	206	B6168	209	BFP494 Series	194
B4035D	174	B6104	206	B6169	208	BFP2400-2	192
B4035E	174	B6105	210	B6170	209	BFP2400-3	192
B4035F	174	B6107	209	B6171	209	BFP2400-4	192
B4037B	174	B6107-62A	209	B6172	209	BFP2400-6	192
B4050	174	B6108	210	B6173	210	BFP3104-8	193

BFP3104-10 193	BFV409 Series ... 194	BKC100 59	BMM-5S 203
BFP3104-12 193	BFV494 Series ... 194	BKC200 59	BMM-6 203
BFV22 184,185	BFV501 Series ... 188	BKCC 60	BMM-6L 203
BFV22A 184,185	BFV532 197	BKF100-4 61	BMM-6S 203
BFV22H1 ^{7/8} 184	BFV557 195	BKF100-6 61	BMS-6 46
BFV22I 188	BFV558 198	BKH-094 Series ... 64	BMS-6L 47
BFV22SH 184	BFV650 199	BKH-094K Series .. 64	BMS-6M 47
BFV42 186,187	BFV655 Series ... 190	BKL-063 Series ... 63	BMS-6S 47
BFV42A 186,187	BFV751-1 ^{1/2} 192	BKL-063K Series .. 63	BMS-8 46
BFV42H1 ^{7/8} 186	BFV751-3 ^{3/8} 192	BKL-094 Series ... 63	BMS-8L 47
BFV42SH 186	BFV751-5 ^{5/8} 192	BKL-094K Series .. 63	BMS-8M 47
BFV100 191	BFV751J-1 ^{1/2} 192	BKP10063 60	BMS-8S 47
BFV101 198	BFV751J-3 ^{3/8} 192	BKP10094 60	BMS-10 46
BFV103 198	BFV751J-5 ^{5/8} 192	BKP20125 60	BMS-10L 47
BFV104 198	BFV755-1 ^{1/2} 193	BKP20188 60	BMS-10M 47
BFV118 198	BFV755-3 ^{3/8} 193	BKT-063 Series ... 66	BMS-10S 47
BFV129 185	BFV2008 191	BKT-063K Series .. 66	BMS-12 46
BFV132 196	BFV2009 191	BKW063 59	BMS-12M 47
BFV133 196	BFV2010 191	BKW094 59	BMS-12S 47
BFV135 197	BFV2011 191	BKW125 59	BMS-D-12 46
BFV136 197	BFV2012 191	BKW188 59	BMS-D-12L 47
BFV140 196	BFV2013 191	BKYH18-094 64	BMS-D-12M 47
BFV141 195	BFV2014 191	BKYH18-094 Series . 65	BMT-6 48
BFV142 197	BFV2015 191	BKYH18-094K Series 65	BMT-8 48
BFV143 196	BFV2016 191	BKYH30-094 64	BMT-10 48
BFV200 191	BFV2017 191	BKYH30-094 Series . 65	BMT-12 48
BFV201 195	BFV3104 -1 thru 6 193	BKYH30-094K Series 65	BMT-D-12 48
BFV202 195	BFV3104-8 193	BKYT12-063 66	BP081SS 133
BFV-223 189	BFV3104-10 193	BKYT12-063 Series . 67	BP110SS 133
BFV-223WO 189	BFV3104-12 193	BKYT12-063K Series 67	BP135SS 133
BFV-224 189	BFVATR Series ... 190	BKYT18-063 66	BP175SS 133
BFV-224WO 189	BFVATRHN Series 190	BKYT18-063 Series . 67	BP205SS 133
BFV-225 189	BFVFW Series ... 190	BKYT18-063K Series 67	BP250SS 133
BFV-225WO 189	BFVHHCS Series . 189	BKYT30-063 66	BP300SS 133
BFV-228 189	BFVHN Series ... 189	BKYT30-063 Series . 67	BP325SS 133
BFV-228WO 189	BHR1225ZN 58	BKYT30-063K Series 67	BP375SS 133
BFV280SQ 199	BHR1238ZN 58	BL1400 Series 142	BP425SS 133
BFV281SQ 199	BHR1250ZN 58	BMM-3 203	BP475SS 133
BFV300 191	BHR1262ZN 58	BMM-3L 203	BPC Series 127
BFV334 197	KA25-063 Series . 70	BMM-3S 203	BTS22TH 38,39
BFV337 197	KA25-063K Series . 70	BMM-4 203	BVP Series 135
BFV340 195	BKB25-063 Series . 68	BMM-4L 203	BVS-12 137
BFV341 196	BKB25-06K3 Series . 69	BMM-4S 203	BVS-120 137
BFV342 196	BKB38-094 Series . 68	BMM-5 203	BVT Series 134
BFV371-2G 198	BKB38-094K Series . 69	BMM-5L 203	CLDP10 155

CNPSS Series 53	N223 47	N624 203	SLWN3/8 56
DB_DS Series 156,157	N223WO 46	N624WO 203	SLWN5/8 56
DB5 153	N224 47	N627 203	SLWNM6 56
DB10 153	N224SS6 179,181	N627WO 203	SLWNM8 56
DB10-28 154	N224WO 46	N721 47	SLWNM10 56
DB10-36 154	N224WOSS6 . 178,181	N722 47	SLWNM12 56
DB10-42 154	N225 47	N723 47	SN224 Series 49
DB10-50 154	N225SS6 179,181	N724 47	SN224WO Series .. 48
DB10-60 154	N225WO 46	N724SS6 179	SN225 Series 49
DB20 153	N225WOSS6 . 179,181	N725 47	SN225WO Series .. 48
DB30 153	N226 47	N725SS6 179	SN228 Series 49
DB40 153	N226WO 46	N726 47	SN228WO Series .. 48
DB48 153	N227 47	N727 47	SN524 Series 49
DB610 153	N227WO 46	N728 47	SN525 Series 49
DB620 153	N228 47	N728SS6 179	SN525WO Series .. 48
DB630 153	N228SS6 179,181	N755 47	SN528 Series 49
DB640 153	N228WO 46	N775 47	SN724 Series 49
DB648 153	N228WOSS6 . 179,181	N778 47	SN725 Series 49
DBE10-8 155	N255 47	N2500 Series 217	SN728 Series 49
DBE10-12 155	N255WO 46	N7221 203	SQN Series 55
DBE10-16 155	N275 47	N7222 203	SRHMS Series 53
DBM 153	N275WO 46	N7224 203	STN224 Series 48
DBM-__ Series ... 154	N278 47	N7227 203	STN225 Series 48
DBM-__CT Series 154	N278WO 46	NW524 49	STN228 Series 48
DBP 153	N521 47	NW525 49	STN525 Series 48
DBR10-12 155	N522 47	NW528 49	TN221 48
DBR2-31/2 158	N523 47	NWM6 49	TN222 48
DBR4-6 158	N524 47	NWM8 49	TN223 48
DBR8-10 158	N524SS6 179,181	NWM10 49	TN224 48
DBR12-14 158	N525 47	NWM12 49	TN225 48
DBR16-20 158	N525SS6 179,181	SA101 227	TN226 48
DCN ³ / ₈ 52	N525WO 46	SA102 227	TN227 48
FFW Series 56	N525WOSS6 179	SA110 227	TN228 48
FW Series 56	N526 47	SA131 227	TN255 48
HHCS Series 53	N527 47	SA154 227	TN525 48
HN Series 55	N528 47	SA155 227	
IPH Series 136	N528SS6 179,181	SA158 223-226	
IPH18230 136	N555 47	SA276 223-226	
ISO 137	N555WO 46	SA318 223-226	
LW Series 56	N575 47	SC228 57	
MSQN Series 55	N575WO 46	SC-UB 57	
N221 47	N621 203	SFHMS Series 53	
N221WO 46	N621WO 203	SHHMS Series 53	
N222 47	N622 203	SLWN1/4 56	
N222WO 46	N622WO 203	SLWN1/2 56	

Cooper B-Line reserves the right to make changes to the specifications, materials, equipment, prices, or the availability of products at any time without prior notice. While every effort has been made to assure the accuracy of information contained in this catalog at the time of publication, we cannot accept responsibility for inaccuracies resulting from undetected errors or omissions.

Global Locations

Cooper B-Line's U.S. Customer Service Center is staffed Monday through Friday from 7 a.m. to 5:00 p.m. Central Standard Time. If a situation requires that you have to contact us after hours, please leave a message via phone or E-mail so we can give it immediate attention the following business day.

Service Facility - United States:

Cooper B-Line - USA

509 West Monroe Street
Highland, IL 62249
United States
Phone: (800) 851-7415
Fax: (800) 356-1438
Email: blineus@cooperindustries.com

Service Facility - Canada:

Cooper B-Line - Canada

Div. of Cooper Ind. Canada, Inc.
5925 McLaughlin Road
Mississauga, ON L5R 1B8
Canada
Phone: (800) 569-3660
Fax: (888) 753-3355
Email: blinecanada@cooperindustries.com

Service Facility - Europe:

Cooper B-Line, Ltd. - UK

Walrow, Highbridge
Somerset, TA9 4AQ
United Kingdom
Phone: + 44 (0) 1278 783371
Fax: + 44 (0) 1278 789037
Email: sales@cooperbline.co.uk

Cooper B-Line - Saudi Arabia:

PO Box 70160 - Al Khobar - 31952
Kingdom of Saudi Arabia
Phone: 00966 3 812 2236
Fax: 00966 3 812 1291
Email: blineme@cooperindustries.com

Literature Fulfillment Questions:

Phone: (314) 426-1800
Fax: (314) 426-6022
Email: cooperbline@repcographics.com

Request Literature Website:

<http://order.repcographics.com/cooperb/>

Cooper B-Line

509 West Monroe Street
Highland, IL 62249
Phone: 800-851-7415
Fax: 618-654-1917

www.cooperbline.com