CATALOG

Kindorf® metal framing system

Metal framing channel and accessories

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Thomas & Betts is now ABB Installation Products, but our long legacy of quality products and innovation remains the same. From connectors that help wire buildings on Earth to cable ties that help put machines in space, we continue to work every day to make, market, design and sell products that provide a smarter, safer and more reliable flow of electricity, from source to socket.

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Overview

Kindorf® Channel's 1½" is much more than a cross-section dimension

The 1½" with Kindorf® channel is truly a modular dimension. The channel height, width and prepunched hole spacings are all engineered around 1½" increments. The angle fittings and the bolt holes in the angle fittings are all engineered around 1½" increments as well.

— 01 1½" wide x 1½" deep ⅞" continuous open slot 10 ft and 20 ft lengths.

— 02 Kindorf® channels make it easy to cut: Scribe marks are located at 1½" intervals to mark the midpoint between holes and every 6" on the side for easy measurement.

Jobsite adaptability and structural integrity are the key factors in making strut channel an economical solution to metal framing needs. Kindorf® channel, with its 1½" modular dimensions, enables the installer to do more work with fewer pieces and less labor dollars.

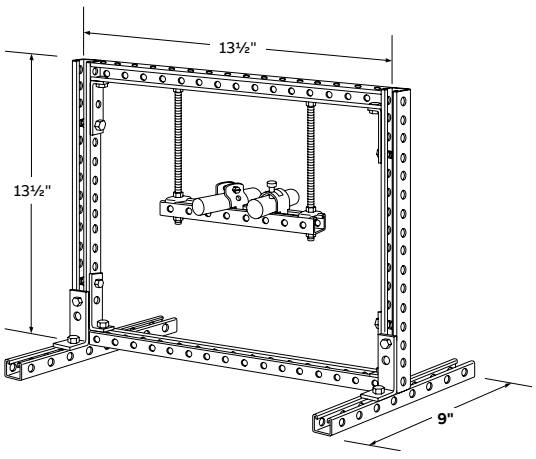
Kindorf® Channel
The Kindorf® Channel System is designed so that the maximum number of support and framing applications can be constructed with a minimum amount of labor and pieces.

Uniqueness in design
The 1½" dimension in the channel, hole spacing and fittings means all parts fit together, no matter where they're used, or at what angle. This modular dimension provides maximum flexibility in field applications, and results in saving inventory and labor dollars. The Kindorf® channel exclusive Galv-Krom® finish provides superior corrosion protection for all threaded components, channel and fittings. Through a two part process, the coating is applied on all finished parts after fabrication – there is no exposed surface where corrosion can start.

Strength
Even though the Kindorf® channel is slightly smaller in dimensions, it supports the same weight as 1⅝" channel.

Compatibility with 1⅝" strut
The Kindorf® System is designed so that most accessories are compatible with 1⅝" strut. Conduit and pipe straps will work equally well with 1⅝" and 1½" strut. In addition, most 1⅝" accessories are interchangeable with Kindorf® channel. Angle fittings can adapt easily to the open side of any 1⅝" strut and the unique parallelogram nuts provide secure attachment to both types of strut.

Full line of support products
The Kindorf® channel system's many advantages are extended into a broad product offering including beam clamps, concrete inserts, lighting supports, cable cleats and a variety of threaded components. This system is available in the largest selection of finishes and materials, including green coated, aluminum, stainless steel and non-metallic. This, combined with a nationwide network of distributors and service centers, makes the Kindorf® system a single source for supported metal-framing needs.



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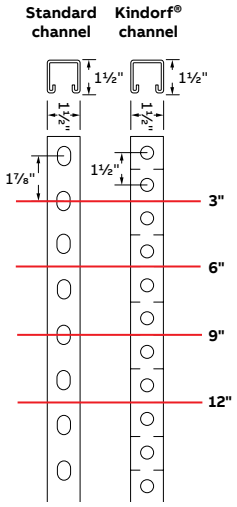

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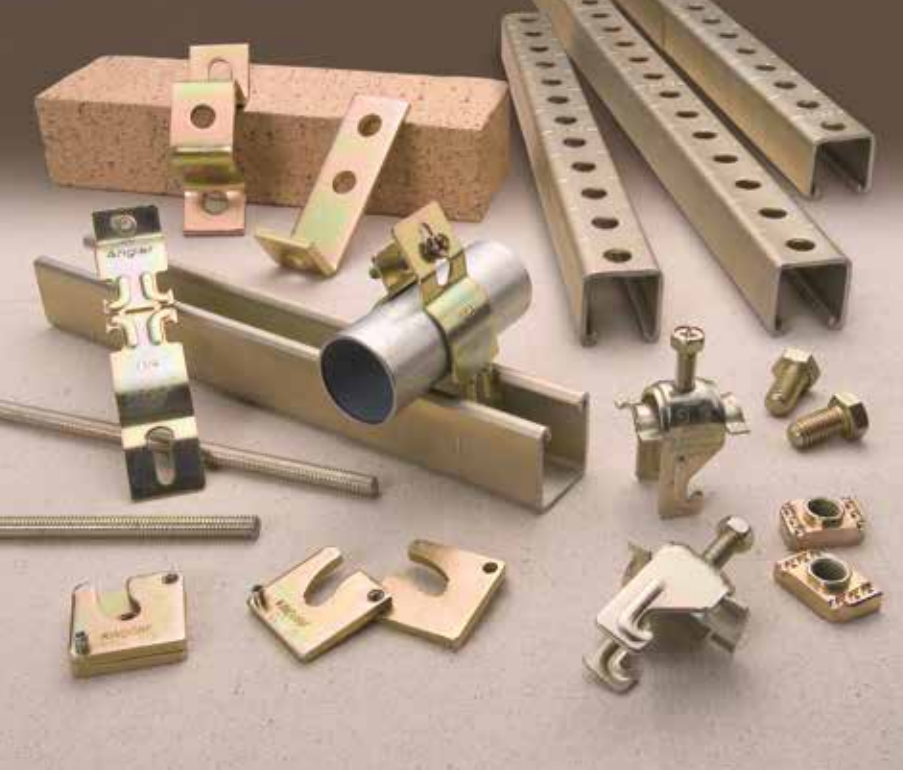

Consider the following:

1. **The entire section can be used**
   You are not limited to using only the open-slot side because holes line up on channel and fittings. Using the scribe marks ensures the fittings will work and a straight cut is made.
2. **Considerable field drilling and welding eliminated**
   The holes are already there and they are usable. Back-to-back, side-to-back, side-to-side – all combinations that can be made using B-995 Kindorf® channel.
3. **Field cutting and layout made simple**
   8 scribe marks = 1 ft. Simply count the marks and cut. Position of holes ensures balanced support for trapezes on every piece, thus keeping waste to an absolute minimum.
4. **Modular fittings fasten to bolt side or slot side – Unique stud nut**
   Kindorf® framing fittings are engineered for versatile use – to meet the greatest number of framing combinations with maximum rigidity and security. Fittings may be fastened to the channel on either the bolt-hole side or the slot side.

What the modular dimension can do for you
Using a 1⅝" channel with hole spacings on 1⅞" centers requires numerous fittings and, in many cases, limits the joint fastening to the open side of the channel. Field drilling and welding, plus the need for extra fittings, become the rule rather than the exception. With constant 1½" dimensions throughout the system, many structural joints can be made with a minimum of fittings.

The matching 1½" dimensions of channel bolt holes and fitting bolt holes provide a fast alignment and quick bolting. Fastening on the slot side provides infinite placement of the nut to match bolting requirements. Either way results in simple “building block” erection and permits multiple application of fittings. With the B-911SN Stud Nut, blind fastening of angles and fixtures is eliminated.

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03 Channel with bolt holes 9⁄16" dia. holes on 1½" centers for 1½" bolts.
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04 Kindorf® 1½" All holes line up – all the time.
—
05 Holes in fittings also line up.
—
06 1⅝" Strut ⅞" holes cause misalignment.
—
07 Clamping nut or hex head nut may be used for attachment and security of fittings to either side of channel.
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08 Stud nut saves time, reduces labor – like having an extra pair of hands.
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09 Spring nut holds in position without support. Inserts easily in channel and sets automatically – cannot rotate.

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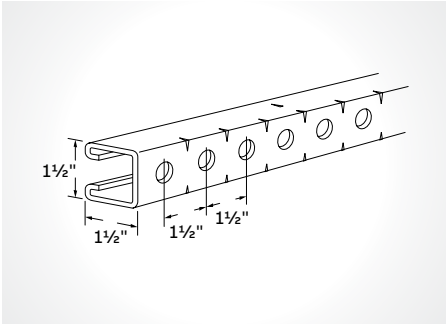

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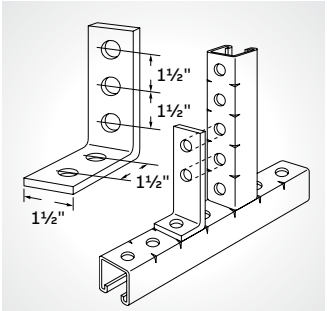

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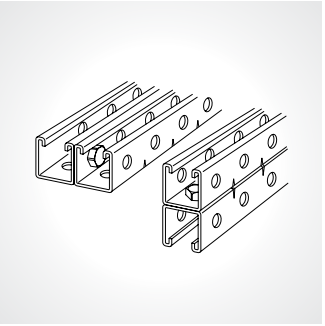

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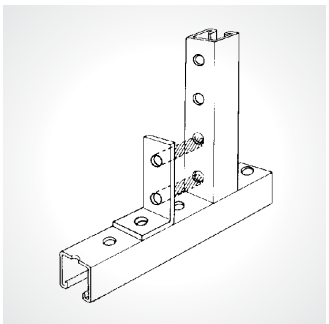

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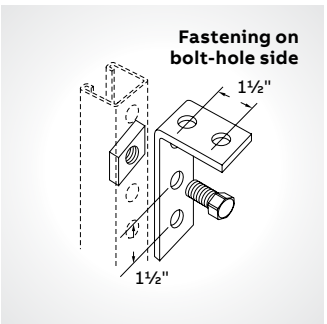

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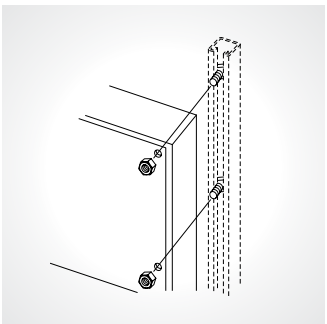

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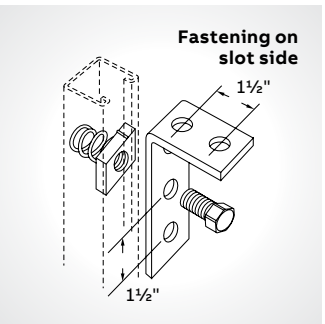


Let the modular 1½" dimension work for you by saving labor and inventory dollars

NOTE: By simply stocking B-995 prepunched channel and three angle fittings, a great number of joints can be made.

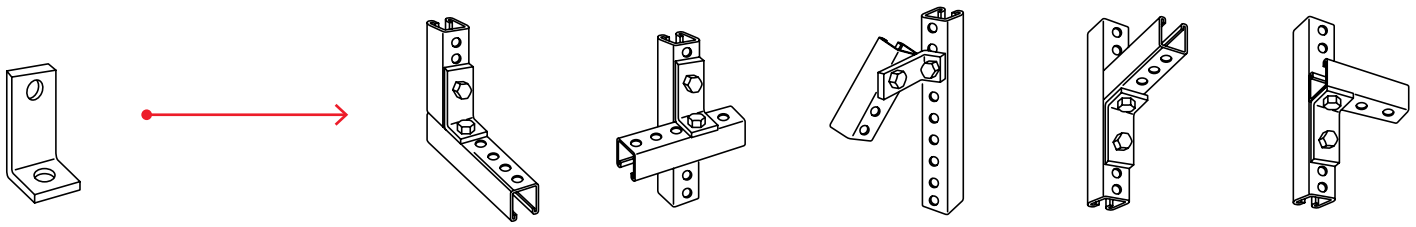
Fewer pieces do more work

By making equal use of the back of the channel, the sides of the channel and the open slot, your options are increased. Combine this with three simple fittings that are 1½" wide and have 1½" hole layout, and you have the simplest and most versatile channel system on the market today. By stocking a single-channel system and only three angle fittings, a multitude of jobs can be done.

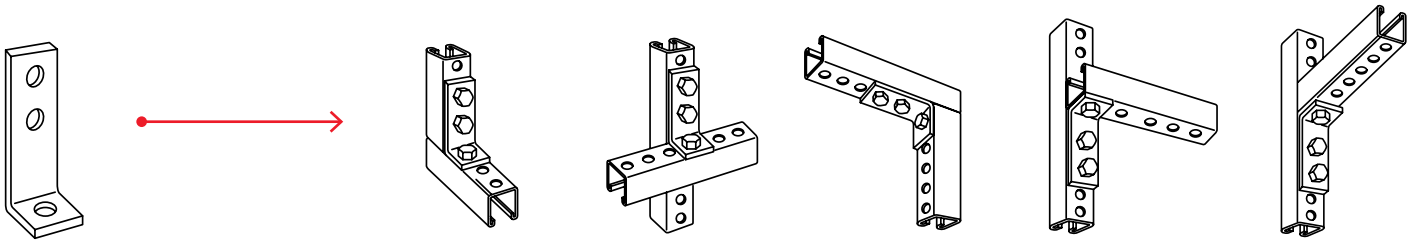
Combine this with three simple fittings that are 1½" wide and have 1½" hole layout, and you have the simplest and most versatile channel system on the market today. By stocking a single-channel system and only three angle fittings, a multitude of jobs can be done.

With fewer pieces doing more work, ordering efficiency is increased and investment dollars are decreased. Any way you look at it – Kindorf® strut can save you money.

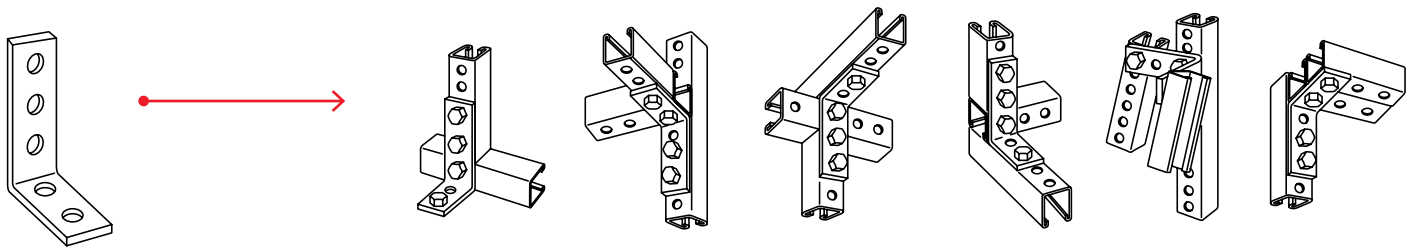
One Kindorf® B-915 two-hole connector will do:



One Kindorf® B-915 three-hole connector will do:



One Kindorf® B-915 five-hole connector will do:



Galv-Krom®
Electro-galvanized finish

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Trivalent Galv-Krom® is OSHA compliant
Over the past several years, there have been many questions about hexavalent chromium in the metal framing industry. Many of these questions relate to the changes made by OSHA. In 2006, the Occupational Safety and Health Administration (OSHA) published a revised standard which includes changes related to occupational exposure to hexavalent chromium (Cr VI). The revised standard was promulgated on February 28, 2006 with the compliance provisions taking effect on November 27, 2006 for most businesses. There is no Cr VI in our unique Kindorf® Trivalent Galv-Krom® finish.

New trivalent Galv-Krom® finish is RoHS compliant
In 2007, ABB introduced the new and improved trivalent Galv-Krom® finish. Galv-Krom® finish is a combination of .5 mils electro-plated zinc and a gold trivalent chromium finish.

- **Gold trivalent chromium finish**
  The new Galv-Krom® finish features a trivalent chromium formulation that provides all the features and protection of hexavalent chromium (CR VI) without the use of this chemical. Hexavalent chromium is a substance that is restricted by some standards such as the European Union directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).
- **RoHS Compliant**
  One great feature for the new Trivalent Chromium formulation is RoHS compliance. Because hexavalent chromium is a substance that is restricted by RoHS, moving away from a hexavalent formulation to the new trivalent formulation will make the performance of Galv-Krom® coating available to customers affected by RoHS and other standards like RoHS around the world.
- **Trivalent Galv-Krom® finish Is OSHA safe**
  As mentioned previously, the hexavalent formulation of the Galv-Krom® finish was safe with regard to the revised 2006 OSHA standard. This new trivalent formulation of the Galv-Krom® finish does not contain any hexavalent chromium and therefore does not fall under the scope of the OSHA standard. As a result, the new Trivalent Galv-Krom® finish, just like the Hexavalent Galv-Krom® finish, is OSHA compliant.
- **ASTM B633 Specification**
  The improved Galv-Krom® finish is applied in compliance with ASTM B633 coating, the same standard as used previously. This standard outlines electro-deposited coatings of zinc on steel.

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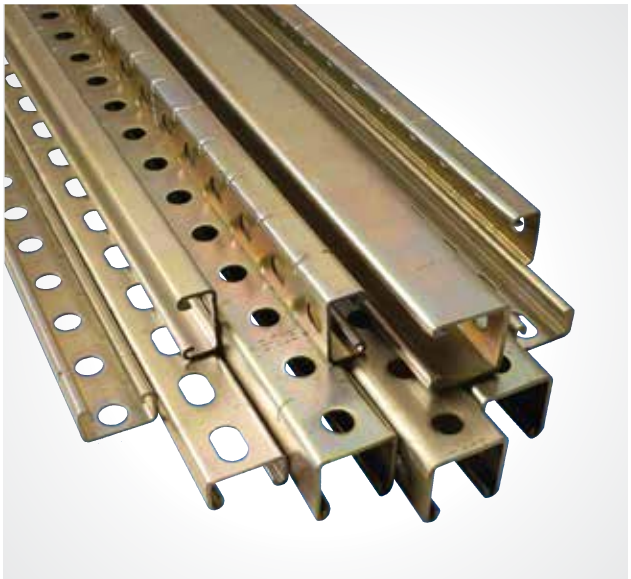

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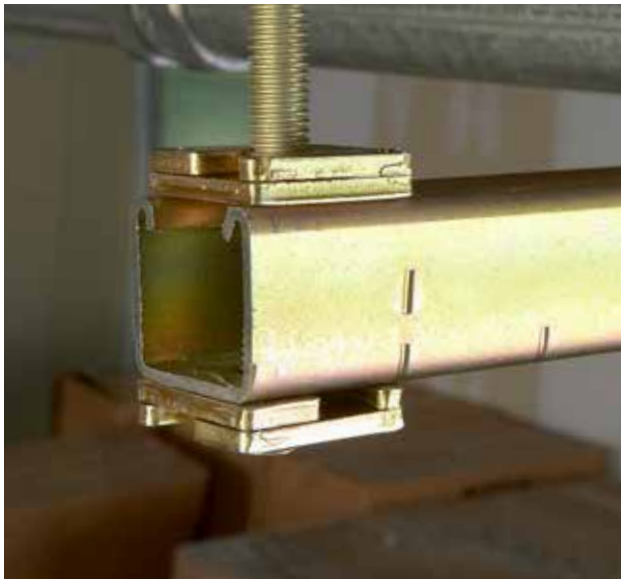

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01 Modular channel system with three simple fittings.
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02 Trivalent Galv-Krom® is OSHA compliant.
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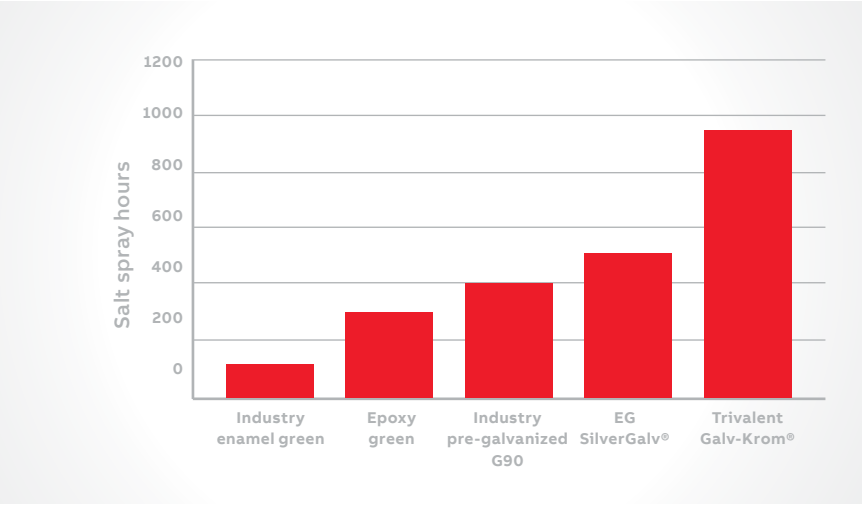
03 New Trivalent Galv-Krom® finish is RoHS compliant.

Kindorf® Galv-Krom® finish
Outperforms the competition



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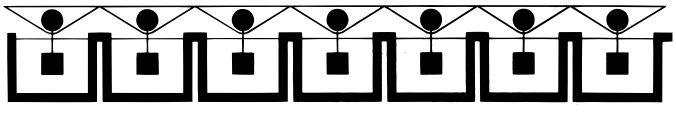
01 Metal Framing Channel Finish Corrosion-Resistant Testing, ASTM B117.

The new and improved Galv-Krom® finish provides many benefits.

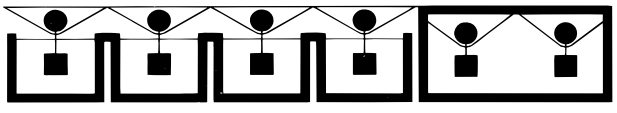
First, it provides continued safety within OSHA guidelines. Second, the trivalent formulation provides RoHs compliance. But most important of all, the new Kindorf® Galv-Krom® finish provides a level of performance unmatched by the competition.

- **Superior corrosion protection**
  One hallmark of the Galv-Krom® finish is the superior corrosion protection it provides. In the ASTM B117 salt spray test, the new Galv-Krom® finish provided improved protection to the previous Hexavalent formulation, and substantially more protection than painted finishes or G-90 Pre-Galvanized (see figure 01). This outstanding corrosion protection means more versatile installations and more service life for Galv-Krom® finished products.
- **Strong abrasion resistance**
  The Galv-Krom® finish won't chip or peel like a green-painted strut product. It stands up to rough handling.
- **Clean finish**
  For pre-galvanized finishes, the zinc finish is applied before the strut is manufactured. That means all the oil and grime collected while the steel is formed into strut remains on the strut for the customer. Because Galv-Krom® finish is applied after fabrication, the oils and grime collected during the manufacturing process arethoroughly cleaned off during plating. This creates a finished product that leaves no residue on your hands when handling.
- **Paintable surface**
  The new Galv-Krom® finish uses nano technology to provide a nonporous and non-crystalline surface. Not only does this feature provide

Kindorf® Galv-Krom® finish process



Soak	Electro Cleaner	Rinse	Sulfuric acid bath	Rinse	Zinc tank	Rinse
Solution removes bulk of oil and grease buildup.	Metal is negatively charged to remove minute surface particles.	Live, clear water rinse.	Prepares the metal by etching the surface for the zinc application.	Live, clear water rinse.	Electrically applies the zinc metal coating.	Chemically treated rinse water.



Rinse	Trivalent chromium prep	Trivalent chromium dip	Rinse	Dryer
Live, clear water rinse.	Polishing agent to prepare part for chromium.	A gold trivalent chromium conversion coat is applied to the zinc.	Live, clear water rinse.	Forced hot air is circulated around the strut until dry.

WARNING: Load tables, charts and design criteria provided in this catalog are intended as guides only. Selection of proper product, installation intervals, erection and placement are the responsibility of the user. Kindorf® products are intended to be used for the support and bracing of fixtures, cable, pipe and conduit. Improper use or installation may result in injury to persons or damage to property. Material and finish specifications are subject to change without notice.

enhanced corrosion protection, it also provides an excellent bond for the paint of your choice.

- **No more white rust**
  With pre-galvanized strut, a common quality concern is the formation of white rust on the zinc finish. With Galv-Krom® finish, the trivalent chromium finish is applied over the zinc, to seal in the zinc beneath and stop the formation of white rust.
- **Great electrical conductivity**
  Unlike paint or enamel, the Galv-Krom® surface offers a minimum of electrical resistance so that electrical applications are easily grounded when grounding is needed.

Finishes

1. **Galv-Krom®**
   Commonly referred to as “gold,” the Galv-Krom® finish is a combination of .5 mils electro-plated zinc and a gold trivalent chromium finish, offering superior rust protection and excellent electrical conductivity.
2. **SilverGalv® (Suffix EG)**
   Often referred to as “zinc plated” or “electroplated zinc,” the SilverGalv® finish applies .5 mils of zinc and a clear conversion coat. Electro-galvanizing is available for channel as well as small fittings, hardware and threaded products.
3. **Pre-galvanized steel (Suffix PG)**
   In addition to the standard Galv-Krom® finish, all Kindorf® channels are available in pre-galvanized steel. This material is identical to the standard steel except for its ASTM G-90 zinc coating. This coating is applied at the steel mill prior to the channel fabrication.
4. **Green coated (Suffix GR)**
   Green urethane powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powderedform urethane, it proceeds through a 400° baking process for ten minutes, creating a chemical bond. This results in a minimum of 1.5 mil thickness of urethane coating providing excellent resistance to chipping or peeling.
5. **Hot-dipped galvanized (Suffix HD)**
   The material is zinc coated after fabrication providing total product protection on all surfaces. The fabricated channel or fitting is suspended and then dipped into tanks of hot zinc for a prolonged period, creating a coherent bond. The result is superior corrosion resistance as compared to pre-galvanized material. Hot-dipped galvanizing is not recommended for threaded products, considering the zinc coating thickness will often disrupt the threads.

   Kindorf® hot-dipped galvanized channel is in conformance with ASTM Specifications A-123 (formerly A-386) and A-153.

   Kindorf® channels maintain a minimum 1.5 ounces of zinc per square foot of steel or 2.5 mils (ASTM A-123, Thickness Grade 65). This finish is also referred to as “Hot-dipped galvanized after fabrication.”
6. **PVC Coated (Prefix P)**
   A polyvinyl chloride (PVC) plastic coating is fused to the channel, fitting or accessory after fabrication by immersing the part in fluidized PVC tanks. The fused-melt mixed powder PVC coating thickness is 15 mils (.015") plus or minus five mils. PVC material is a thermoplastic and will soften in high temperatures. An inherent weakness with PVC coatings occurs when field alterations are applied, such as cutting or drilling. These acts disrupt the sealed PVC product and warrant field touch-up. ABB cannot be held responsible for field-altered PVC coated products.

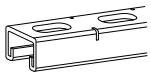
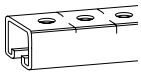
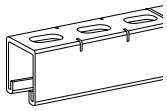
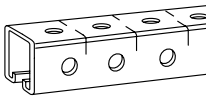
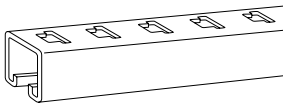
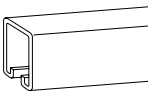
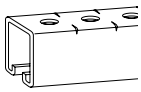
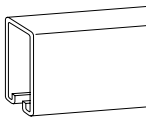
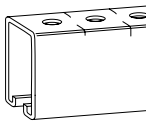
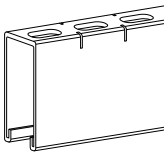
Materials

1. **Standard steel**
   The standard Kindorf® Channel is made from high-quality ASTM A570 Grade 40 carbon steel sheet. These sections are cold formed into a unique and modular profile by an efficient roll forming process. Additionally, the process “cold works” the steel is to give it greater mechanical properties.
2. **Extruded aluminum (Suffix AL)**
   For more corrosive environments, ABB also offers extruded aluminum channel sections. These section are nearly identical to their steel counterparts. Aluminum channel is made from 6063 Aluminum and heat treated to a T-6 specification.
3. **Non-metallic (Suffix N)**
   Kindorf® channels are also available in fiberglass-reinforced polyester and vinylester. These products are pultruded into shapes similar to steel channels. They offer a high degree of corrosion protection and are very lightweight.
4. **Stainless steel (Suffix SS)**
   For the most corrosive environments, ABB offers Type 304 Stainless Steel channel sections and accessories. Type 316 stainless available upon request. Contact your local sales rep. These products are identical to their carbon steel counterparts except for a much greater corrosion resistance.

Channels, nuts and fittings
Channels

Kindorf® channel is a rugged, heavy-gage structural-quality steel channel preformed in a “U” shape with a continuous open slot the entire length. The turned-in edges serve as retaining points for the nut and bolt assembly of fittings to the channel. The shape of the channel permits infinite adjustability of the clamping nut simply by gliding it along the channel to the desired position. Spring-tensioned nuts are generally used for positioning overhead or in vertical channel installations. A stud nut (with spring) is provided for easy mounting of cabinets and equipment. Channel Nuts are specially shaped as parallelograms with biting edges so that when tightened with normal pressure on the bolt, the nut clamps the sides of the channel together in a secure connection, which reinforces the rigidity of the channel itself. The nut rests on the “lips” of the channel slot.

Steel channels - Galv-Krom® finish (10 ft and 20 ft lengths)

Solid base	Bolt hole base	Half-slot base	Bolt hole base	T-Slot base
	9⁄16" diameter bolt holes on 1½" centers ¾" from end	9⁄16" x 7⁄8" slots on 1½" centers ¾" from end	Bolt holes on 3 sides, 9⁄16" diameter on 1½" centers ¾" from end	
 **B-906** 1½" x ¾" x 14 ga	 **B-907** 1½" x ¾" x 14 ga	 **B-907HS** 1½" x ¾" x 14 ga		
 **B-900** (12 ga) / **B-900-M** (14 ga) 1½" x 1½"	 **B-905** (12 ga) / **B-905-M** (14 ga) 1½" x 1½"	 **B-905HS** (12 ga) / **B-905HS-M** (14 ga)	 **B-995** (12 ga) / **B-995-M** (14 ga) 1½" x 1½"	 **B-904** 1½" x 1½" x 12 ga
 **B-901** 1½" x 1⅞" x 12 ga	 **B-909** 1½" x 1⅞" x 12 ga			
 **B-902** 1½" x 3" x 12 ga	 **B-903** 1½" x 3" x 12 ga	 **B-903HS** 1½" x 3" x 12 ga		

How to order: Add the suffix designation of the desired combination to the regular channel catalog number. (Example: Two B-900 channels back to back are ordered as B-900-2A.)

Kindorf® channels – Combination channels (All Kindorf® channels are available in a variety of combinations – some are shown below).

10 and 20 ft lengths – steel

Special lengths may be ordered

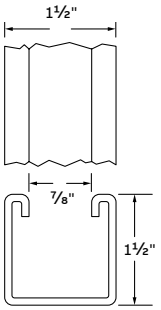
Channels, nuts and fittings

B-900 & B-901 Channel

B-900 Channel – Properties of section

Cat. No.	Sectional area	Material thickness	lbs/ft
B-900	.345	0.104	1.206
B-900-M	.217	0.074	0.74

X-X AXIS			XY-Y AXIS		
I	S	R	I	S	R
.101	.123	.535	.129	.175	.603
.018	.163	.272	.077	.105	.559



Connection by means of continuous slot.

B-900 Channel – 1½" x 1½"

Cat. No.	Description	Material
B-900 10	Galv-Krom®	12 ga
B-900-20	Galv-Krom®	12 ga
B-900-M-10	Galv-Krom®	14 ga
B-900-M-20	Galv-Krom®	14 ga
B-900-10-EG	SilverGalv®	12 ga
B-900-20-EG	SilverGalv®	12 ga
B-900-M-10-EG	SilverGalv®	14 ga
B-900-M-20-EG	SilverGalv®	14 ga

Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
B-900, 162 lbs/C ft. B-900-M, 107 lbs/C ft.

B-900 Channel – Accessories

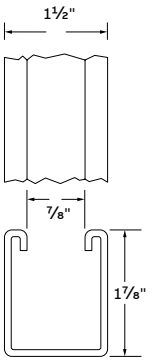
Cat. No.	Description	Joiner	End cap
B-900	12 ga Galv-Krom®	–	–
B-900-M	14 ga Galv-Krom®	–	–
B-900-10GR	Green powder coated	–	–
B-900-20GR	Green powder coated	G978	–
B-900-10PG	Pre-galvanized	G978A	G967
B-900-20PG	Pre-galvanized	G1503S	–
B-900-10HD	Hot-dipped galvanized	–	–
B-900-20HD	Hot-dipped galvanized	–	–

Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
B-900, 162 lbs/C ft. B-900-M, 107 lbs/C ft.

B-901 Channel – Properties of section

Cat. No.	Sectional area	Material thickness	lbs/ft
B-900-M	.217	.074	.74

X-X AXIS			XY-Y AXIS		
I	S	R	I	S	R
.101	.123	.535	.129	.175	.603
.018	.163	.272	.077	.105	.559



For heavier load requirements.
Connection by means of continuous slot.

B-901 Channel – 1½" x 1⅞"

Cat. No.	Description	Material
B-901-10	Galv-Krom®	12 ga
B-901-20	Galv-Krom®	12 ga
B-901-10-EG	SilverGalv®	12 ga
B-901-20-EG	SilverGalv®	12 ga

Use H-113-B bolts and B-910-½" or B-911-½" steel nuts for mounting fittings.
196 lbs/C ft.

B-901 Channel – Accessories

Cat. No.	Description	Joiner	End cap
B-901	12 ga Galv-Krom®	G978C	G-966
B-901HD	Hot-dipped galvanized	–	–

Use H-113-B bolts and B-910-½" or B-911-½" steel nuts for mounting fittings.
196 lbs/C ft.

Channels, nuts and fittings

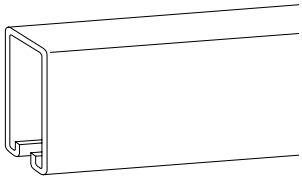
B-902 & B-903 Channel

B-902 Channel – Properties of section

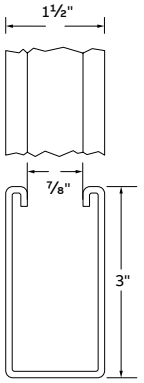
Cat. No.	Sectional area	Material thickness	lbs/ft
B-902	.837	.104	2.825

X-X AXIS		
I	S	R
.909	.552	1.042

XY-Y AXIS		
I	S	R
.363	.471	.658



Connection by means of continuous slot.



B-902 Channel – 1½" x 3"

Cat. No.	Description	Material (ga)
B-902-10	Galv-Krom®	12
B-902-20	Galv-Krom®	12
B-902-10-EG	SilverGalv®	12
B-902-20-EG	SilverGalv®	12

Use H-113-B bolts and B-910-1/2 steel nuts for mounting fittings.
285 lbs/C ft.

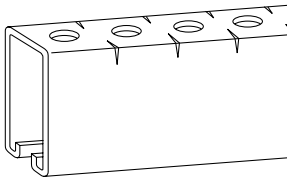
B-902 Channel – Accessories

Cat. No.	Description	Joiner	End cap
B-902-10	12 ga Galv-Krom®	–	–
B-902-20	12 ga Galv-Krom®	G978-D	G957
B-902-10HD	Hot-dipped galvanized	G-3003S	–
B-902-20HD	Hot-dipped galvanized	–	–

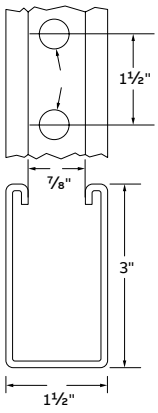
Use H-113-B bolts and B-910-1/2 steel nuts for mounting fittings.
285 lbs/C ft.

B-903 Channel – 1½" x 3"

Cat. No.	Description	Material (ga)
B-903-10	Galv-Krom®	12
B-903-20	Galv-Krom®	12
B-903-10-EG	SilverGalv®	12
B-903-20-EG	SilverGalv®	12



Connection by means of continuous slot or 9⁄16" holes on 1½" centers.



Use H-113-B bolts and B-910-1/2 steel nuts for mounting fittings.
277 lbs/C ft.

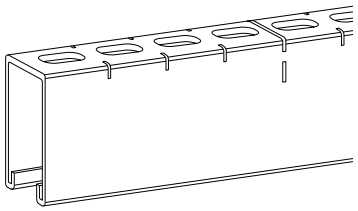
B-903 Channel – Accessories

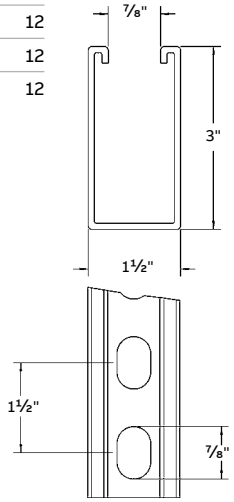
Cat. No.	Description	Joiner	End cap
B-903	12 ga Galv-Krom®	G978-D	–
B-903HD	Hot-dipped galvanized	G3003S	–

Use H-113-B bolts and B-910-1/2 steel nuts for mounting fittings.
277 lbs/C ft.

B-903HS Channel – 1½" x 3"

Cat. No.	Description	Material (ga)
B-903HS-10	Galv-Krom®	12
B-903HS-20	Galv-Krom®	12
B-903HS-10-EG	SilverGalv®	12
B-903HS-20-EG	SilverGalv®	12





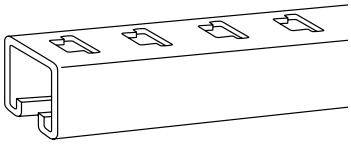
Use H-113-B bolts and B-910-1/2 steel nuts for mounting fittings.
277 lbs/C ft.

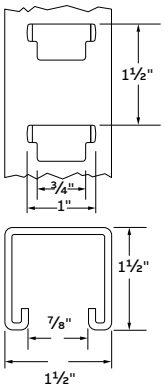
Channels, nuts and fittings

B-904 & B-905 Channel

B-904 Channel – 1½" x 1½"

Cat. No.	Description
B-904-10	12 ga Galv-Krom®
B-904HD	Hot-dipped galvanized



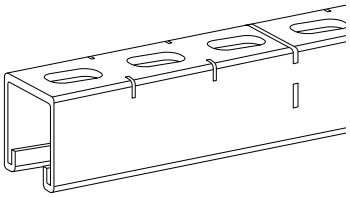


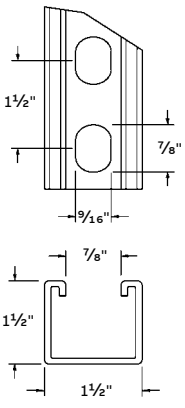
Connection by means of continuous slot or T-slots on 1½" centers in base side of channel.

For attachment to continuous slot use H-113-B bolts and B-910-1/2 steel nuts. For attachment to T-slots use F-739 brackets 155 lbs/C ft.

B-905HS Channel – 1½" x 1½"

Cat. No.	Description	Material (ga)
B-905HS-10	Galv-Krom®	12
B-905HS-20	Galv-Krom®	12
B-905HS-M-10	Galv-Krom®	14
B-905HS-M-20	Galv-Krom®	14
B-905HS-10-EG	SilverGalv®	12
B-905HS-20-EG	SilverGalv®	12
B-905HS-M-10-EG	SilverGalv®	14
B-905HS-M-20-EG	SilverGalv®	14

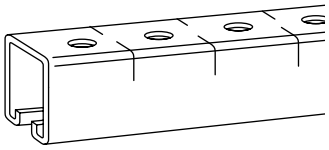


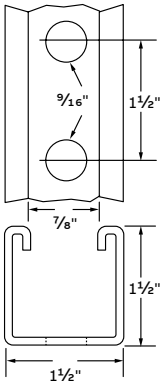


Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
Scribe marks designate midpoint between holes for accurate field cutting.
B-905, 158 lbs/C ft. B-905-M, 102 lbs/C ft.

B-905 Channel – 1½" x 1½"

Cat. No.	Description	Material (ga)
B-905HS-10	Galv-Krom®	12
B-905HS-20	Galv-Krom®	12
B-905HS-M-10	Galv-Krom®	14
B-905HS-M-20	Galv-Krom®	14
B-905HS-10-EG	SilverGalv®	12
B-905HS-20-EG	SilverGalv®	12
B-905HS-M-10-EG	SilverGalv®	14
B-905HS-M-20-EG	SilverGalv®	14





Connection by means of continuous slot or 9⁄16" holes on 1½" centers that match holes in B-900 series fittings.

Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
Scribe marks designate midpoint between holes for accurate field cutting.
B-905, 158 lbs/C ft. B-905-M, 102 lbs/C ft.

B-905 Channel – Accessories

Cat. No.	Description	Joiner	End cap
B-900	12 ga Galv-Krom®	–	–
B-900-M	14 ga Galv-Krom®	–	–
B-900-10GR	Green powder coated	–	–
B-900-20GR	Green powder coated	–	–
B-900-10PG	Pre-galvanized	–	–
B-900-20PG	Pre-galvanized	–	–
B-900-10HD	Hot-dipped galvanized	–	–
B-900-20HD	Hot-dipped galvanized	–	–

Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
Scribe marks designate midpoint between holes for accurate field cutting.
B-905, 158 lbs/C ft. B-905-M, 102 lbs/C ft.

Channels, nuts and fittings

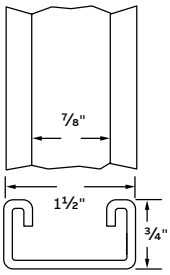
B-906 & B-907 Channel

B-906 Channel – Properties of section

Cat. No.	Sectional area	Material thickness	lbs/ft
B-906	.521	.104	1.776

X-X AXIS		
I	S	R
.155	.088	.545

XY-Y AXIS		
I	S	R
.2	.259	.619



Connection by means of continuous slot.

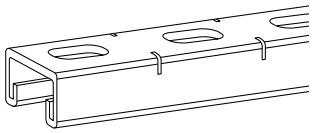
B-906 Channel – 1½" x 3"

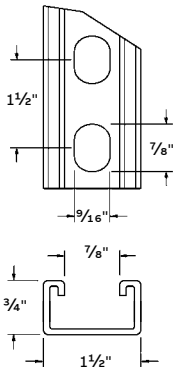
Cat. No.	Description	Material (ga)
B-906-10	Galv-Krom®	14
B-906-20	Galv-Krom®	14
B-906-10-EG	SilverGalv®	14
B-906-20-EG	SilverGalv®	14

Use H-113-B bolts and B-910-½" or B-912-½" steel nuts for mounting fittings.
Steel 75 lbs/C ft.

B-907HS Channel – 1½" x ¾"

Cat. No.	Description	Material (ga)
B-907HS-10	Galv-Krom®	14
B-907HS-20	Galv-Krom®	14
B-907HS-M-10	SilverGalv®	14
B-907HS-M-20	SilverGalv®	14

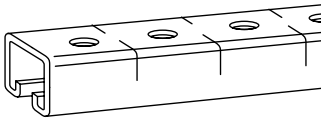


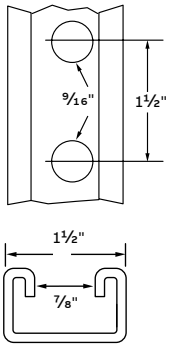


Use H-113-A bolts and B-910-½" or B-912-½" steel nuts for mounting fittings.
Holes on B-900 series fittings match channel holes.
Scribe marks on steel channel designate midpoint between holes for accurate field cutting.
Steel 71 lbs/C ft.

B-907 Channel – 1½" x ¾"

Cat. No.	Description	Material (ga)
B-907-10	Galv-Krom®	14
B-905HS-20	Galv-Krom®	14
B-905HS-M-10	SilverGalv®	14
B-905HS-M-20	SilverGalv®	14





Connection by means of continuous slot or 9/16" holes on 1½" centers.

Use H-113-A bolts and B-910-½" or B-912-½" steel nuts for mounting fittings.
Holes on B-900 series fittings match channel holes.
Scribe marks on steel channel designate midpoint between holes for accurate field cutting.
Steel 71 lbs/C ft.

B-907 Channel – Accessories

Cat. No.	Description	Joiner
B-907	14 ga Galv-Krom®	B948
B-907-10GR	Green coated	B948
B-907-20GR	Green coated	B948
B-907-10PG	Pre-galvanized	B948
B-907-20PG	Pre-galvanized	B948
B-907-10HD	Hot-dipped galvanized	B948
B-907-20HD	Hot-dipped galvanized	B948

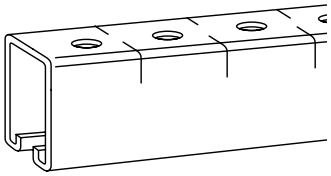
Use H-113-A bolts and B-910-½" or B-912-½" steel nuts for mounting fittings.
Holes on B-900 series fittings match channel holes.
Scribe marks on steel channel designate midpoint between holes for accurate field cutting.
Steel 71 lbs/C ft.

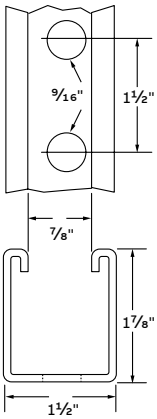
Channels, nuts and fittings

B-909 & B-995 Channel

B-909 Channel – 1½" x 1⅞"

Cat. No.	Description	Material (ga)
B-909-10	Galv-Krom®	12
B-909-20	Galv-Krom®	12
B-909-EG	SilverGalv®	12
B-909-20-EG	SilverGalv®	12





For heavier load requirements. Connection by means of continuous slot or 9/16" holes on 1½" centers.

Use H-113-A bolts and B-910-½" or B-911-½" steel nuts for mounting fittings.
118 lbs/C ft.

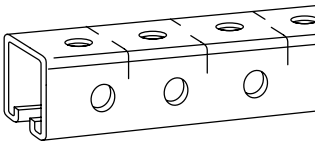
B-909 Channel – Accessories

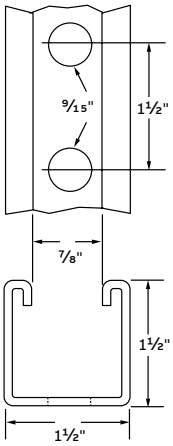
Cat. No.	Description	Joiner
B-909	12 ga Galv-Krom®	G978-C
B-909HD	Hot-dipped galvanized	G978-C

Use H-113-A bolts and B-910-½" or B-911-½" steel nuts for mounting fittings.
118 lbs/C ft.

B-995 Channel – 1½" x 1½"

Cat. No.	Description	Material (ga)
B-995-10	Galv-Krom®	12
B-995-20	Galv-Krom®	12
B-995-M-10	Galv-Krom®	14
B-995-M-20	Galv-Krom®	14
B-995-10-EG	SilverGalv®	12
B-995-20-EG	SilverGalv®	12
B-995-M-10-EG	SilverGalv®	14
B-995-M-20-EG	SilverGalv®	14





Connection by means of continuous slot or 9/16" holes on 1½" centers on three sides which match holes in B-900 series fittings.

Use H-113-A bolts and B-910-½" or B-911-½" steel nuts for mounting fittings.
150 lbs/C ft. Scribe marks designate midpoint between holes for accurate field cutting.
Standard 10 ft lengths.

01

01 **B-995 Channel – 1½" x 1½"** Connection by means of continuous slot or 9/16" holes on 1½" centers on three sides which match holes in B-900 series fittings.

Channels, nuts and fittings
Channel nuts

—
01

—
01 Channel nuts Kindorf® Channel Nuts are manufactured from mild steel and are case hardened.

—
Screw threads

Thread Size	B	J	C	D
Threads per inch	20	18	16	13
Design Torque (ft-lbs)	6	11	19	50

All threaded products are American Standard thread, free fit class 2.
Galv-Krom® hardware finish is standard for all Superstrut products. This is a multi-process finish of electro-plated zinc, followed by gold-colored trivalent chromium finish to give excellent corrosion resistance and a superior paint base.
Standard Finish – Galv-Krom®, unless otherwise stated.

H 122 3/8
Galv-Krom®

H 122 3/8 EG
SilverGalv®

—
Trapnut® strut fastener

Cat. No.	Description	Size (in)	Design load (Lbs)	Std. ctn.
H 122 1/4	¼" Galv-Krom®	¼	150	50
H 122 3/8	⅜" Galv-Krom®	⅜	590	50
H 122 1/2	½" Galv-Krom®	½	1,080	50
H 122 1/4 EG	¼" SilverGalv®	¼	150	50
H 122 3/8 EG	⅜" SilverGalv®	⅜	590	50
H 122 1/2 EG	½" SilverGalv®	½	1,080	50
H 122 1/4 SS6	¼" Type 316 stainless steel	¼	150	50
H 122 3/8 SS6	⅜" Type 316 stainless steel	⅜	590	50
H 122 1/2 SS6	½" Type 316 stainless steel	½	1,080	50

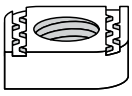
Design data
Kindorf® self-aligning channel nuts are designed to provide resistance to pull out and resistance to side slip in excess of the full strength of the channels with which they are used. The extreme resistance to side slip results from the unique design of the alternate teeth, spaced and designed to develop a wedging action that increases with pressure or load.

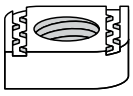
Load ratings of steel channel and insert nuts
(B-910-1/2 or B-911-1/2) when used in slot of 12 ga. Kindorf® channel and tightened to a torque of 50 ft. Pounds are as follows: Withdrawal resistance to pull out safe-load rating = 1,600 lbs.
Slip resistance safe-load rating = 400 lbs.
(B-910-1/2 or B-912-1/2) when used in slot of 14 ga. Kindorf channel and tightened to a torque of 50 ft. Pounds are as follows: Withdrawal resistance to pull out safe-load rating = 1,300 lbs.
Slip resistance safe-load rating = 400 lbs.
Load ratings are based on safety factor of 3.

BC-910 Universal cone nut
Eliminates the inventory and installation hassles of conventional spring nuts. Fits all 1⅝" channel, regardless of depth, with a simple twist of your thumb. Pliable nylon cone secures the nut in place through the entire range of construction site temperatures.

—
B-910 Series Channel Nuts – Standard Finish: Galv-Krom®

Thread size	Size (in)	Thickness (in)	Weight (lbs/C)
B-910-1/4	¼ – 20	3/16	7.5
B-910-5/16	5/16 – 18	5/16	7.3
B-910-3/8	⅜ – 16	5/16	9.15
B-910-1/2	½ – 13	⅜	9.9





For use with all Kindorf® channels.

—
Load Ratings for B-910 strut nuts

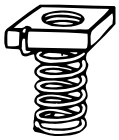
Channel nut sizes (in)	Slip test rating	Pull test rating (in)
¼	300	500
⅜	750	1000
½	1,200	2000

If connections will be subjected to dynamic or seismic loading conditions, contact the factory for design assistance. 1. All ratings have safety factor of 3 applied.
2. Load ratings are for Static Applications.

Channels, nuts and fittings

Channel nuts

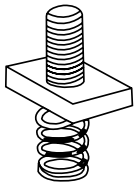
B-911 Series



Cat. No.	Size (in)	Thickness (in)	Weight (lbs/C)
B-911-1/4	¼ – 20	3/16	8
B-911-5/16	5/16 – 18	5/16	8.25
B-911-3/8	3/8 – 16	5/16	10
B-911-D-3/8*	3/8 – 16	5/16	12
B-911-1/2	½ – 13	3/8	10
B-911-D-1/2*	½ – 13	7/8	13

Self-holding clamping nut with spring attached. For use with 1½" deep channels.
* For clamping nuts with spring for 3" deep channels add suffix D to catalog number.

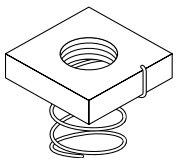
B-911-SN Series



Cat. No.	Size (in)	Thickness (in)	Weight (lbs/C)
B-911-3/8-SN1†	3/8 – 16	3/16	12.5
B-911-3/8-SN2†	3/8 – 16	5/16	13.0
B-911-1/2-SN1†	½ – 13	5/16	16.0
B-911-1/2-SN2†	½ – 13	3/8	17.0

Stud nut self-holding clamping nut with spring attached.
† B-911-3/8-SN1, Stud: 3/8 Dia., 1" Long and B-911-3/8-SN2, Stud: 3/8 Dia., 1¼" Long.
Accepts Kindorf ® Nuts H-114C (hex), H-116-C (square).
B-911-1/2-SN1, Stud: ½ Dia., 1" Long. and B-911-1/2-SN2, Stud: ½ Dia., 1¼" Long.
Accepts Kindorf ® Nuts H-114D (hex), H-116-D (square).

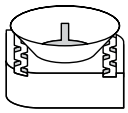
B-912 Series



Cat. No.	Size (in)	Thickness (in)	Weight (lbs/C)
B-912-1/4	¼ – 20	3/16	8.0
B-912-5/16	5/16 – 18	5/16	7.5
B-912-3/8	3/8 – 16	5/16	9.5
B-912-1/2	½ – 13	5/16	9.8

Self-holding clamping nut with spring attached. For use with 3/4" deep channels.
Standard finish: Galv-Krom®

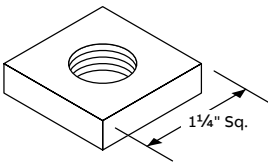
B-912 Series – ¼", 3/8" & ½" Universal nylon cone nut



Cat. No.	Size (in)	Finish
BC910-1/4	¼ – 20	Galv-Krom®
BC910-3/8	3/8 – 16	Galv-Krom®
BC910-1/2	½ – 13	Galv-Krom®

For all 1⅝" & 1½" channels. May be used with ALL strut depths.

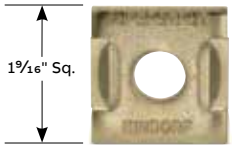
B-914 Series



Cat. No.	Size (in)	Thickness (in)	Weight (lbs/C)
B-914-1/4	¼ – 20	3/16	10.50
B-914-3/8	3/8 – 16	5/16	13.25
B-914-1/2	½ – 13	3/8	14.00
B-914-5/8	5/8 – 11	3/8	14.00
B-914-3/4	¾ – 10	3/8	12.00
B-914-7/8	7/8 – 9	3/8	10.50
B-914-3/8P	3/8 – 18**	3/8	12.00
B-914-1/2P	½ – 14**	3/8	11.00

Square nuts for use with channel and spot-type concrete inserts.
** Standard Pipe Threads. Standard finish: Galv-Krom®.

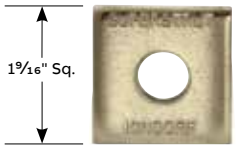
Located square washers



Cat. No.	Bolt size (in)	Std. Ctn.
AB-241L-1/4	¼	100
AB-241L-5/16	5/16	100
AB-241L-3/8	3/8	100
AB-241L-1/2	½	100
AB-241L-5/8	5/8	100

GoldGalv® is standard finish.
Add "EG" suffix for SilverGalv®.

Square washers



Cat. No.	Bolt size (in)	Std. Ctn.
AB-241-1/4	¼	100
AB-241-5/16	5/16	100
AB-241-3/8	3/8	100
AB-241-1/2	½	100
AB-241-5/8	5/8	50

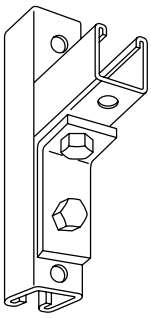
GoldGalv® is standard finish.
Add "EG" suffix for SilverGalv®.

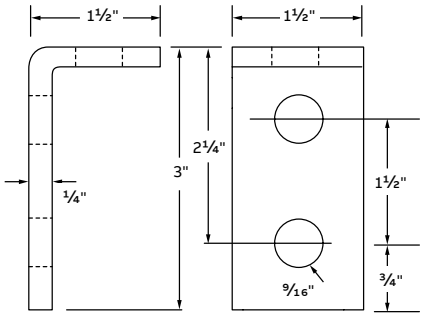
Channels, nuts and fittings

Angle & gusset connectors

B-915 Two-hole angle connector

Cat. No.	Finish
B-915	Galv-Krom®
B-915EG	Electro-galvanized
B-915HD	Hot-dipped galvanized

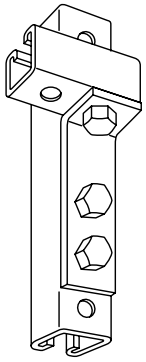


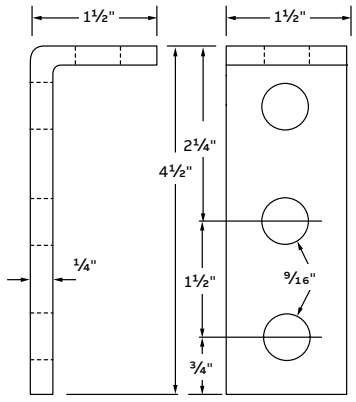


Can also be used as side-beam connector to suspend ½" hanger rod.
¼" steel. 39 lbs/C.

B-916 Three-hole angle connector

Cat. No.	Finish
B-916	Galv-Krom®
B-916HD	Hot-dipped galvanized

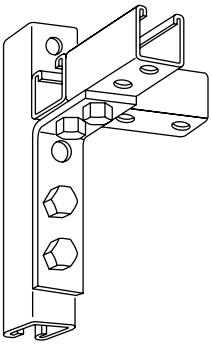


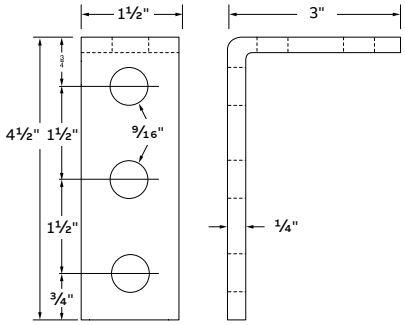


Can also be used as side-beam connector to suspend ½" hanger rod.
¼" steel. 46 lbs/C.

B-917 Five-hole angle connector

Cat. No.	Finish
B-917	Galv-Krom®
B-917EG	Electro-galvanized
B-917HD	Hot-dipped galvanized

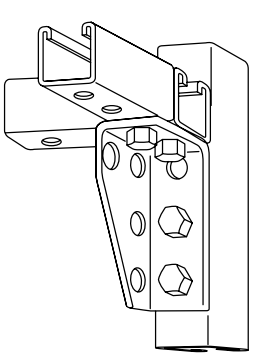


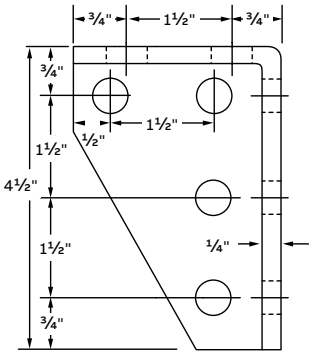


¼" steel. 68 lbs/C.

B-918 Left-hand gusset connector

Cat. No.	Finish
B-918	Galv-Krom®
B-918EG	Electro-galvanized





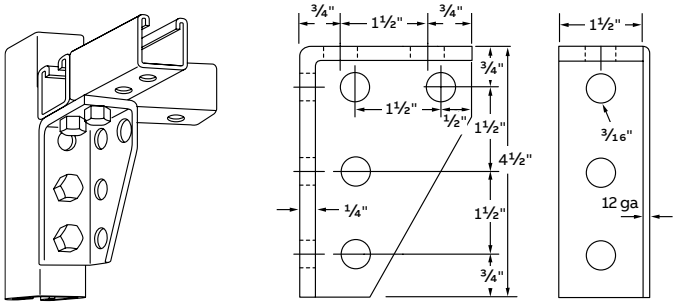
12 ga and ¼" steel. 102 lbs/C.

Channels, nuts and fittings

Angle, gusset, corner & end connectors

B-919 Right-hand gusset connector

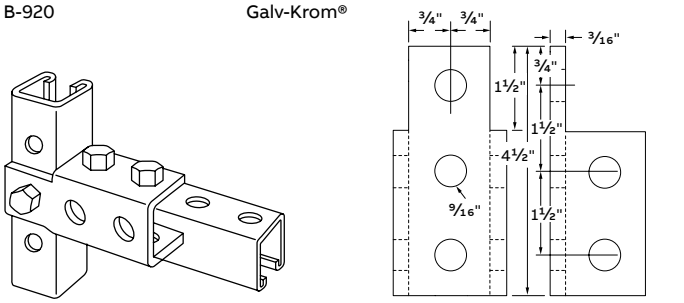
Cat. No.	Finish
B-919	Galv-Krom®
B-919EG	Electro-galvanized



12 ga and ¼" steel. 102 lbs/C.

B-920 End Connector

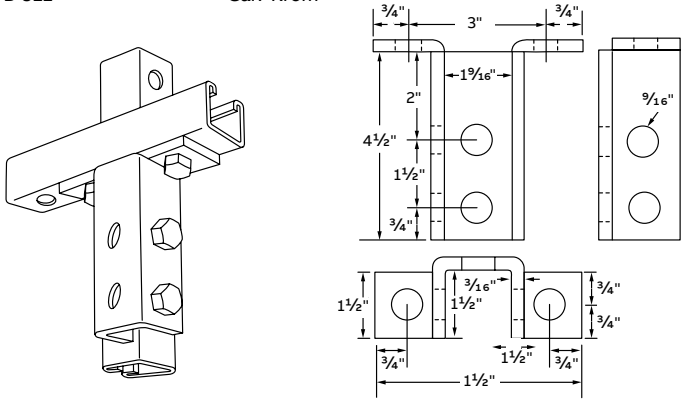
Cat. No.	Finish
B-920	Galv-Krom®



3/16" steel. 80 lbs/C.

B-922 Opposite-side angle connector

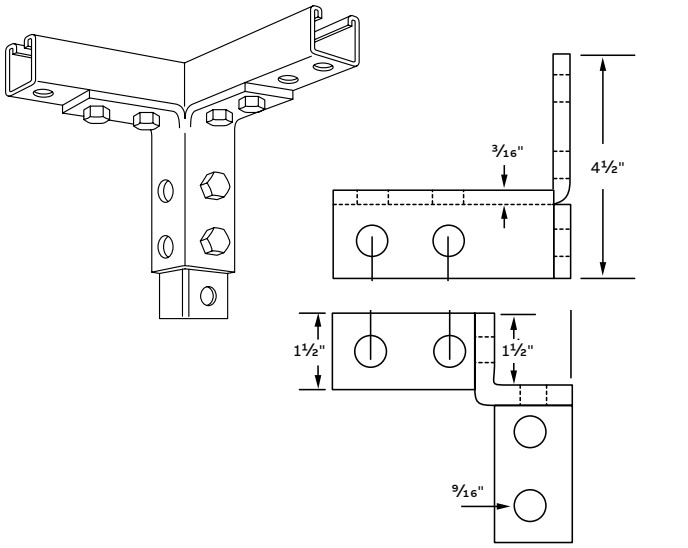
Cat. No.	Finish
B-922	Galv-Krom®



3/16" steel. 124 lbs/C.

B-921 Two-side corner connector

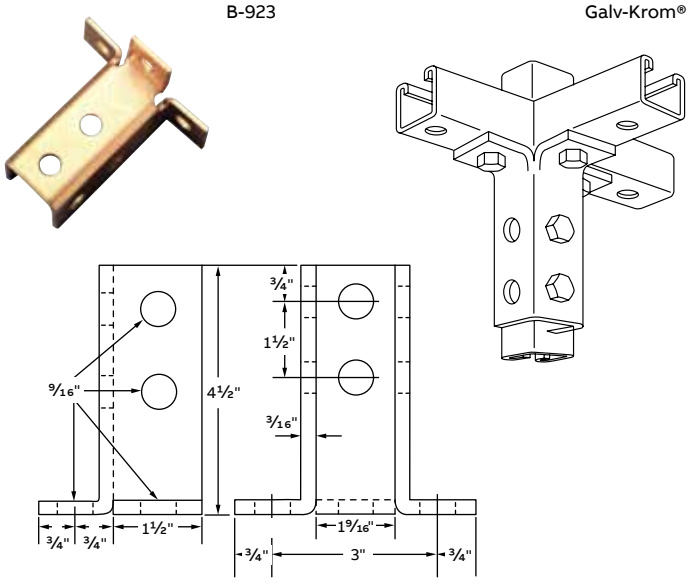
Cat. No.	Finish
B-921	Galv-Krom®



3/16" steel. 101 lbs/C.

B-923 Three-side angle connector

Cat. No.	Finish
B-923	Galv-Krom®



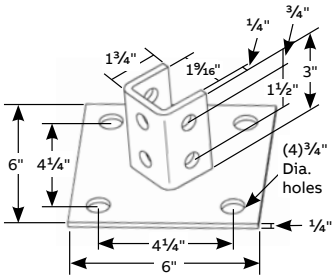
3/16" steel. 137 lbs/C.

Channels, nuts and fittings

Base connectors

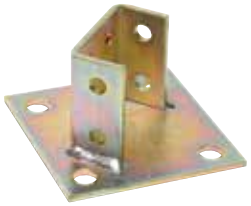
B-924 Post base connector

Cat. No.	Finish
B-924	Galv-Krom®
B-924-EG	SilverGalv®

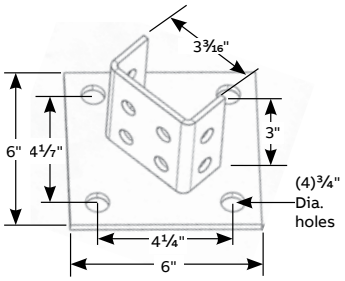


¼" steel 250 lbs/C. For use with 1½" x 1½" channels.

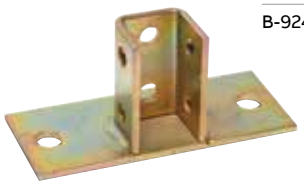
B-925 Post base connector



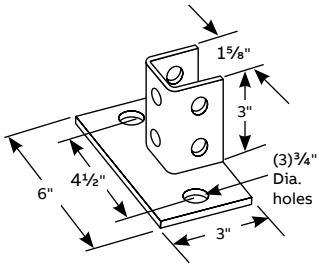
Cat. No.	Finish
B-925	Galv-Krom®
B-925-EG	SilverGalv®



B-924FL Post base connector

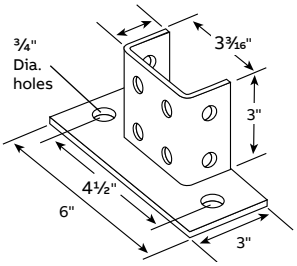


Cat. No.	Finish
B-924FL	Galv-Krom®
B-924FLEG	SilverGalv®

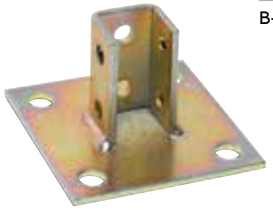


B-925FL Post base connector

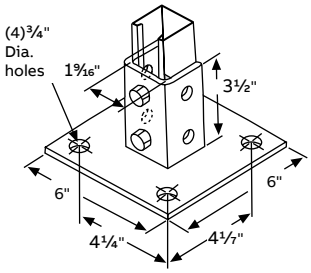
Cat. No.	Finish
B-925FL	Galv-Krom®
B-925FLEG	SilverGalv®



B-924SQ Post base connector

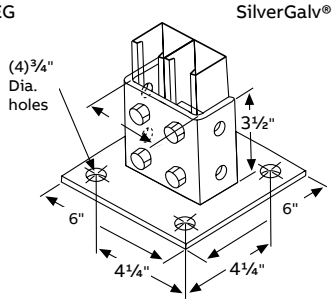


Cat. No.	Finish
B 924SQ	Galv-Krom®
B-924SQEG	SilverGalv®



B-925SQ Post base connector

Cat. No.	Finish
B-925SQ	Galv-Krom®
B-925SQEG	SilverGalv®

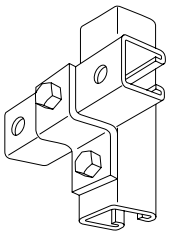


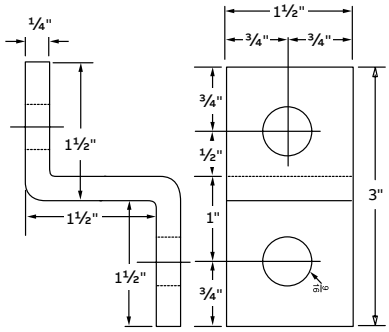
Channels, nuts and fittings

Z, U & angle supports

B-926 Z support

Cat. No.	Finish
B-926	Galv-Krom®

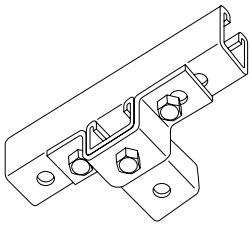


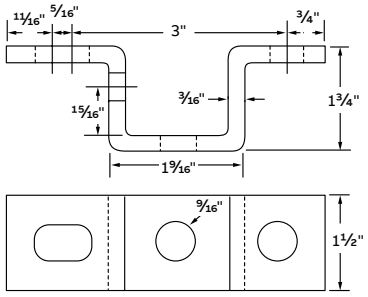


¼" steel. 42 lbs/C. For use with 1½" x 1½" channels.

B-927 U support

Cat. No.	Finish
B-926	Galv-Krom®

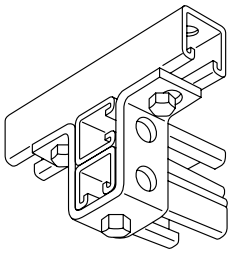


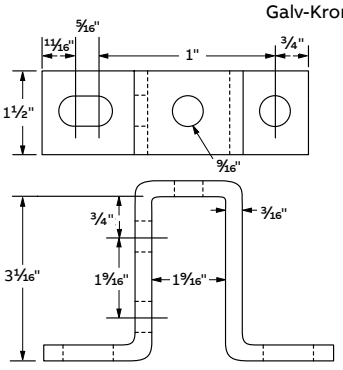


3/16" steel. 57 lbs/C. For use with 1½" x 1½" channels.

B-928 Deep U support

Cat. No.	Finish
B-928	Galv-Krom®

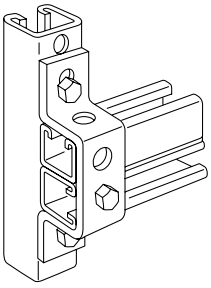


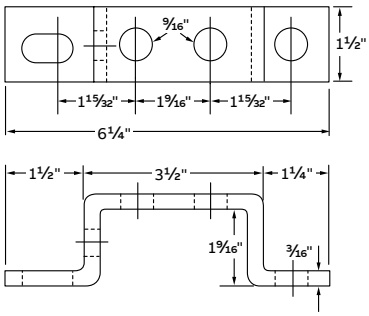


3/16" steel. 77 lbs/C.

B-929 Wide U support

Cat. No.	Finish
B-929	Galv-Krom®

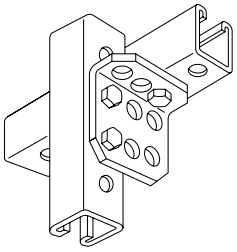


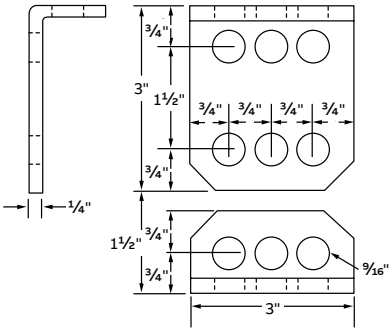


3/16" steel. 63 lbs/C.

B-930 Angle support

Cat. No.	Finish
B-930	Galv-Krom®

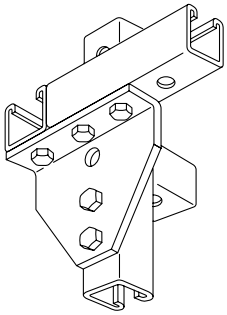


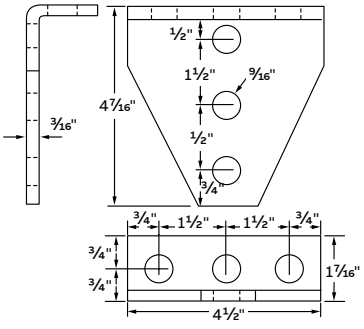


¼" steel. 70 lbs/C.

B-932 Heavy angle connector

Cat. No.	Finish
B-932	Galv-Krom®





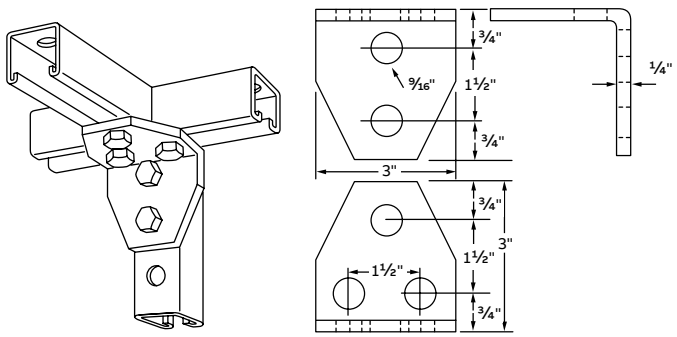
3/16" steel. 136 lbs/C.

Channels, nuts and fittings

Joint, corner, plate & angle connectors

B-933 Five-hole joint connector

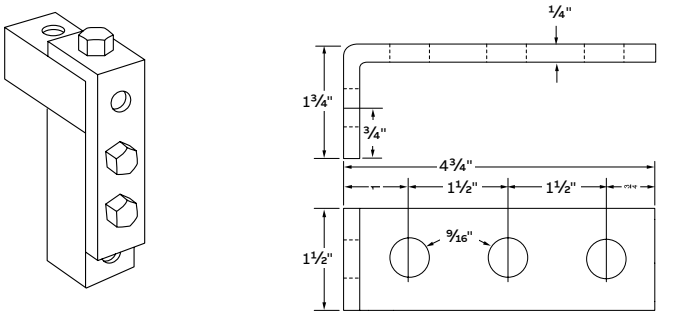
Cat. No.	Finish
B-933	Galv-Krom®



¼" steel. 96 lbs/C.

B-934 Outside corner connector

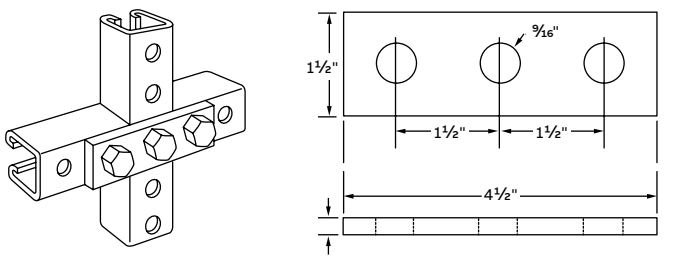
Cat. No.	Finish
B-934	Galv-Krom®



¼" steel. 57 lbs/C.

B-935 Three-hole plate connector

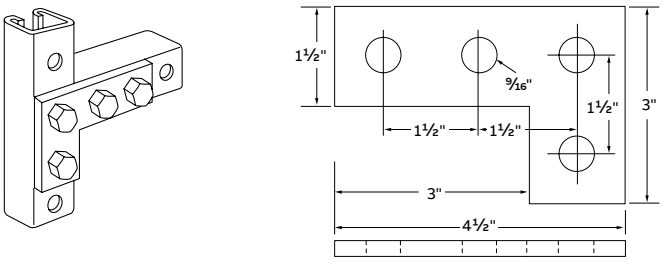
Cat. No.	Finish
B-935	Galv-Krom®
B-935-GR	Green coated
B-935-EG	Electro-galvanized



3/16" steel. 32 lbs/C.

B-936 Angle plate connector

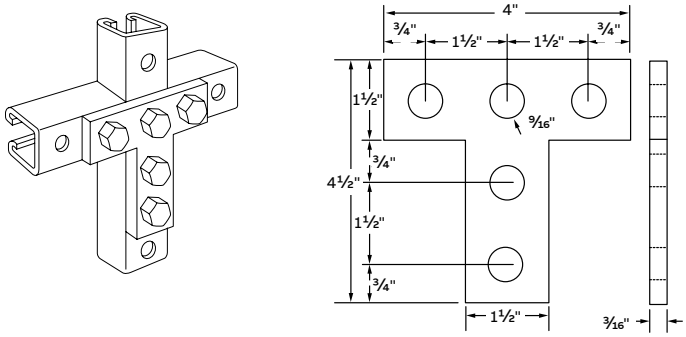
Cat. No.	Finish
B-936	Galv-Krom®
B-936GR	Green coated
B-936EG	Electro-galvanized



3/16" steel. 42 lbs/C.

B-937 T-Plate connector

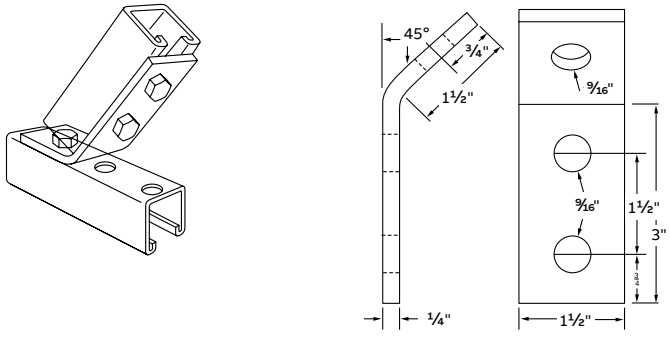
Cat. No.	Finish
B-937	Galv-Krom®



3/16" steel. 53 lbs/C.

B-938 Open angle connector

Cat. No.	Finish
B-938	Galv-Krom®



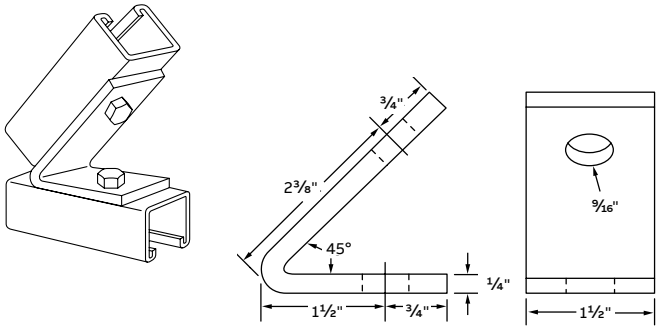
¼" steel. 42 lbs/C.

Channels, nuts and fittings

Angle, corner, brace connectors, joiner & swivel plate

B-939 Closed angle connector

Cat. No.	Finish
B-939	Galv-Krom®

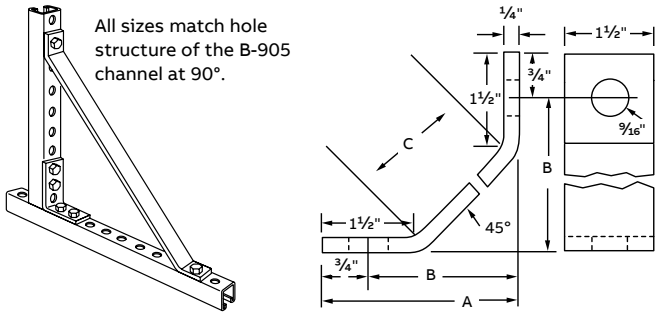


¼" steel. 50 lbs/C.

B-940 Corner braces

Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)
B-940-1	7½	6¾	8⅛	115
B-940-2	13½	12¾	16⅝	212
B-940-3	19½	18¾	25⅛	305

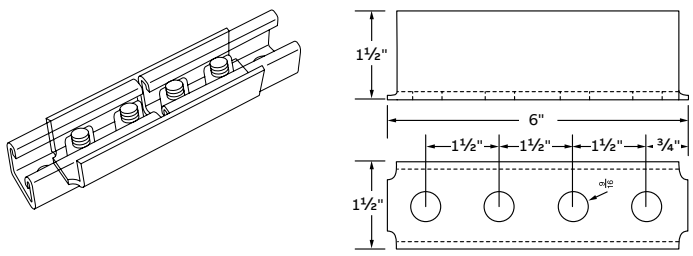
All sizes match hole structure of the B-905 channel at 90°.



¼" steel, Galv-Krom®.

B-941 Joiner for B-905 channel

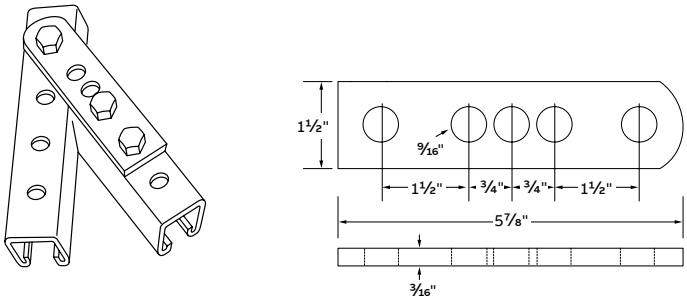
Cat. No.	Finish
B-941	Galv-Krom®



Order four B-910-½ nuts and four H-113-A cap screws separately.
12 ga steel. 80 lbs/C.

B-942 Swivel plate

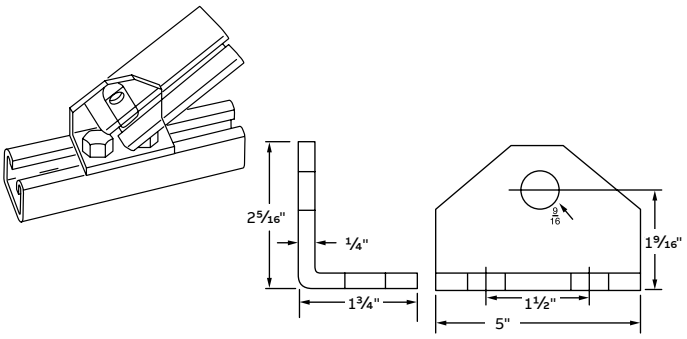
Cat. No.	Finish
B-942	Galv-Krom®



3⁄16" steel. 40 lbs/C.

B-943 Brace connector

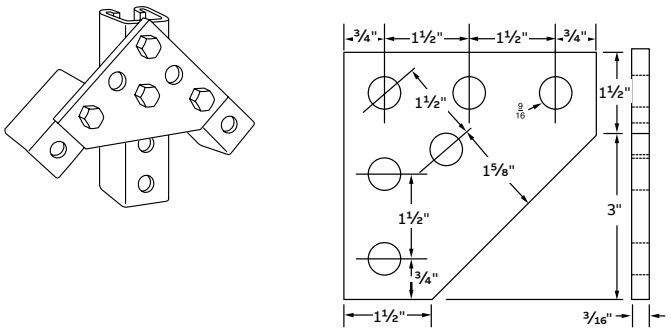
Cat. No.	Finish
B-943	Galv-Krom®



¼" steel. 66 lbs/C.

B-944 Double brace connector

Cat. No.	Finish
B-944	Galv-Krom®



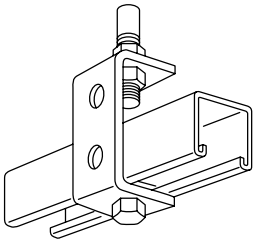
3⁄16" steel. 75 lbs/C.

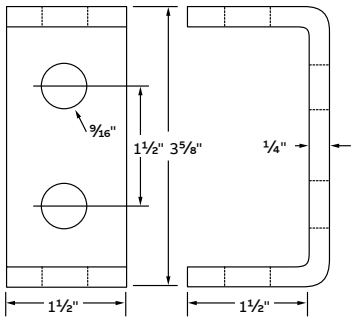
Channels, nuts and fittings

Rod, Z-support, cross-plate, wing connectors & joiner

B-945 Rod connector

Cat. No.	Finish
B-945	Galv-Krom®

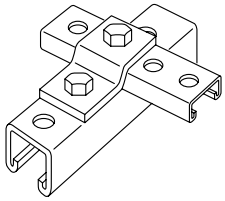


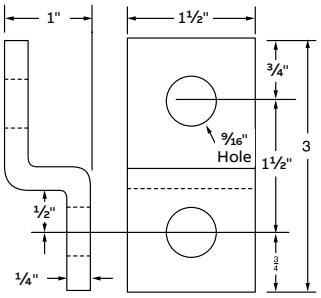


¼" steel. 61 lbs/C.

B-946 Z-Support

Cat. No.	Finish
B-946	Galv-Krom®

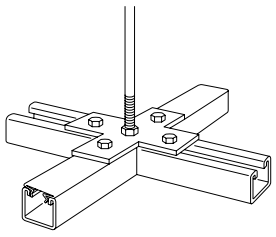


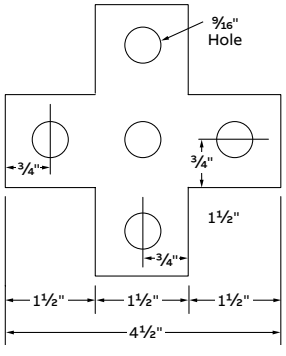


For use with B-906 or B-907 channel only. ¼" steel. 34 lbs/C.

B-947 Cross-plate connector

Cat. No.	Finish
B-947	Galv-Krom®

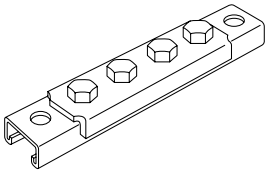


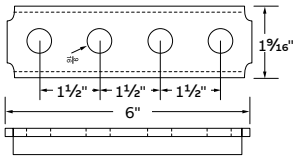


¼" steel. 55 lbs/C.

B-948 Joiner for B-907 Channel

Cat. No.	Finish
B-948	Galv-Krom®

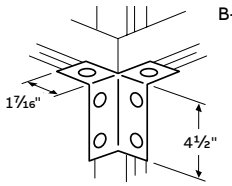




Order four B-910-1/2 nuts and four H-113-A cap screws separately. 12 ga steel. 51 lbs/C.

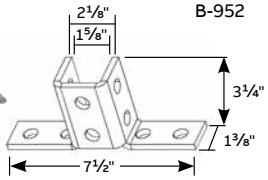
B-951 Wing connector

Cat. No.	Finish
B-951	Galv-Krom®



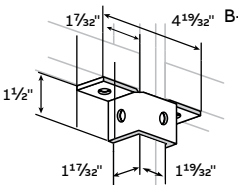
B-952 Wing connector

Cat. No.	Finish
B-952	Galv-Krom®



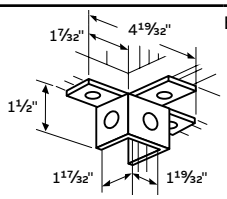
B-953 Wing connector

Cat. No.	Finish
B-953	Galv-Krom®



B-954 Wing connector

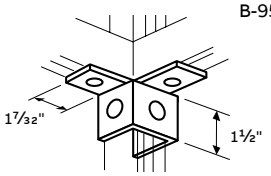
Cat. No.	Finish
B-954	Galv-Krom®



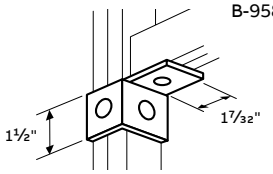
Channels, nuts and fittings

Wing & plate connectors

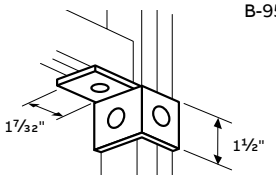
B-957 Wing connector

	Cat. No.	Finish
 	B-957	Galv-Krom®

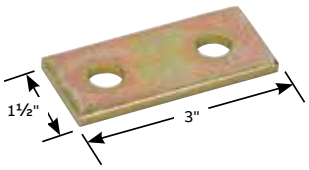
B-958L Wing connector

	Cat. No.	Finish
 	B-958L	Galv-Krom®

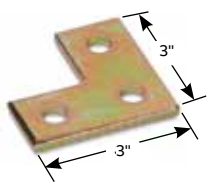
B-958R Wing connector

	Cat. No.	Finish
 	B-958R	Galv-Krom®

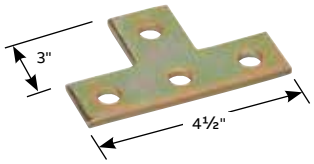
B-960 Plate connector

	Cat. No.	Finish
	B-960	Galv-Krom®

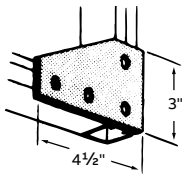
B-961 Plate connector

	Cat. No.	Finish
	B-961	Galv-Krom®

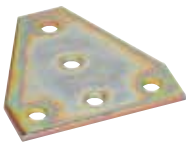
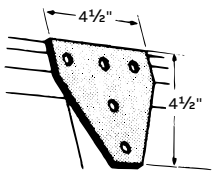
B-962 Plate connector

	Cat. No.	Finish
	B-962	Galv-Krom®

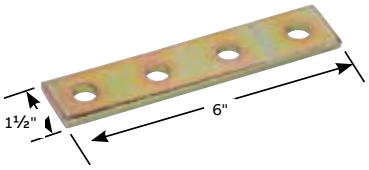
B-964 Plate connector

	Cat. No.	Finish
 	B-964	Galv-Krom®

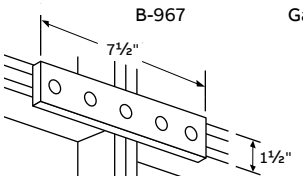
B-965 Plate connector

	Cat. No.	Finish
 	B-965	Galv-Krom®

B-966 Plate connector

	Cat. No.	Finish
	B-966	Galv-Krom®

B-967 Plate connector

	Cat. No.	Finish
 	B-967	Galv-Krom®

Channels, nuts and fittings
Solar panel hold-down clamps

01

02

01 SHC-T-SSH

02 SHC-L-SSH

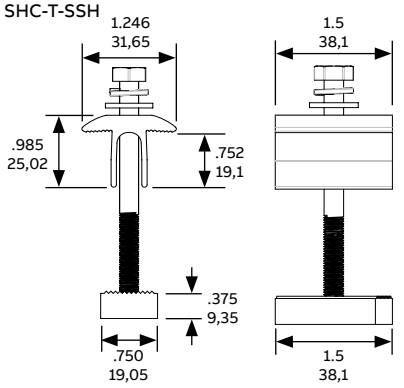
Rugged, corrosion-resistant materials
- Body and channel nut made from high-strength extruded aluminum alloy 6061-T6 with clear anodized finish
- ¼–20 x 3" bolt, lock washer and flat washer made from Type 304 stainless steel

Labor-saving features
- Hardware is pre-assembled to clamp to save time and labor for the installer
- Self-oriented channel nut is staked to bolt to ensure fast, easy installation

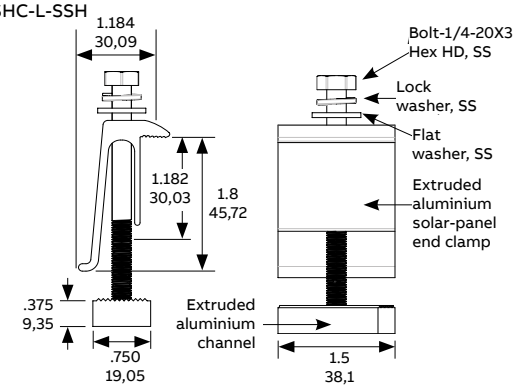
Versatile design
- Can be used with both 1½" Kindorf® channel and 1⅝" strut systems

Dimensions

SHC-T-SSH

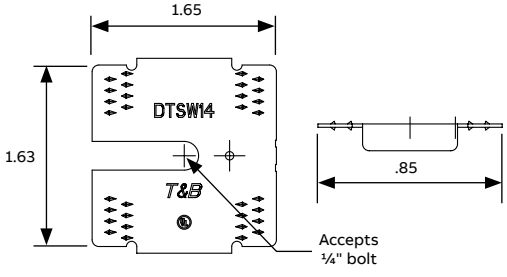


SHC-L-SSH



Applied load direction	SHC-T-SSH	SHC-L-SSH
	Allowable Load (lbs)	
Sliding	331	99
Tension	1535	568
Transverse	702	58
Tighten torque value (lbs/in), minimum	100	100

Cat. No.	Description
DTSW14	Solar panel grounding washer



Solar panel grounding washer
- Slotted for quicker installation – no need to disassemble clamp assembly
- Bent tab ensures washer stays in place during installation
- Can be used with both 1½" Kindorf® channel and 1⅝" strut systems
- Made from tin-plated, case-hardened steel
- Can be used on carbon steel or aluminum strut channel
- Complies with UL 467 (UL® Listed E9809)
- Designed for use with ¼" bolt installed with minimum torque value of 100 lbs/in

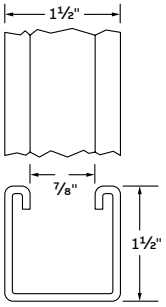
Channels, nuts and fittings

Stainless steel channels, spring nut, straps & pipe clamps

B-900 Channel – Stainless steel – 1½" x 1½"

Cat. No.	Description
B-900-10SS	Type 304
B-900-10316-SS	Type 316

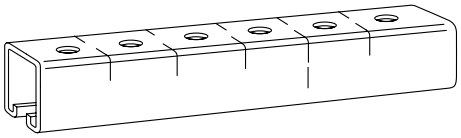
Connection by means of continuous slot.



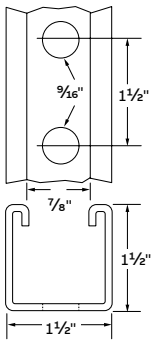
Use H-113-B bolts and B-910-1/2 or B-911-1/2 stainless steel nuts for mounting fittings. Available 20 ft lengths.

B-905 Channel – Stainless steel – 1½" x 1½"

Cat. No.	Description
B-905-10SS	Type 304
B-905-10-316SS	Type 316



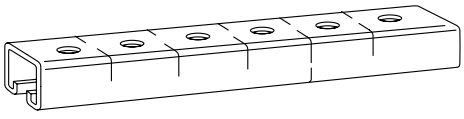
⁹⁄₁₆" holes on 1½" centers punched in channel base. Connection also by means of continuous slot.



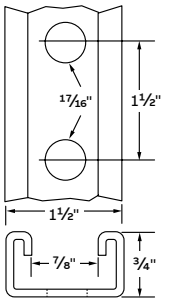
Use H-113-B bolts and B-910-1/2 or B-911-1/2 stainless steel nuts for mounting fittings. Scribe marks designate mid-point between holes for accurate field cutting. Available 20 ft lengths.

B-907 Channel – Stainless steel

Cat. No.	Description
B-907-10SS	Type 304
B-907-10316SS	Type 316



Connection by means of continuous slot or ⁹⁄₁₆" holes on 1½" centers.



Available 20 ft lengths.

B-911 Spring nut – Stainless steel

Cat. No.	Size (in)	Thickness (in)	Weight (lbs/C)
B-911-3/8-SS†	⅜ – 16	³⁄₁₆	12.5
B-911-1/2-SS†	½ – 13	⁵⁄₁₆	16.0

† Self-holding clamping nut with spring attached. For use with 1½" deep channels.

Kindorf straps for rigid conduit and pipe – Type 304 Stainless steel

Cat. No.	Rigid conduit or pipe size (in)	Cat. No.	Rigid conduit or pipe size (in)
C-105-1/2SS	½	C-105-2SS	2
C-105-3/4SS	¾	C-105-2-1/2SS	2½
C-105-1SS	1	C-105-3SS	3
C-105-1-1/4SS	1¼	C-105-3-1/2SS	3½
C-105-1-1/2SS	1½	C-105-4SS	4

C-105

Cobra® Cable and pipe clamp – Type 316 Stainless steel

Cobra® Cable and pipe clamp – Type 316 Stainless steel

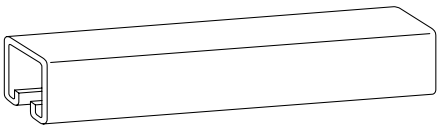
Cat. No.	For EMT and rigid conduit trade size (in)	Cable O.D. range (in)	Static load limit (lb) safety factor = 4	Std. Ctn.
CPC025SS6	¼	.312 – .600	200	100
CPC050SS6	½	.650 – .890	200	100
CPC075SS6	¾	.860 – 1.110	200	100
CPC100SS6	1	1.100 – 1.400	200	100
CPC125SS6	1¼	1.400 – 1.725	200	50
CPC150SS6	1½	1.690 – 1.980	200	50
CPC200SS6	2	1.980 – 2.576	200	50
CPC250SS6	2½	2.576 – 3.060	350	25
CPC300SS6	3	3.060 – 3.626	350	25
CPC350SS6	3½	3.626 – 4.126	350	25
CPC400SS6	4	4.126 – 4.626	350	25

Channels, nuts and fittings

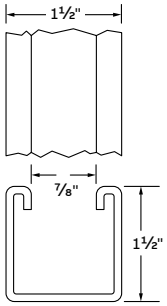
Stainless steel channels & aluminium straps

B-900 Channel – Stainless steel – 1½" x 1½"

Cat. No.	Description
B-900-10SS	Type 304



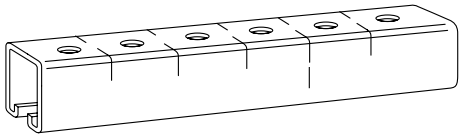
Connection by means of continuous slot.



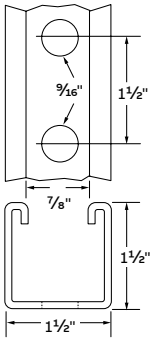
Use H-113-B bolts and B-910-1/2, B-911-1/2 or B-911-1/2-TL steel nuts for mounting fittings.
10 ft lengths only.

B-905 Channel – Stainless steel – 1½" x 1½"

Cat. No.	Description
B-905-10SS	Type 304



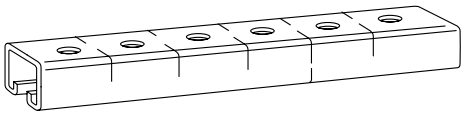
9⁄16" holes on 1½" centers punched in channel base. Connection also by means of continuous slot.



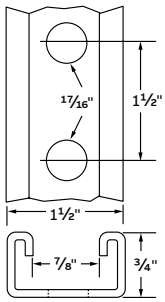
Use H-113-B bolts and B-910-1/2 or B-911-1/2 steel nuts for mounting fittings.
10 ft lengths only.

B-907 Channel – Stainless steel

Cat. No.	Description
B-907-10SS	Type 304



Connection by means of continuous slot or 9⁄16" holes on 1½" centers.

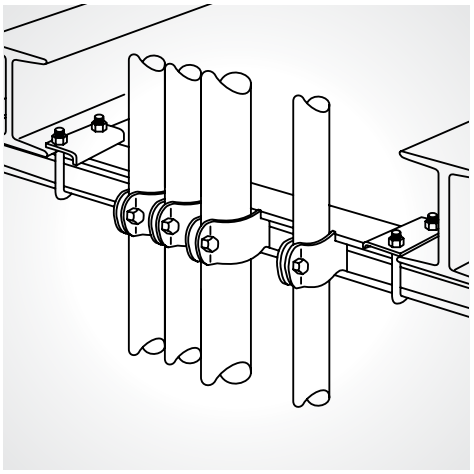


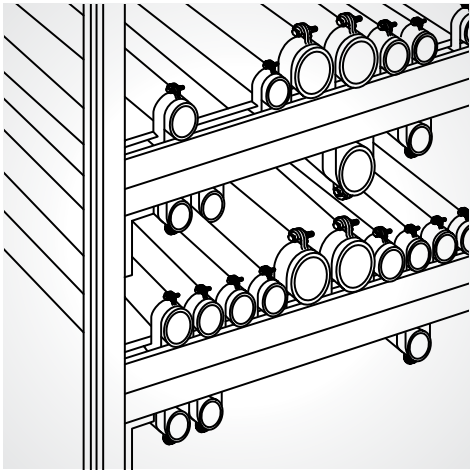
Use H-113-A bolts and B-910-1/2 or B-912-1/2 steel nuts for mounting fittings.
Holes on B-900 series fittings match channel holes.

Kindorf straps for rigid conduit and pipe – Aluminum

Cat. No.	Rigid conduit or pipe size (in)	Aluminium strap material thickness	Weight (lbs/C)
C-105AL-1/2	¼	14	7
C-105AL-3/4	½	14	8
C-105AL-1	¾	14	9
C-105AL-1-1/4	1	14	10
C-105AL-1-1/2	1¼	12	12
C-105AL-2	1½	12	14
C-105AL-2-1/2	2	12	16
C-105AL-3	3	12	18
C-105AL-3-1/2	3½	⅛	22
C-105AL-4	4	⅛	24

Steel beam mounting application. Aluminum straps with stainless steel Hardware. Frame assembly carries multiple conduit runs.





PVC-Coated steel channel & fittings for highly corrosive atmospheres

The complete and lasting corrosion protection of conduit with polyvinyl chloride coating is now extended to the supporting system. No longer will installers be faced with the problem of installing PVC-coated conduit or other corrosion-resistant material only to have the support system require constant maintenance or replacement.

PVC-coated Kindorf® channel and fittings complement other corrosion resistant services installed in chemical plants, foundries, meat packing plants, oil refineries, paper mills, sewage treatment plants and other locations.

PVC Plastic-coated Kindorf® channel support system for installations in severely corrosive atmospheres – PVC Coating
The coating is a polyvinyl chloride (PVC) plastic coating that is permanently fused to the Kindorf® Galv-Krom® galvanized steel channels, fittings and accessories. The fused-melt mixed powder (PVC) coating is 15 mils. (.015") ±5 mils thickness.

Specifications
- Hardness: 90+ Shore A Durometer
- Dielectric Strength (volts/mil @ 60 cycles): 1100
- Flammability: Self-extinguishing
- Tensile strength: 2000 p.s.i.
- Percent elongation: 180%
- Aging: 14,000 hours Atlas
- Weatherometer

The material is a thermoplastic and will soften in high temperatures. Service life will be decreased if the normal operating temperature of the support system is in excess of 225° F. The service life expectancy is 20 years in normal weathering, with no indication of hardening, softening or other physical change.

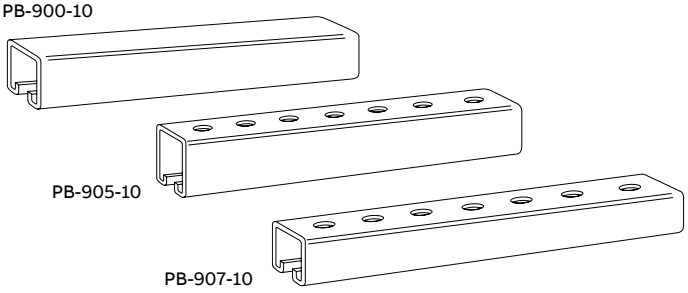
The Kindorf® plastic-coated support system has excellent resistance to the corrosive atmospheres created in modern processing industries which materially reduce the life of standard products and cause high maintenance costs. The fused-on coating of PVC plastic to a pre-galvanized steel effectively bars corrosive action by eliminating “undercreep” or “corrosion travel”. There is practically no maintenance. No special tools are required for installation of the Kindorf® PVC system.

The Kindorf® PVC-coated support system, combining the strength of steel and the corrosion resistance of plastic, is designed for mechanical support of plastic and plastic-coated conduits and pipes. Kindorf® PVC meets the requirements for corrosion resistance in those environments generally found in chemical processing plants, oil refineries, steel mills, foundries, meat packing and other food processing plants, fertilizer plants, textile and paper processing industries.

PVC-Coated steel channel

Cat. No.	Description	Weight (lbs/C)
PB-900-10	1½" x 1½" x 12 ga solid base	168
PB-905-10	1½" x 1½" x 12 ga 9⁄16" Holes on 1½" centers	160
PB-907-10	1½" x ¾" x 14 ga 9⁄16" Holes on 1½" centers	82

PB-900-10



Standard 10 ft.

PVC-Coated steel hanger rod

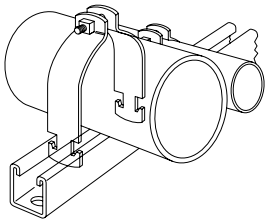
Cat. No.	Description	Weight (lbs/C)
PBH-193-3/8-6	3⁄8" x 6'	174
PBH-193-3/8-10	¾" x 10'	290
PB-905-10	½" x 6'	324
PB-907-10	½" x 10'	540

PBH-193

Channels, nuts and fittings

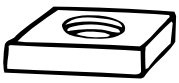
Straps, hardware, beam clamps & framing fittings

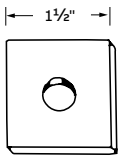
PVC-Coated steel conduit straps

	Cat. No.	Description (in)	Weight (lbs/C)	Cat. No.	Description (in)	Weight (lbs/C
PBC-105	B-911-1/4	¾	16	PBC-105-2-1/2	2½	38
	B-911-5/16	1	18	PBC-105-3	3	45
	B-911-3/8	1¼	20	PBC-105-3-1/2	3½	58
	B-911-D-3/8*	1½	29	PBC-105-4	4	64
	B-911-1/2	2	33			

PVC-Coated hardware

Cat. No.	Description	Weight (lbs/C)
PB-910-3/8	⅜ – 16 Steel nut	9
PB-910-1/2	½ – 13 Steel nut	10
PBH-119C-3/8	1½" Square qasher with 7⁄16" hole	12
PBH-119D-1/2	1½" Square washer with 27⁄32" hole	14
PBH-120	Saddle washer for ⅜" or ½" rod	7


PB-910

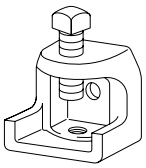


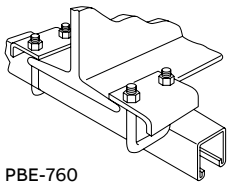
PBH-119

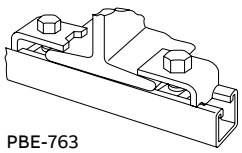

PBH-120

PVC-Coated beam clamps

Cat. No.	Description	Weight (lbs/C)
PB-502	2" – ⅞" Jaw Tapped ⅜ – 16	95
PB-508	21⁄2" – 2" Jaw Tapped ½ – 13	182
PBE-760-2	For Use with PB-900, PB-905, PB-906 or PB-907	80
PBE-763	For use with all channels	25

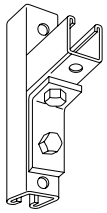

PB-500 Series


PBE-760

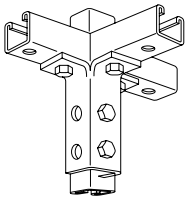

PBE-763

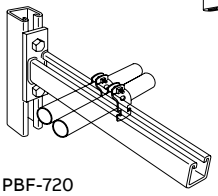
PVC-Coated framing fittings

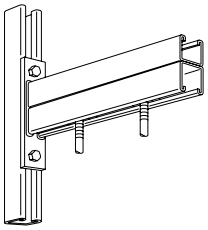
PB-915



PB-923

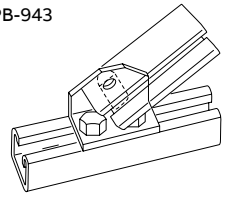



PBF-720

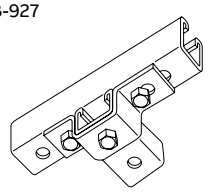

PBF-721

Cat. No.	Description	Weight (lbs/C)
PB-910-3/8	⅜ – 16 Steel nut	9
PB-910-1/2	½ – 13 Steel nut	10
PBH-119C-3/8	1½" Square qasher with 7⁄16" hole	12
PBH-119D-1/2	1½" Square washer with 27⁄32" hole	14
PBH-119D-1/2	1½" Square washer with 27⁄32" hole	14
PBH-120	Saddle washer for ⅜" or ½" rod	7

PB-943



PB-927



Bantam channels

for the support of light- and medium-weight equipment in electrical and mechanical applications

Bantam Channels simplify the support of overhead fixtures, conduits, pipes and boxes in suspended ceiling installations where they can be supported on runs of lathers channel or directly from bar joists or ceiling beams. Ribbed channels may also be mounted on concrete forms and used as low-cost continuous-slot concrete inserts.

The use of Kindorf® Channel Bars provides a ready made system of bars and accessories designed to eliminate costly and time consuming on-the-job improvising.

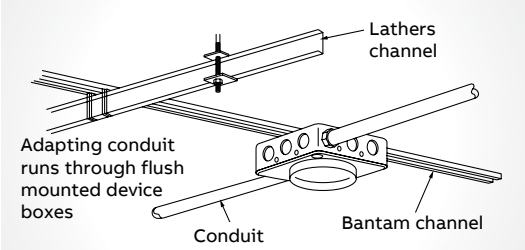
01 Installed slot down the open slot accommodates and enables easy positioning of accessory fittings or ¼" hanger rod to support lightor medium-weight equipment.

02 Suspended fixture.

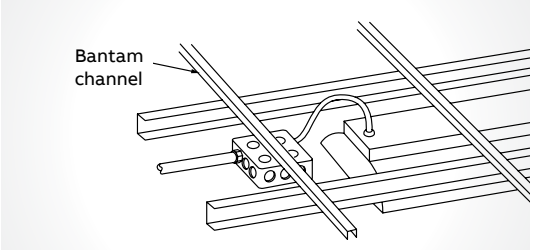
03 Box mounted on Bantam Channel to feed fixtures.

04 Typical mounting on bar joists.

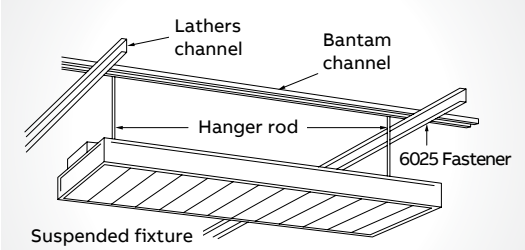
01



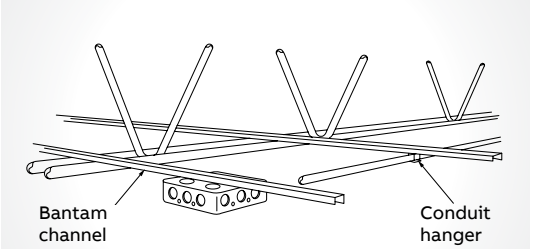
03



02

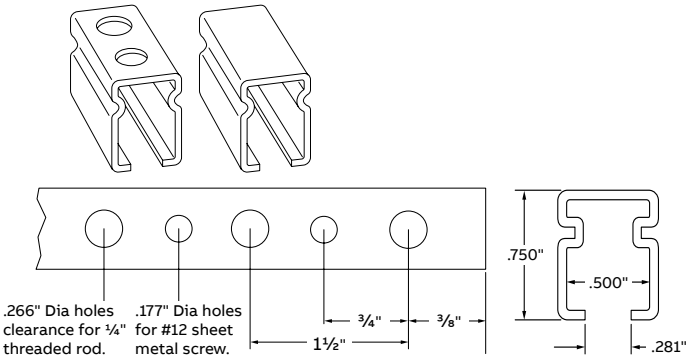


04



Ribbed channels (extra strength)

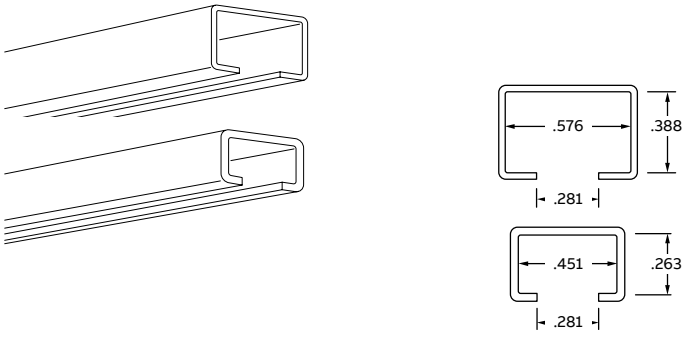
Cat. No.	Description	Weight (lbs/C)
6029-H	16 gauge (.060") ribbed channel with holes	30
6029	16 gauge (.060") ribbed channel	45



Channels are produced in 10 ft lengths. Pre-galvanized steel.

Lightweight channels

Cat. No.	Description	Weight (lbs/C)
6013	20 gauge (.034") lightweight channel	17
6014	18 gauge (.044") lightweight channel	16

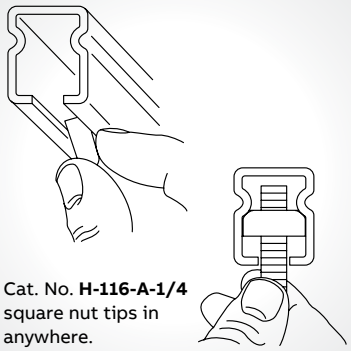


Channels are produced in 10 ft lengths. Pre-galvanized steel.

Bantam channels

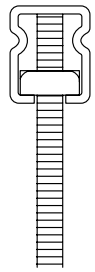
Low-cost techniques for fast, easy hanging with standard fittings

01



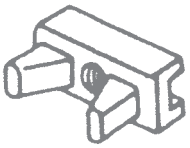
Cat. No. **H-116-A-1/4** square nut tips in anywhere.

02



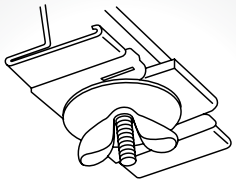
Cat. No. **H-193-1/4** hanger rod.

03



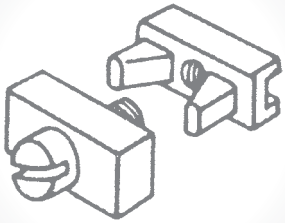
Cat. No. **6017**

04



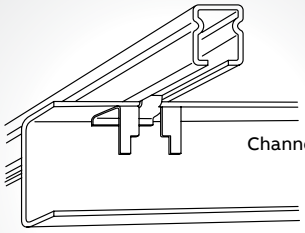
Cat. No. **6075**
Mounts electrical fixtures to exposed grid acoustical ceilings. Fits 1⁵⁄₁₆" or 1" bar face. Load Rating: 100 lbs. Safety factor of 4. Furnished complete with cupped washer and wing nut.

05



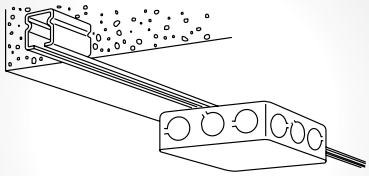
Cat. No. **6016**

06



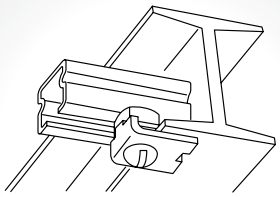
Cat. No. **6025**
Secures channel to lathers channel or other ceiling-carrying channels.

07



Cat. No. **6029**
Maximum recommended loads 200 lbs.

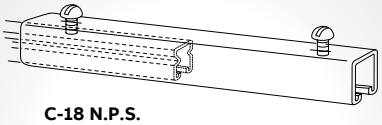
08



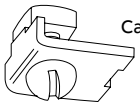
Cat. No. **6024**
Secures channel to I-beams, angle iron or bar joists with flanges not exceeding ¼" thickness.

09

Cat. No. **6026**



C-18 N.P.S.



Cat. No. **6015**

Fits over ends of ribbed channels for continuous runs.

01 Groove holds nut squarely – Nut won't rotate.

02 Insert rod full height of channel for rigidity.

03 Channel carrier 2 lbs/C

04 T-Bar clip.

05 Fastener and carrier, (complete assembly) 6 lbs/C.

06 Hung ceiling carrying channel

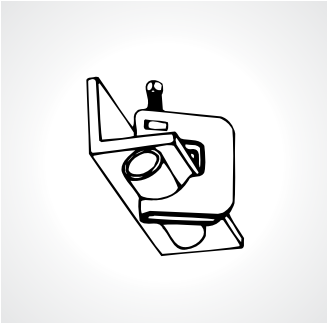
07 Bantam channel for low-cost, continuous-slot concrete inserts.

08 Beam flange clip.

09 Fixture stud and carrier, (complete assembly) 7 lbs/C.

Conduit, cable and pipe supports
C105 & C106 Series pipe straps

10



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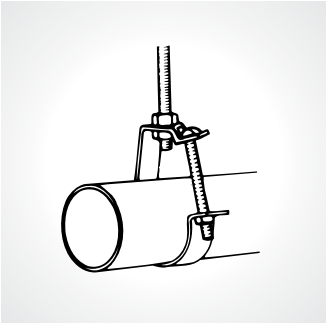

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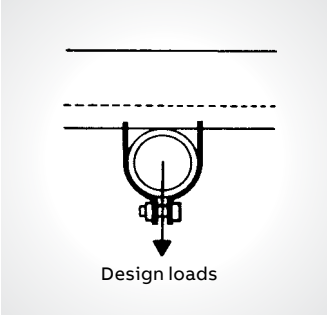

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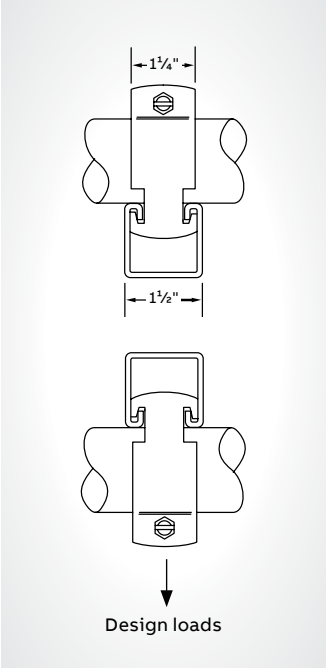

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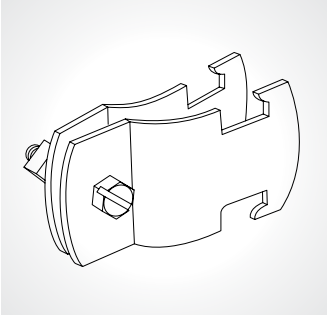


10 C-247 Beam clamp supports pipe.

11 Design Loads.

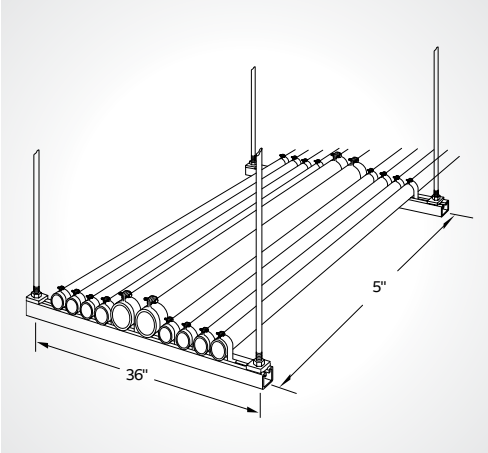
12 All Kindorf® Straps are pre-assembled for easy handling and sorting.

13 Pipe supported by C-149 lay-in hanger.

14 Design Load

15 Trapeze application supporting multiple conduit runs.

15



Kindorf® Pipe Straps are designed to be twist inserted anywhere along the slot side of the channel. Pipes can be placed as closely as pipe couplings permit.

Single or multiple runs of pipe and cable are secured easily and economically by Kindorf® supports. In the racking of multiple runs of pipe, for example, C-105 Straps are quickly twist inserted into a channel slot and the pipe is installed by the tightening of a single screw. There are no holes to drill and position adjustment is made simple by sliding the strap along the channel slot. Runs of pipe or conduit can be spaced with complete freedom, as close as conduit couplings permit.

For single runs, the C-149 Pipe Hanger saves installation time by allowing the conduit or pipe to be laid in place after the hanger is mounted. The versatile C-149 can be suspended from hanger rod or bolted directly to the wall, and pipe insulation, when needed, can be installed without removing the pipe from the hanger.

These are but two examples of how Kindorf® products deliver lower installed costs. Whether it be a problem of tight spacing, adjustment or alignment of adequate spacing between hangers, there's a Kindorf® support to solve it.

Kindorf® pipe and cable supports are engineered to provide safe and secure installations. The majority of Kindorf® supports are protected by the exclusive Galv-Krom® finish, including threaded components.

There's a wide range of Kindorf® pipe and cable supports to meet almost every job condition, installed either in combination with channel or individually secured to the structure surface.

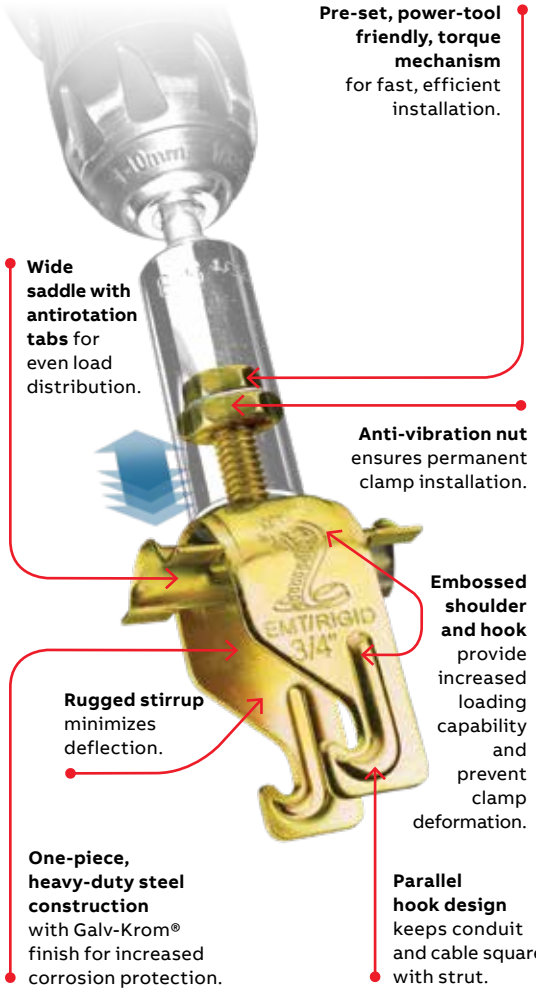
Some unique features of the straps include:

- Bolt head is combination slot and hexhead for flexibility of attachment
- Square nut is captivated on the shoulder for easy one-handed tightening
- Straps are interchangeable with 15/8" strut for broader application
- Straps are shipped assembled so counting and sorting are easier
- Pipe or conduit sizes are shown on the strap for easy identification

Conduit, cable and pipe supports

LOC-KING™ Cobra® One-piece cable and pipe clamp

See Table 1 below.



Pre-set, power-tool friendly, torque mechanism for fast, efficient installation.

Wide saddle with antirotation tabs for even load distribution.

Anti-vibration nut ensures permanent clamp installation.

Embossed shoulder and hook provide increased loading capability and prevent clamp deformation.

Rugged stirrup minimizes deflection.

One-piece, heavy-duty steel construction with Galv-Krom® finish for increased corrosion protection.

Parallel hook design keeps conduit and cable square with strut.

The new standard for heavy-duty applications. The LOC-KING™ Cobra® heavy-duty pipe and cable clamp adds two new design innovations to the heavy-duty features of the original King Cobra® clamp. First, a pre-set torque mechanism takes the guesswork out of installation, ensuring optimum torque and eliminating excess pressure on cables. Since the torque is pre-set, LOC-KING™ Cobra® clamps are ideally suited for use with power tools, making installation faster and more efficient than ever. Second, the incorporation of an anti-vibration nut means that once installed, LOC-KING™ Cobra® clamps remain securely installed, even in high-vibration environments.

Features

- Designed to be used on tray cable, Teck cable, metal-clad cable and armored cable
- Power-tool compatible for fast and efficient installation
- Pre-set torque mechanism takes the guesswork out of installation, delivering optimum torque even when using power tools
- Pre-set torque prevents over-tightening and excess pressure
- Anti-vibration nut ensures permanent installation, even in high-vibration environments
- Superior design load capabilities for heavy-duty applications: 350 lbs. for ½" to 2½" trade sizes; 450 lbs for 3" to 4" trade sizes

Table 1 - LOC-KING™ Cobra® One-piece

Cat. No.	For EMT and rigid conduit trade sizes	Cable O.D. range (in)	Arrow #1 Load rating* (lbs)	Arrow #2 Slip rating** (lbs)	Arrow #3 Pull rating** (lbs)	Quantity per box
LKCPC050	½	.650–.890	350	50	50	100
LKCPC075	¾	.860–1.110	350	50	50	100
LKCPC100	1	1.100–1.400	350	50	50	100
LKCPC125	1¼	1.400–1.725	350	50	50	50
LKCPC150	1½	1.690–1.980	350	50	50	50
LKCPC200	2	1.980–2.576	350	50	50	50
LKCPC250	2½	2.576–3.060	350	50	50	25
LKCPC300	3	3.060–3.626	350	50	50	25
LKCPC350	3½	3.626–4.126	350	50	50	25
LKCPC400	4	4.126–4.626	350	50	50	25

* Safety Factor of 4, ** Safety Factor of 1.

NOTE: When pre-set torque engages, lock-nut separates from bolt head and stops firmly against clamp body.

01 Position LOC-KING™ Cobra® clamp.

02 Using a power tool fitted with a ⅝" (16mm) socket, tighten lock nut.

03 ...until it 'blocks' and will no longer turn. Installation is complete.

Conduit, cable and pipe supports

King Cobra® Cable and pipe clamp with Galv-Krom® finish

* Compared to conventional electrogalvanization.

The new specification standard for heavy-duty industrial applications.

- Superior design load capabilities for industrial applications: 350 lbs for ½" to 2½" trade sizes; 450 lbs for 3" to 4" trade sizes
- Durable one-piece heavy-duty steel construction – designed specifically for use in industrial applications
- Embossed shoulder and hooks increase loading capability and durability, preventing deformation of clamps
- Rugged stirrup provides increased strength for heavier loads, minimizing deflection
- Wider saddle design with anti-rotation tabs distributes load evenly over a larger surface area, preventing jacket damage
- Increased corrosion protection* – Galv-Krom® (yellow zinc trivalent) finish stands up to harsh industrial applications
- Parallel hook design keeps conduit and cable square with strut
- Heavy-duty 5⁄16" hex bolt
- One clamp size works on equal trade sizes for both EMT and rigid conduit, simplifying clamp specification

King Cobra® Cable and pipe clamp with Galv-Krom® finish

Cat. No.	For EMT and rigid conduit trade size (in)	Cable O.D. range (in)	Static load limit (lbs) Safety factor = 4	Std. Ctn.
Galv-Krom® finish				
KCPC050	½	.650–.890	350	100
KCPC075	¾	.860–1.110	350	100
KCPC100	1	1.100–1.400	350	100
KCPC125	1¼	1.400–1.725	350	50
KCPC150	1½	1.690–1.980	350	50
KCPC200	2	1.980–2.576	350	50
KCPC250	2½	2.576–3.060	350	25
KCPC300	3	3.060–3.626	450	25
KCPC350	3½	3.626–4.126	450	25
KCPC400	4	4.126–4.626	450	25

Standard finish – Galv-Krom®

Conduit, cable and pipe supports

Cobra® One-piece cable and pipe clamp

The new specification standard for heavy-duty industrial applications.

- One-piece heavy-duty construction ready to install right out of the box, no need to break apart and reassemble, no screws or bolts to drop
- Installs quickly and securely using one hand
- Universal bolt head accepts a range of tools
- Eliminates the guesswork from clamp selection – one catalog number attaches equal trade sizes of EMT and rigid conduit
- Parallel hook design keeps conduits and cable square with strut
- Reconfigure wiring without complete disassembly. Remove cables easily without disturbing neighboring clamps

Cobra® One-piece cable and pipe clamp

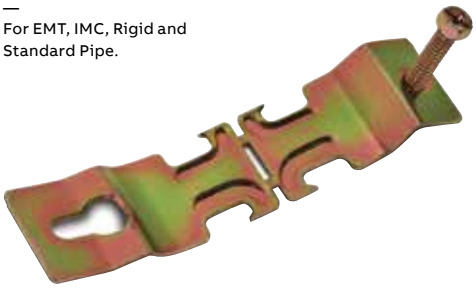
Cat. No.	For EMT and rigid conduit trade size (in)	Cable O.D. range (in)	Static load limit (lbs) Safety factor = 4	Std. Ctn.
EG Silver finish				
CPC025	¼	.312–.600	200	100
CPC050	½	.650–.890	200	100
CPC075	¾	.860–1.110	200	100
CPC100	1	1.100–1.400	200	100
CPC125	1¼	1.400–1.725	200	50
CPC150	1½	1.690–1.980	200	50
CPC200	2	1.980–2.576	200	50
CPC250	2½	2.576–3.060	350	25
CPC300	3	3.060–3.626	350	25
CPC350	3½	3.626–4.126	350	25
CPC400	4	4.126–4.626	350	25

Stainless steel: add suffix SS6.

Conduit, cable and pipe supports

Angler® pipe and conduit clamp

For EMT, IMC, Rigid and Standard Pipe.



Universal Series

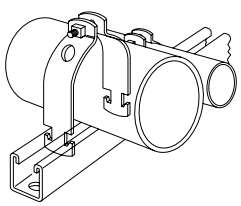
Cat. No.	Size (in)	Strap thickness (ga)	Design load (lbs)	Install torque (lbs/in)	Std. Ctn.
Galv-Krom® finish					
C 109 1/2	½	14	400	40	100
C 109 3/4	¾	14	500	40	100
C 109 1	1	14	500	40	100
C 109 1 1/4	1¼	14	500	40	100
C 109 1 1/2	1½	12	800	60	50
C 109 2	2	12	800	60	50
C 109 2 1/2	2½	12	800	60	50
C 109 3	3	12	800	60	50
C 109 3 1/2	3½	11	1,200	60	25
C 109 4	4	11	1,200	60	25
SilverGalv® finish					
C 109 1/2 EG	½	14	400	40	100
C 109 3/4 EG	¾	14	500	40	100
C 109 1 EG	1	14	500	40	100
C 109 1 1/4 EG	1¼	14	500	40	100
C 109 1 1/2 EG	1½	12	800	60	50
C 109 2 EG	2	12	800	60	50
C 109 2 1/2 EG	2½	12	800	60	50
C 109 3 EG	3	12	800	60	50
C 109 3 1/2 EG	3½	11	1,200	60	25
C 109 4 EG	4	11	1,200	60	25

Rigid Series

Cat. No.	Size (in)	Strap thickness (ga)	Design load (lbs)	Install torque (lbs/in)	Std. Ctn.
Galv-Krom® finish					
C 109R 1/2	½	14	600	40	100
C 109R 3/4	¾	14	600	40	100
C 109R 1	1	14	600	40	100
C 109R 1 1/4	1¼	14	600	40	100
C 109R 1 1/2	1½	12	800	60	50
C 109R 2	2	12	800	60	50
C 109 2 1/2	2½	12	800	60	50
C 109 3	3	12	800	60	50
C 109 3 1/2	3½	11	1,200	60	25
C 109 4	4	11	1,200	60	25
SilverGalv® finish					
C 109R 1/2 EG	½	14	600	40	100
C 109R 3/4 EG	¾	14	600	40	100
C 109R 1 EG	1	14	600	40	100
C 109R 1 1/4 EG	1¼	14	600	40	100
C 109R 1 1/2 EG	1½	12	800	60	50
C 109R 2 EG	2	12	800	60	50
C 109 2 1/2 EG	2½	12	800	60	50
C 109 3 EG	3	12	800	60	50
C 109 3 1/2 EG	3½	11	1,200	60	25
C 109 4 EG	4	11	1,200	60	25

Hex head size ⅜" for ½" to 1¼" sizes, ½" for 1½" to 4" sizes.
Material: Stamped Steel.
Pipe sizes 2½" to 4" utilize the same clamps for the Rigid Series and the Universal Series.
Available in SilverGalv® Finish by adding "EG" suffix to catalog number.

C-200 Universal pipe straps



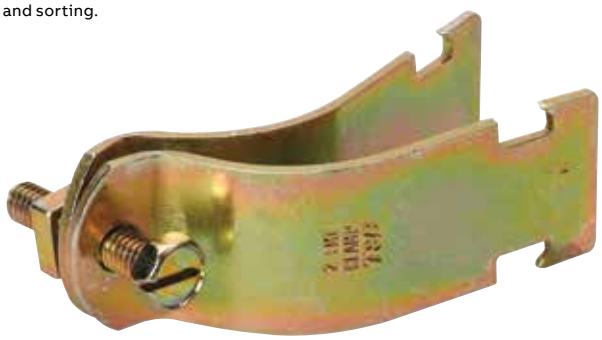
Cat. No.	EMT, IMC, rigid pipe size (in)	Pipe O.D. range (in)	Strap thickness (ga)	Weight (lbs/C)
C-200-1/2	½	.706–.804	14	12
C-200-3/4	¾	.922–1.060	14	13
C-200-1	1	1.163–1.315	14	14
C-200-1-1/4	1¼	1.508–1.660	14	16
C-200-1-1/2	1½	1.738–1.900	12	27
C-200-2	2	2.196–2.375	12	31

Design load equal to C-105 straps.

Conduit, cable and pipe supports

C-105 & C-106 Pipe straps

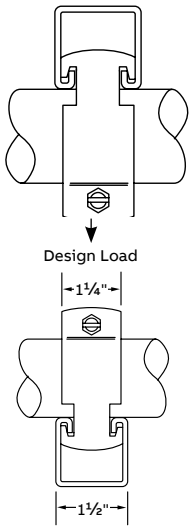
All Kindorf® straps are pre-assembled for easy handling and sorting.



Kindorf® Pipe Straps are designed to be twist inserted anywhere along the slot side of the channel. Pipes can be placed as closely as pipe couplings permit. Some unique features of the straps include:

- Bolt head is combination slot and hex head for flexibilityof attachment
- Square nut is captivated on the shoulder for easy one-handed tightening
- Straps are interchangeable with 1⅝" strut for broader application
- Straps are shipped assembled so counting and sorting are easier
- Pipe or conduit sizes are shown on the strap for easy identification

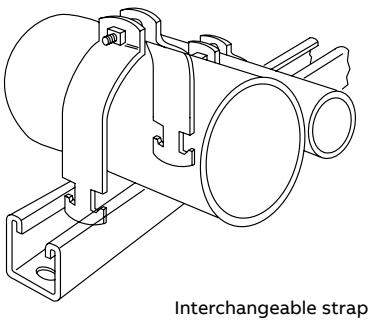
Kindorf® Straps for rigid conduit, IMC and pipe



Cat. No.	Rigid conduit or pipe size (in)	O.D. size (in)	Steel Straps – Galv-Krom® Finish: Steel strap thickness (ga)	Steel Straps – Galv-Krom® Finish: Design load (lbs)	Weight (lbs/C)
C-105-3/8	⅜	.675	14	750	12
C-105-1/2	½	.840	14	750	13
C-105-3/4	¾	1.050	14	750	15
C-105-1	1	1.315	14	750	17
C-105-1-1/4	1¼	1.660	14	800	19
C-105-1-1/2	1½	1.900	12	800	28
C-105-2	2	2.375	12	800	31
C-105-2-1/2	2½	2.875	12	1000	36
C-105-3	3	3.500	12	1650	42
C-105-3-1/2	3½	4.000	11	1650	56
C-105-4	4	4.500	11	1650	64
C-105-4-1/2	4½	5.000	11	1650	72
C-105-5	5	5.563	11	1650	76
C-105-6	6	6.625	11	1650	89
C-105-8	8	8.625	11	1650	114
C-105-10	10	10.750	10	1650	160
C-105-12	12	12.750	10	1650	165

Kindorf® Straps for EMT

Cat. No.	EMT size (in)	O.D. size (in)	Steel – Galv-Krom® Finish: Steel strap thickness (ga)	Steel – Galv-Krom® Finish: Design load (lbs)	Weight (lbs/C)
C-106-3/8	⅜	.577	14	750	13
C-106-1/2	½	.706	14	750	14
C-106-3/4	¾	.922	14	750	13
C-106-1	1	1.163	14	750	16
C-106-1-1/4	1¼	1.510	14	750	19
C-106-1-1/2	1½	1.740	12	800	20
C-106-2	2	2.197	12	800	22



Interchangeable strap fits both 1½" and 1⅝" channels.

Conduit, cable and pipe supports

Kindorf® Straps & C-708-U Short strap

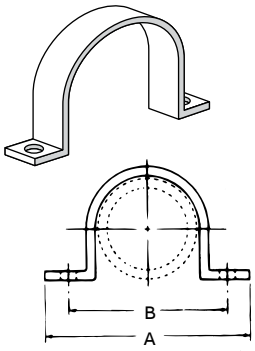
Kindorf® Straps for O.D. tubing

701-3/4

Cat. No.	Tubing O.D. (in)	Steel strap thickness (ga)	Design load (lbs)	Cat. No.	Tubing O.D. (in)	Steel strap thickness (ga)	Design load (lbs)	Cat. No.	Tubing O.D. (in)	Steel strap thickness (ga)	Design load (lbs)
Galv-Krom® finish				**Galv-Krom® finish**				**Galv-Krom® finish**			
701 1/4	¼	14	750	701-2-5/8	2⅝	12	1,300	701-5	5	11	1,650
701-3/8	⅜	14	750	701-2-3/4	2¾	12	1,300	701-5-1/8	5⅛	11	1,650
701-1/2-STR	½	14	750	701-2-7/8	2⅞	12	1,300	701-5-1/4	5¼	11	1,650
701-5/8	⅝	14	750	701-3	3	12	1,300	701-5-3/8	5⅜	11	1,650
701-3/4	¾	14	750	701-3-1/8	3⅛	12	1,300	701-5-1/2	5½	11	1,650
701-7/8	⅞	14	750	701-3-1/4	3¼	12	1,300	701-5-5/8	5⅝	10	1,650
701-1-STR	1	14	750	701-3-3/8	3⅜	12	1,300	701-5-3/4	5¾	10	1,650
701-1-1/8	1⅛	14	1,000	701-3-1/2	3½	12	1,300	701-5-7/8	5⅞	10	1,650
701-1-1/4	1¼	14	1,000	701-3-5/8	3⅝	11	1,650	701-6	6	10	1,650
701-1-3/8	1⅜	14	1,000	701-3-3/4	3¾	11	1,650	701-6-1/8	6⅛	10	1,650
701-1-1/2	1½	14	1,000	701-3-7/8	3⅞	11	1,650	701-6-1/4	6¼	10	1,650
701-1-5/8	1⅝	14	1,000	701-4	4	11	1,650	701-6-3/8	6⅜	10	1,650
701-1-3/4	1¾	12	1,000	701-4-1/8	4⅛	11	1,650	701-6-1/2	6½	10	1,650
701-1-7/8	1⅞	12	1,000	701-4-1/4	4¼	11	1,650	701-6-5/8	6⅝	10	1,650
701-2	2	12	1,000	701-4-3/8	4⅜	11	1,650	701-6-3/4	6¾	10	1,650
701-2-1/8	2⅛	12	1,300	701-4-1/2	4½	11	1,650	701-6-7/8	6⅞	10	1,650
701-2-1/4	2¼	12	1,300	701-4-5/8	4⅝	11	1,650	701-8	8	10	1,650
701-2-3/8	2⅜	12	1,300	701-4-3/4	4¾	11	1,650				
701-2-1/2	2½	12	1,300	701-4-7/8	4⅞	11	1,650				

For SilverGalv® Finish, add suffix EG.

C-708-U Short strap for channel or wall mounting



CAT. NO.	Pipe size (in)	Dimensions (in) A	Dimensions (in) B	Hole size (in)	Stock size (in)	Design load (lbs)
C708U 1/2	½	2⅞	2	9/32	⅛ x 1⅝	650
C-708-U-3/4	¾	3 1/16	2 3/16	9/32	⅛ x 1⅝	650
C-708-U-1	1	3⅜	2½	9/32	⅛ x 1⅝	650
C-708-U-1-1/4	1¼	3 11/16	2 3/16	9/32	⅛ x 1⅝	650
C-708-U-1-1/2	1½	3 15/16	3 1/16	9/32	⅛ x 1⅝	650
C-708-U-2	2	5¾	4⅛	7/16	¼ x 1⅝	650
C-708-U-2-1/2	2½	6 3/16	4 9/16	7/16	¼ x 1⅝	1,000
C-708-U-3	3	6 3/16	5 3/16	7/16	¼ x 1⅝	1,000
C-708-U-3-1/2	3½	7 5/16	5 11/16	7/16	¼ x 1⅝	1,000
C-708-U-4	4	7 13/16	6 3/16	7/16	¼ x 1⅝	1,200
C-708-U-5	5	8⅞	7¼	7/16	¼ x 1⅝	1,200
C-708-U-6	6	9 15/16	8 5/16	7/16	¼ x 1⅝	1,200

Conduit, cable and pipe supports

Ty-Rap® Cable clamp & two-hole pipe straps

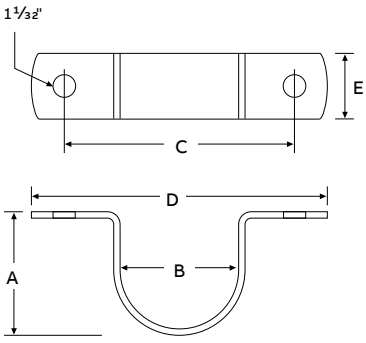
When fastening wire bundles, cables or hoses to framing channels, you can cut costs considerably by using the Ty-Rap® Cable Clamp. It is made of smooth, weather-resistant nylon and designed to protect cable insulation and hoses from wear or damage as can occur with metal clamps. The clamp may be used for both indoor or outdoor applications. It installs in the framing channel with a simple push and twist. It requires no screws, nuts or tools. The clamp fits all 1⅛" and 1⅝" channels regardless of channel depth

- Installs with a push and twist
- Designed for indoor or outdoor use
- Smooth design protects cable insulation
- Takes range of cable diameters

Ty-Rap® Cable clamp for framing channel

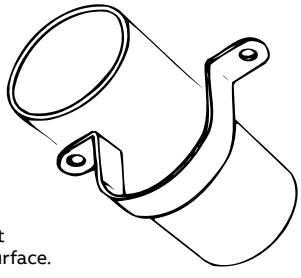
Cat. No.	Channel size	Maximum tie width accom.	Unit qty.	Std. Ctn.
TC5363X	1.5 & 1.625	.301	50	250

C-144 Two-hole pipe straps



Cat. No.	Dimensions (in) A & B	C	D	E	Wood screw size req'd.	Thickness steel	Weight (lbs/C)
C-144-1/2	.840	2	3	¾	No. 12 x 1	⅛	10
C-144-3/4	1.050	2¼	3¼	¾	No. 12 x 1	⅛	11
C-144-1	1.315	2½	3½	¾	No. 12 x 1	⅛	13
C-144-1-1/4	1.660	3¼	4¼	1	No. 12 x 1	⅛	20
C-144-1-1/2	1.900	3½	4½	1	No. 12 x 1	⅛	23
C-144-2	2.375	4¼	5¼	1	No. 16 x 1½	⅛	30
C-144-2-1/2	2.875	5	6	1	No. 16 x 1½	⅛	35
C-144-3	3.500	5¾	6¾	1	No. 16 x 2	⅛	42
C-144-3-1/2	4.000	6½	7½	1	No. 16 x 2½	3/16	69
C-144-4	4.500	7	8	1	No. 16 x 3	3/16	78

Standard finish Galv-Krom®.

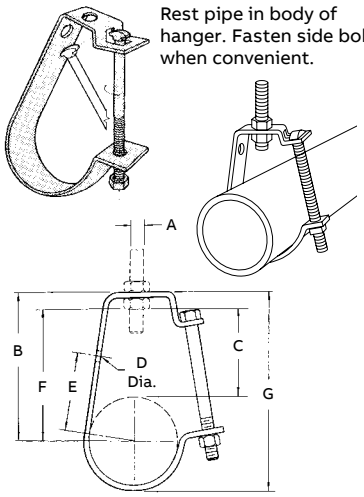


Holds pipe tight against mounting surface.

Conduit, cable and pipe supports

Lay-in-pipe & clevis hangers

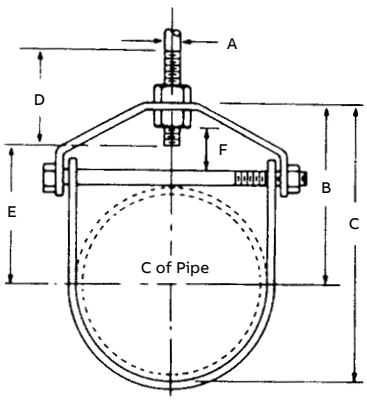
C-711 Lay-in-pipe hanger (J-Hanger)



Cat. No.	Pipe size (in)	A rod (in)	Dimensions (in) B	C	D	E	F	G	Bolt size (in)	Stock size	Max. rec. loads (lbs)
C-711-1/2	½	⅜	2⅝	1¾	7/16	1½	1 15/16	3 9/32	¼	12 Ga x ¾	400
C-711-3/4	¾	⅜	2⅞	1⅞	7/16	1 11/16	2⅛	3½	¼	12 Ga x ¾	400
C-711-1	1	⅜	2 15/16	1 15/16	7/16	1 13/16	2 5/16	3 11/16	¼	12 Ga x ¾	400
C-711-1-1/4	1¼	⅜	3¼	2	7/16	2 1/16	2⅝	4⅛	¼	12 Ga x ¾	400
C-711-1-1/2	1½	⅜	3 9/16	2 3/16	7/16	2 7/16	2⅞	4⅝	¼	12 Ga x ¾	400
C-711-2	2	⅜	3 11/16	2⅛	7/16	2 9/16	3 1/16	5	¼	12 Ga x ¾	400
C-711-2-1/2	2½	½	7 1/16	2 7/16	9/16	3 3/16	3⅝	6	⅜	12 Ga x 1¼	500
C-711-3	3	½	4 13/16	2 9/16	9/16	3½	4 1/16	6 21/32	⅜	12 Ga x 1¼	500
C-711-3-1/2	3½	½	5⅛	2⅝	9/16	3¾	4⅜	7 5/16	⅜	3/16 x 1¼	500
C-711-4	4	⅝	6⅛	3 3/16	9/16	4⅝	5 3/16	8 9/16	⅜	3/16 x 1¼	550
C-711-5	5	⅝	6¾	3¼	9/16	5 1/16	5⅜	9 23/32	⅜	3/16 x 1¼	550
C-711-6	6*	¾	7¾	3 9/16	9/16	5 13/16	6⅝	11¼	⅜	3/16 x 1¾	600
C-711-8	8*	⅞	9 3/16	3 15/16	9/16	6 15/16	8	13 11/16	⅜	3/16 x 1¾	760

Saves installation time by allowing the conduit or pipe to be laid in place after the hanger is mounted. Fastening of side bolt can be delayed until most convenient for job conditions. Insulation can be installed without removing pipe from hanger. The C-149 hanger can be suspended from hanger rod or can be bolted directly to a wall. When used with hanger rod, assembly requires two H-114 hex nuts. Vertical adjustment of at least 1 1/2" after pipe is laid in place. The lower nut adjusts pipe lines to the proper pitch and the top nut, when locked into position, prevents loosening due to vibration. The square nut on the side bolt is kept from loosening by the arrangement of hole and up-turned lip. * Hangers 6" and over have hole instead of slot.

C-710 Clevis hanger



Cat. No.	Pipe size (in)	Size of Steel (in) Upper	Lower	Dimensions (in) A	B	C	D	E	F	Max. rec. loads (lbs)
C710 1/2	½	⅛ x 1	⅛ x 1	⅜	1 1/16	2⅛	2½	⅞	7/16	610
C-710-3/4	¾	⅛ x 1	⅛ x 1	⅜	1⅞	2 7/16	2½	1	½	610
C-710-1	1	⅛ x 1	⅛ x 1	⅜	2⅛	2 13/16	2½	1¼	⅝	610
C-710-1-1/4	1¼	⅛ x 1	⅛ x 1	⅜	2 9/16	3 7/16	2½	1¾	⅞	610
C710-1-1/2	1½	⅛ x 1	⅛ x 1	⅜	3	4	2½	2⅛	1 1/16	610
C-710-2	2	⅛ x 1	⅛ x 1	⅜	3 11/16	4⅞	2½	2 15/16	1⅝	610
C-710-2-1/2	2½	⅜ x 1¼	3/16 x 1¼	½	4 11/16	6⅛	3	3 13/16	2	1,130
C-710-3	3	⅜ x 1¼	3/16 x 1¼	½	4¾	6 9/16	3	3⅞	1¾	1,130
C-710-3-1/2	3½	⅜ x 1¼	3/16 x 1¼	½	4 15/16	6 15/16	3	4 1/16	1¾	1,130
C-710-4	4	¼ x 1¼	3/16 x 1¼	⅝	5 9/16	7 13/16	3½	4½	1 15/16	1,130
C-710-5	5	¼ x 1¼	3/16 x 1¼	⅝	6 3/16	9	3½	5⅛	1¾	1,430
C-710-6	6	¼ x 1½	3/16 x 1½	¾	6 3/16	10⅛	4	5⅝	1⅞	1,430
C-710-7	7	¼ x 1¾	3/16 x 1¾	¾	8½	12⅛	4¼	6½	2¼	1,940
C-710-8	8	¼ x 1¾	3/16 x 1¾	⅞	8 5/16	12⅝	4¼	7	2⅛	1,940
C-710-10	10	⅜ x 1¾	¼ x 1¾	⅞	9⅞	15¼	4½	8⅜	2¼	1,940
C-710-12	12	⅜ x 2	¼ x 2	⅞	11 13/16	17 9/16	4¾	9¾	2⅝	3,600
C-710-14	14	½ x 2½	¼ x 2½	1	12 7/16	19 7/16	5¼	10 13/16	2 15/16	3,800
C-710-16	16	½ x 2½	¼ x 2½	1	15	23	6	12 7/16	2⅝	4,200
C-710-18	18	½ x 2½	¼ x 2½	1⅛	15¼	24¼	6½	13 15/16	3¾	4,600
C-710-20	20	⅝ x 3	⅜ x 3	1¼	16¾	26¾	7	13 15/16	4	4,800
C-710-24	24	⅝ x 3	⅜ x 3	1¼	19	31	7½	17½	4¼	4,800
C-710-30	30	¾ x 3	⅜ x 3	1¼	24⅛	39⅛	8¼	21⅞	5	6,000

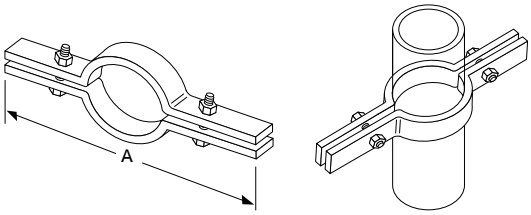
Order by Cat. No., finish and pipe size.

Conduit, cable and pipe supports

Clamps & supports

C-720 Riser clamps

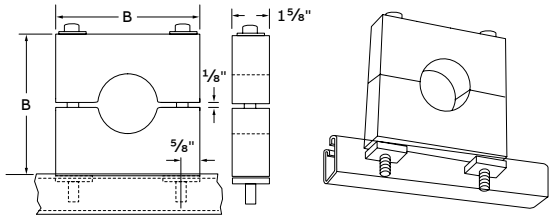
Cat. No.	Pipe Size (in)	A (in)	Stock size (in)	Bolt size (in)	Max. rec. load (lbs)
C720 1/2	½	9⅛	3/16 x 1	⅜ x 1½	220
C-720-3/4	¾	9¼	3/16 x 1	⅜ x 1½	220
C-720-1	1	9⅝	3/16 x 1	⅜ x 1½	220
C-720-1-1/4	1¼	9⅞	¼ x 1	⅜ x 1½	250
C-720-1-1/2	1½	10	¼ x 1	⅜ x 1½	250
C-720-2	2	10½	¼ x 1	⅜ x 1½	300
C-720-2-1/2	2½	11 1/16	¼ x 1	⅜ x 1½	400
C-720-3	3	11 13/16	¼ x 1	⅜ x 1½	500
C-720-3-1/2	3½	13	¼ x 1	½ x 1½	600
C-720-4	4	13½	¼ x 1	½ x 1½	750
C-720-5	5	14	¼ x 1½	½ x 1¾	1,500
C-720-6	6	15 3/16	¼ x 1½	½ x 1¾	1,600
C-720-8	8	19	⅜ x 1½	⅝ x 2½	2,500



Firmly grips vertically mounted pipe or conduit and distributes the load over a larger area.

C-750 Maple cable clamp

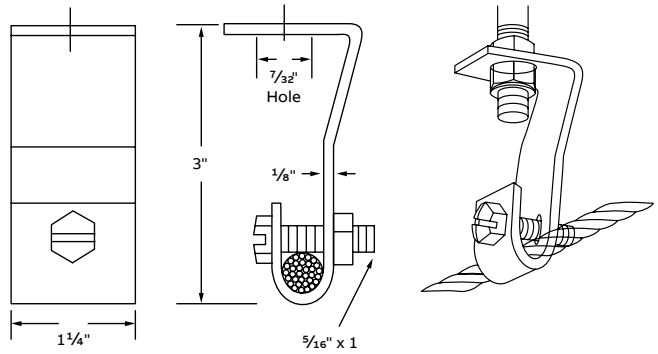
Cat. No. & size	O.D. of cable (In)	Dimensions A (in)	B (in)	Weight (lbs/C)
C-750-1	0–.99	4	3 ⅞	90
C750 2	1.0–1.49	4½	4⅜	100
C-750-3	1.5–1.99	5	4⅞	120
C-750-4	2–2.49	5½	5⅜	140
C-750-5	2.5–2.99	6	5⅞	160
C750 6	3–3.49	7	6⅞	200
C-750-7	3.5–3.99	8	7⅞	240
C-750-8	4–4.49	–	–	–
C-750-9	4.5–5.00	–	–	–



Maple blocks, impregnated with paraffin. ⅜" bolts with special nuts facilitate installation on B-900 channel. Size refers to overall dimensions of Maple Cable Clamp only. Hole will be bored to fit O.D. of cable. Orders MUST specify exact O.D. of cable. Special order.

C-708 Messenger cable support

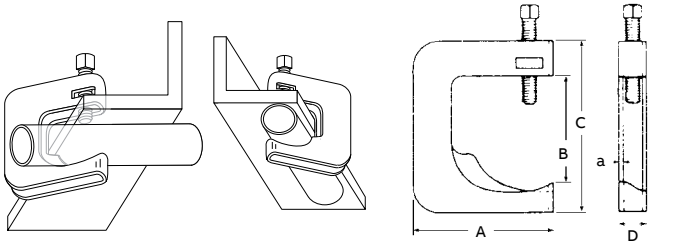
Cat. No.	Description
C-708	1/8" Steel, 27 lbs./C



Designed for use as intermediate supports for ⅜" messenger cable.
Grips cable when 5/16" screw is tightened. Provides easy vertical adjustment. Design load 1,000 lbs. Safety factor of 3.
Galv-Krom® finish.

C-247, C-248 & C-249 Steel conduit clamps

Conduit size	Maximum beam flange thickness (in) C-247	C-248	C-249
½	⅝	1	–
1¾	7/16	¾	1½
1	–	½	1¼
1¼	–	1	–
1½	–	–	⅝
Dim A	2¼	2 9/16	3¼
Dim B	1⅜	1¾	2½
Dim C	2¾	3	4
Dim D	9/16	9/16	⅝
Per Carton	100	50	50
Wt. in lbs./C	33	36	59



A versatile clamp for attaching conduit to any type of beam, channel, angle or column. Designed to hold the conduit snug against the support with conduit either parallel or at right angle to it. The case-hardened set screw bites into the structural member for maximum security. 1/8" steel. Galv-Krom® Finish.

Conduit, cable and pipe supports

Kindorf® TPE Cable insulator clamps

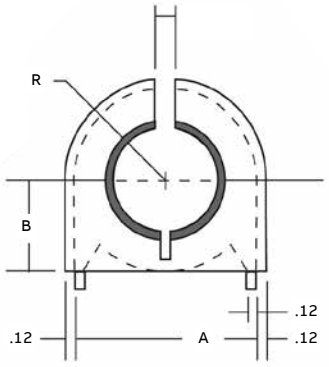
Kindorf® TPE Cable insulator clamps offer a less expensive, lighter weight and non-breakable alternative to porcelain for cable support, and they won't rot like maple clamps. The one-piece thermoplastic elastomer (TPE) insulator is flame-retardant, UV-resistant and chemical-resistant. A tapered flange isolates and protects cable. Available sizes accommodate cables from ⅜" to 4½" O.D. and fit all Kindorf® channels as well as all 1⅝" channel systems.

- Tapered flange isolates and protects cable
- Flame retardant
- UV resistant
- Exceptional chemical resistance
- Ideal for commercial and industrial applications
- Thermoplastic elastomer (TPE) insulator
- Electro-galvanized finish steel clamp with
- Everdur nut and bolt
- Dielectric strength of 640V per mil
- Sizes to hold cables ⅜" to 4½" O.D.
- Fits all channel sizes
- UL® Listed

Universal Series

Cat. No.	Hole Dia. (in)	Clamp Size (in)	Dim. A (in)	Dim. B&R (in)	Total height (in)
C755 1ATP	⅜	1⅛	1.12	.56	1.82
C-755-1B-TP	½	1⅛	1.12	.56	1.82
C-755-1C-TP	⅝	1⅛	1.12	.56	1.82
C-755-2 TP	¾	1⅝	1.62	.81	2.34
C-755-2A-TP	⅞	1⅝	1.62	.81	2.34
C-755-2B-TP	1	1⅝	1.62	.81	2.34
C-755-2C-TP	1⅛	1⅝	1.62	.81	2.34
C-755-3-TP	1¼	2⅛	2.12	1.06	2.86
C-755-3A-TP	1⅜	2⅛	2.12	1.06	2.86
C-755-3B-TP	1½	2⅛	2.12	1.06	2.86
C-755-3C-TP	1⅝	2⅛	2.12	1.06	2.86
C-755-4-TP	1¾	2⅝	2.62	1.31	3.5
C-755-4A-TP	1⅞	2⅝	2.62	1.31	3.5
C-755-4B-TP	2	2⅝	2.62	1.31	3.5
C-755-4C-TP	2⅛	2⅝	2.62	1.31	3.5
C-755-8F-TP	4½	5	5	2.5	5.92
C-755-5-TP	2¼	3⅛	3.12	1.56	4.05
C-755-5A-TP	2⅜	3⅛	3.12	1.56	4.05
C-755-5B-TP	2½	3⅛	3.12	1.56	4.05
C-755-5C-TP	2⅝	3⅛	3.12	1.56	4.05
C-755-6-TP	2¾	3⅝	3.62	1.81	4.75
C-755-6A-TP	2⅞	3⅝	3.62	1.81	4.75
C-755-6B-TP	3	3⅝	3.62	1.81	4.75
C-755-6C-TP	3⅛	3⅝	3.62	1.81	4.75

Cat. No.	Hole Dia. (in)	Clamp Size (in)	Dim. A (in)	Dim. B&R (in)	Total height (in)
C-755-7 TP	3¼	4⅛	4.12	2.06	5.125
C-755-7A-TP	3⅜	4⅛	4.12	2.06	5.125
C-755-7B-TP	3½	4⅛	4.12	2.06	5.125
C-755-7C-TP	3⅝	4⅛	4.12	2.06	5.125
C-755-8-TP	3¾	4⅝	4.62	2.31	5.54
C-755-8A-TP	3⅞	4⅝	4.62	2.31	5.54
C-755-8B-TP	4	4⅝	4.62	2.31	5.54
C-755-8C-TP	4⅛	4⅝	4.62	2.31	5.54
C-755-8D-TP	4¼	5	5	2.5	5.92
C-755-8E-TP	4⅜	5	5	2.5	5.92
C-755-8F-TP	4½	5	5	2.5	5.92

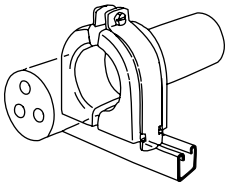


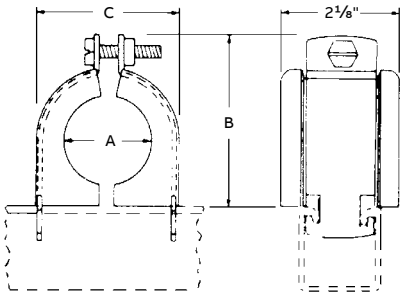
Conduit, cable and pipe supports

Porcelain insulator clamps & saddles

C-755 Porcelain insulator clamp

Cat. No.	Dimensions (in) A	B	C	Strap C-105 (in)	Weight (lbs/C)
C-755-1A	3/8	2 1/16	1 9/16	1	50
C-755-1B	1/2	2 1/16	1 9/16	1	50
C-755-1C	5/8	2 1/16	1 9/16	1	50
C-755-2	3/4	2 21/32	2 5/32	1 1/2	91
C-755-2A	7/8	2 21/32	2 5/32	1 1/2	90
C-755-2B	1	2 21/32	2 5/32	1/2	85
C-755-2C	1 1/8	2 21/32	2 5/32	1 1/2	82
C-755-3	1 1/4	3 1/8	2 5/8	2	114
C-755-3A	1 3/8	3 1/8	2 3/8	2	110
C-755-3B	1 1/2	3 1/8	2 5/8	2	105
C-755-3C	1 5/8	3 1/8	2 5/8	2	102
C-755-4	1 3/4	4 1/4	3 3/4	3	220
C-755-4A	1 7/8	4 1/4	3 3/4	3	214
C-755-4B	2	4 1/4	3 3/4	3	205
C-755-4C	2 1/8	4 1/4	3 3/4	3	200
C-755-5	2 1/4	4 3/4	4 1/4	3 1/2	260
C-755-5A	2 3/8	4 3/4	4 1/4	3 1/2	250
C-755-5B	2 1/2	4 3/4	4 1/4	3 1/2	243
C-755-5C	2 5/8	4 3/4	4 1/4	3 1/2	240
C-755-6	2 3/4	5 1/4	4 3/4	4	250
C-755-6A	2 7/8	5 1/4	4 3/4	4	240
C-755-6B	3	5 1/4	4 3/4	4	230
C-755-6C	3 1/8	5 1/4	4 3/4	4	220
C-755-7	3 1/4	6 5/16	5 13/16	5	340
C-755-7A	3 3/8	6 5/16	5 13/16	5	330
C-755-7B	3 1/2	6 5/16	5 13/16	5	318
C-755-7C	3 5/8	6 5/16	5 13/16	5	387
C-755-8	3 3/4	7 3/8	6 7/8	6	565
C-755-8A	3 7/8	7 3/8	6 7/8	6	550
C-755-8B	4	7 3/8	6 7/8	6	535
C-755-8C	4 1/8	7 3/8	6 7/8	6	520
C-755-8D	4 1/4	7 3/8	6 7/8	6	490
C-755-8E	4 3/8	7 3/8	6 7/8	6	475
C-755-8F	4 1/2	7 3/8	6 7/8	6	460



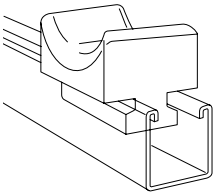


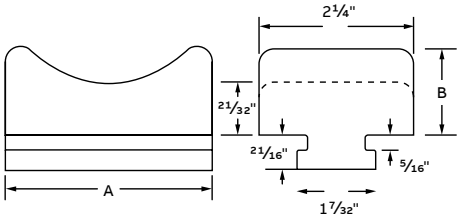
* Also available in thermoplastic, order as C775-TP. Dry-process white-glaze porcelain insulators assembled in pairs to accept cables from 3/8" through 4 1/2" O.D. C-105 clamp with bronze slotted hex head screw and nut furnished. Fits all Kindorf® channels.

- White-glaze dry-process porcelain cable rack insulator
- Fits all sizes of B-900 series channel including B-906

C-756-1 Porcelain saddle / C-756-2 Porcelain saddle

Cat. No.	Dimensions (in) A	B
C-756-1	3	13/16
C-756-2	4	17/32



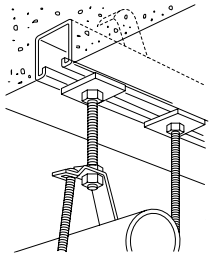


C-756-1 is for cables up to 3" O.D. Weight 72 lbs/C.
C-756-2 for cables up to 5" O.D. Weight 102 lbs/C.

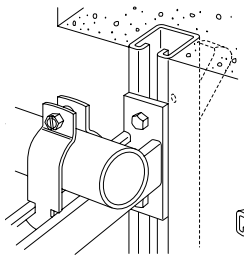
Concrete inserts

Continuous-slot channel inserts

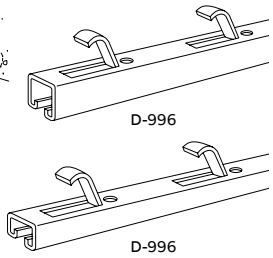
Cat. No.	Type Anchor	Cross-Section	Load rating (lbs/ft)*
D-990	Punched	1½ x 1½ x 12 ga	2,000
D-996	Punched	1½ x ¾ x 14 ga	1,500



Pipe section hangs from D-990 concrete insert.



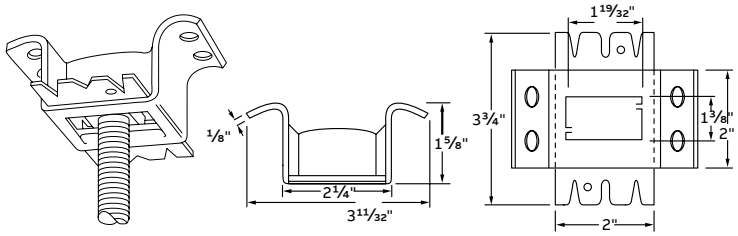
D-990 concrete insert supports conduit installation.



* Safety factor of 3. Based on uniformly distributed load.
* Standard lengths 10 and 20 feet.
* Special lengths available on request.

D-255 Concrete inserts

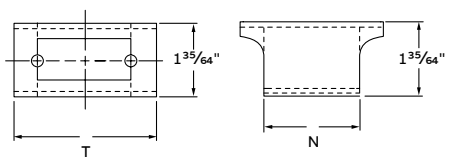
Cat. No.	Description
D-255	For ¼" through ⅞" Hanger Rod – ¼" – ½" Pipe

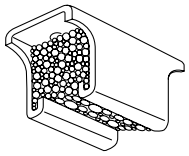


An insert with a knockout saves covering the slot or covering the opening. Load rating at 1,300 lbs. with a safety factor of 3. Accommodates hanger rod sizes from ¼" through ⅞" by means of a B-914 insert nut. ⅛" steel. 52 lbs/C. Standard finish: Galv-Krom®.

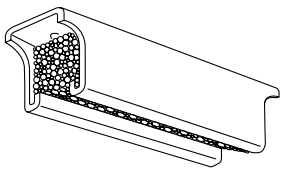
D-256-2 and D-256-5 Concrete insert

Cat. No.	N (in)	T (in)	Weight (lbs/C)
D-256-2	2	3	34
D-256-5	5	6	76





D-256-2



D-256-5

This unique product reduces the "spot" concrete insert to its simplest possible components with all the adjustability of the most expensive. Its features include: two sizes – 2" and 5" adjustability, takes standard insert nuts, uses hanger rod sizes 1/4" through 5/8" and has a load rating up to 1,000 lbs. and a safety factor of 3 (hanger rod permitting). Standard finish: Galv-Krom®.

Buildings designed with concrete inserts as an integral part of the ceiling or wall construction realize many economies, both in initial construction and when updating of the mechanical and electrical system is required. The initial economies of construction stem from the ease with which pipe, air conditioning, lighting and other fixtures can be attached to ceilings or walls.Inserted by casting into the structure, Kindorf® continuous-slot channels will accept all the assembly parts and fittings of the Kindorf® system. This provides virtually limitless structural arrangements – present and future. Hanger attachments are made by the standard Kindorf® procedure of simply inserting a standard channel nut which can be pre-started on the hanger rod or bolt. Placement or adjustment of attachments can be made in infinite increments at any time along the length of the concrete insert. Future flexibility means economies in terms of future changes in equipment or its placement.

Initial installation of Continuous-Slot Channel Inserts offers:

- An immediate savings in time and labor by eliminating the need for precise calculation and measurement, both in layout planning and actual installation of attachment devices
- Additional savings in time and labor because changes or additions can be made readily to the existing channel at any time; the need for costly drilling in concrete and other costly procedures can be eliminated

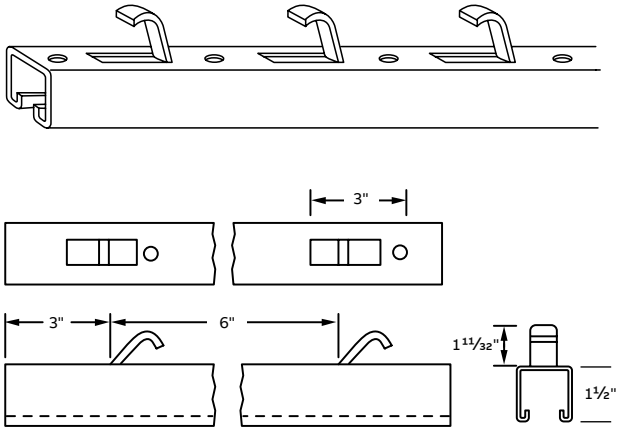
Companion to the channel inserts is the spot-type insert for use where a single hanger is required at a specific location.

Concrete inserts

Concrete inserts & end caps

D-990 Continuous-slot concrete insert

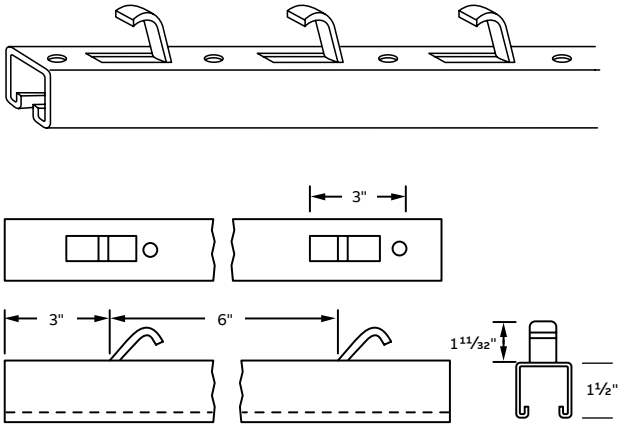
Cat. No.	Description
D-990	Continuous slot and concrete insert



Insert is made of B-900 channel (12 ga) with anchors punched out of insert on 6" centers. Polystyrene filled. Use B-910 or B-914 steel nuts for assembly. Load rating 2,000 lbs. per foot with a safety factor of 3. Available in 10 and 20 ft lengths. Galv-Krom® finish.

D-996 Continuous-slot concrete insert

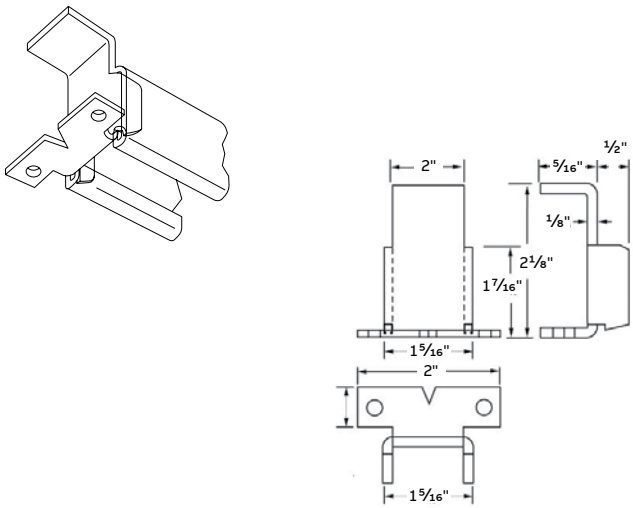
Cat. No.	Description
D-996	Continuous slot and concrete insert



Insert is made of B-900 channel (14 ga) with anchors punched out of insert on 6" centers. Use B-910 or B-914 steel nuts for assembly. Load rating 1,500 lbs. per foot with a safety factor of 3. Available in 10 and 20 ft lengths. Galv-Krom® finish.

D-982 Anchor end cap

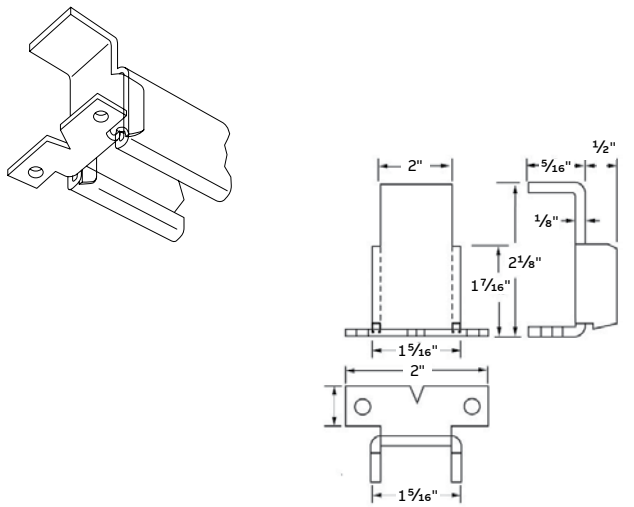
Cat. No.	Description
D-982	Anchor end cap



For capping the ends of D-990 continuous-slot concrete inserts. May be used on the job to make up inserts of less than 1 ft lengths of B-900 channel. Load rating of such an insert less than 1 ft long is 1,000 lbs. with a safety factor of 3. ⅛" steel. 19 lbs/C. Galv-Krom® finish.

D-988 Anchor end cap

Cat. No.	Description
D-988	Anchor end cap



For capping the ends of D-996 continuous-slot concrete inserts. May be used on the job to make up inserts of less than 1 ft lengths of B-906 channel. Load rating of each insert less than 1 ft long is 600 lbs. with a safety factor of 3. ⅛" steel. 13 lbs/C. Galv-Krom® finish.

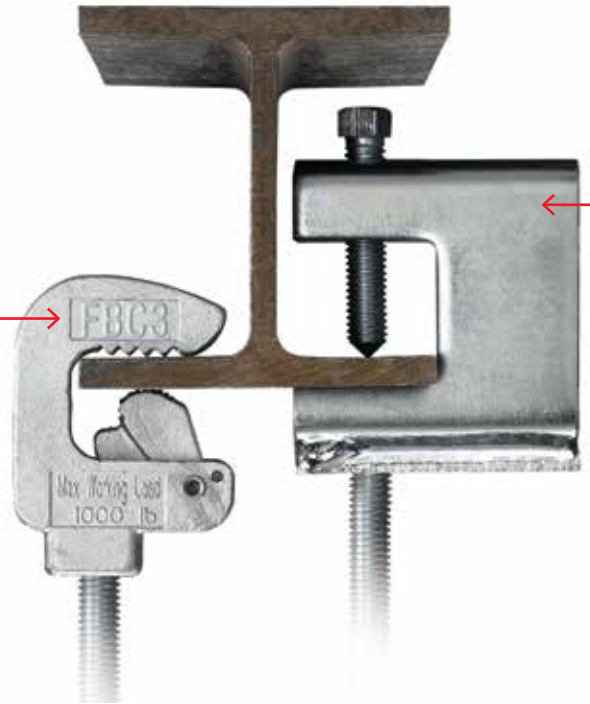
Beam clamps and hanger rod supports

Kindorf® Fast set beam clamps

It can't get much easier than the new Kindorf® Fast Set Beam Clamp. Simply slide the clamp onto the I-beam flange, and it will remain firmly fixed while you install the threaded rod. When tightened, the threaded rod locks the tongue of the clamp against the I-beam for a fast installation and a superior hold.

Ty-Rap® Cable clamp for framing channel

Cat. No.	Description	Load rating (lbs)	Rod size	Std. pkg. qty.
FBC-1	Fast set beam clamp	250	¼" – 20	25
FBC-2	Fast set beam clamp	600	⅜" – 16	25
FBC-3	Fast set beam clamp	1,000	½" – 13	10

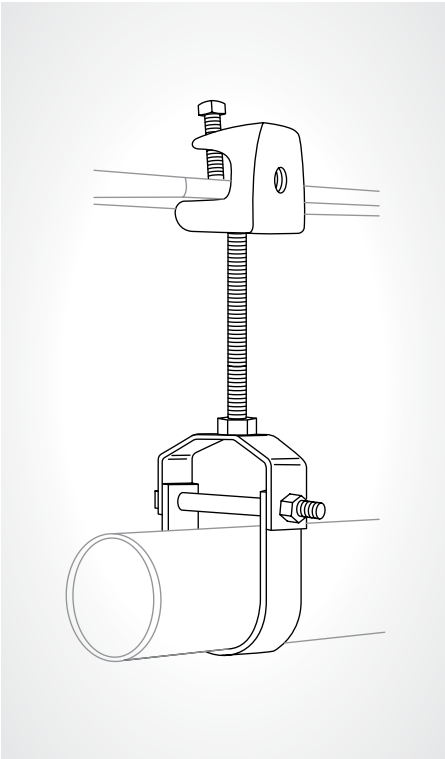


NEW WAY – Kindorf® Fast set beam clamp
- Tool-less attachment to the I-beam
- Threaded rod secures the clamp, eliminating an entire step in the process

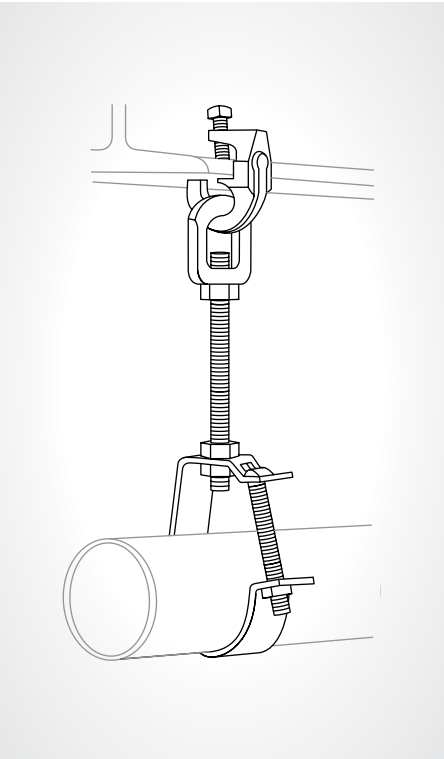
OLD WAY – Kindorf® Standard beam clamp
- The clamp must be held in
- place while tightening the set screw
- The set screw is difficult to access within the I-beam web

Beam clamps and hanger rod supports

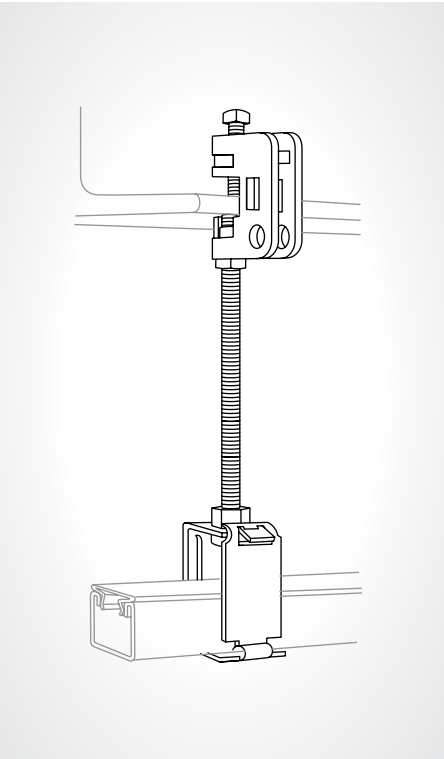
Kindorf® Beam clamps



01



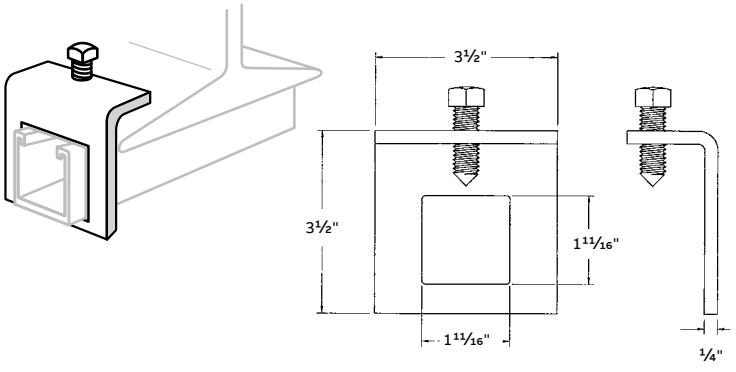
02



03

E-761 Channel to beam clamp

Cat. No.	Design load (lbs./EA)	Channel series	Weight (lbs/C)
E-761	800	B-900, B-905, B-995	108



Kindorf® devices for hanging the load can deliver lower installation costs. Hanger rod and conduit pipe supports are attached to ceilings or to other structural members such as beams, columns or purlins, without drilling, welding or fastening by means of power-actuated tools. A full selection of beam clamps and hanger rod supports are offered to meet a wide variety of needs.

The flexibility of the Kindorf® Series of clamps affords a range of applications, from simple attachment of channel to the suspending of supports from sloping, as well as horizontal, beams.

Where high vibrations are expected, additional support can be attained by gripping the beam on both sides.

01 **500 Series beam clamp**
Supports pipe with C-710 clevis hanger.

02 **H-550 Swivel beam clamp**
Supports pipe with C-711 hanger.

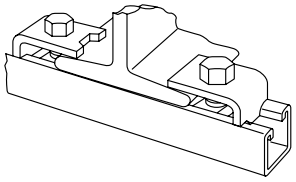
03 **E-231 Beam clamp**
Supports channel raceway with G-1012 lay-in-hanger.

Beam clamps and hanger rod supports

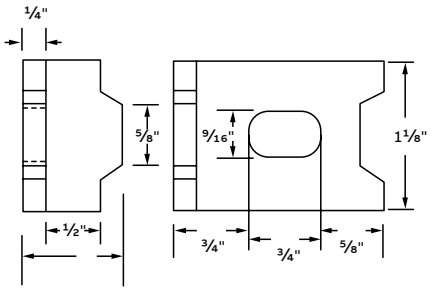
Channel to beam clamp, channel support & channel hangers

E-763 Channel to beam clamp

Cat. No.	Design load (lbs/EA)	Weight (lbs/C)
E-763	500	25



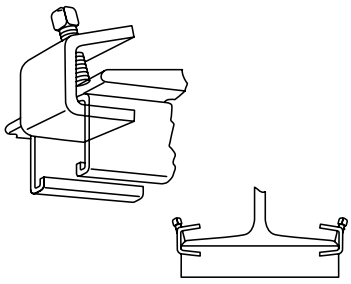
Secures all sizes of Kindorf® channel to beams where flange edge does not exceed .8" thickness.



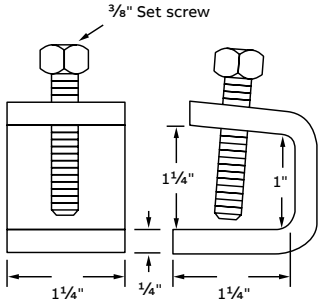
Load rating each clamp 800 lbs. with a safety factor of 3. Assembly requires one H-113-E bolt and one B-910-½ steel nut per clamp – order separately.
¼" steel. Galv-Krom® finish.

E-767 Channel support

Cat. No.	Design load (lbs/EA)	Weight (lbs/C)
E-767	800	44



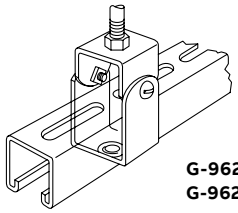
Supports any size Kindorf® channel. Clamps to I-beam where flange edge does not exceed .8" thickness.



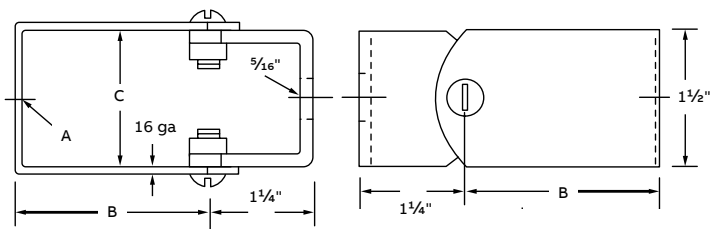
Load rating each clamp 800 lbs. with a safety factor of 3.
¼" steel. Galv-Krom® finish.

G-962 and G-962-D Channel hangers

Cat. No.	Weight (lbs/C)	Hanger size (in)	Dim. A (in)
G-962-D-1	47	¼ and ⅜ rod	13⁄32
G-962-D-2	47	½ rod and ¼ pipe	9⁄16
G-962-D-3	47	⅜ pipe and ⅝ rod	11⁄16
G-962-D-4**	47	½ pipe	⅞



G-962 fits around 1½" or 1⅞" deep channel, **G-962-D** series hangers for 3" deep channel.



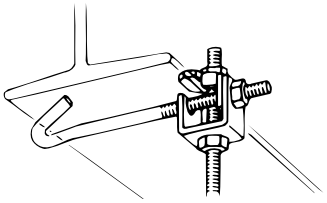
** Load rating of 700 lbs. with a safety factor of 3. "B" dimension for G-962: 21⁄2"; for G-962-D: 4". UL® Listed for raceway. "C" dimension for G-962, 137⁄64", for G-962-D, 37⁄64".
Galv-Krom® finish.

Beam clamps and hanger rod supports

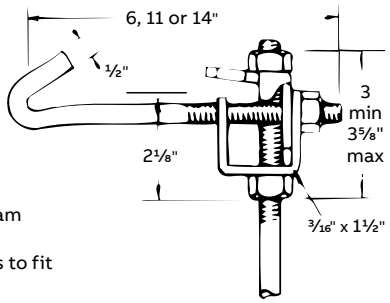
Adjustable beam clamp, swinging hanger & channel clamp

E-160 Adjustable beam clamp (½" Rod)

Cat. No. for ½" Hanger	For beam flange width (in)	Weight (lbs/C)
E-160-1/2-6	2½ to 6	115
E-160-1/2-9	5½ to 9	125
E-160-1/2-12	8½ to 12	154



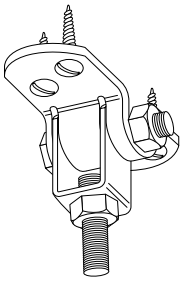
Clamps to I-beams where edge of beam flange does not exceed .8" thickness
Hook rod is furnished in three lengths to fit beam flanges up to 6, 9 or 12" widths.



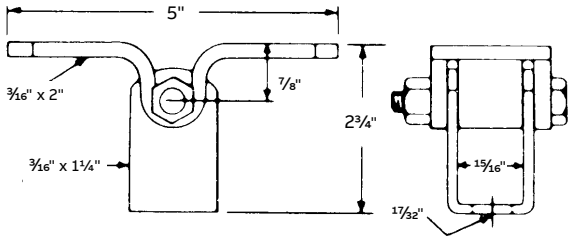
Load rating of 800 lbs. with a safety factor of 3. Assembly requires hanger rod of the proper length and size plus two H-114-D nuts. 3/16" steel, ½" hook rod. Galv-Krom® finish.

U577 Adjustable swinging hanger flange (⅜" or ½" Rod)

Cat. No.	Weight (lbs/C)
U577	100



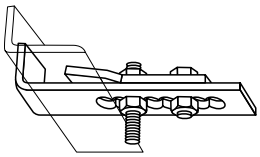
Flange has 13/32" holes for connection to ceiling.



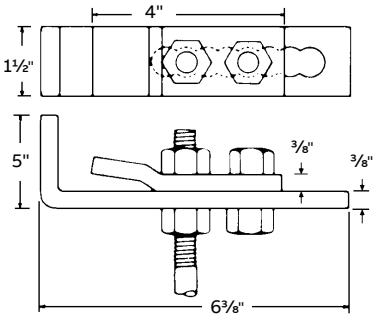
Assembly requires ⅜" or ½" hanger rod of proper length plus two H-114-C or H-114-D nuts. 3/16" steel. Flange has 13/32" diameter holes for connection to ceiling. Galv-Krom® finish.

E-177 Adjustable channel clamp (½" Rod)

Cat. No.	Weight (lbs/C)
E-177	183



Adjustable to fit all structural channels up to a maximum flange width of 3¼", and all structural angles with leg up to 3" long and not more than ⅜" thick.



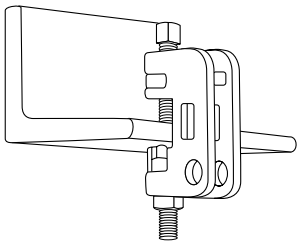
Load rating is 800 lbs. with a safety factor of 3. Assembly requires ½" hanger rod of the proper length plus two H-114-D nuts. ⅜" steel. Galv-Krom® finish.

Beam clamps and hanger rod supports

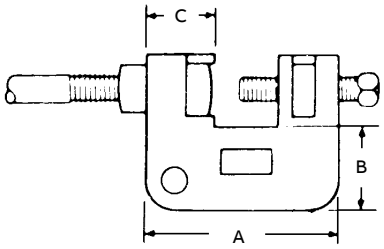
Structural steel clamp, swing connector clamp & anchor clip

E-231 Structural steel clamp (⅜" or ½" Rod)

Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)	Design load (lbs)
E-231-3/8*	2½	1	⅞	31	25
E-231-1/2**	3	2 9/32	1 5/16	53	15



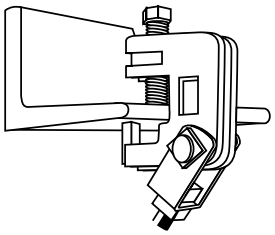
Clamps to I-beams, channels, angles and columns. Two sizes are available, one for ⅜" and the other for ½" hanger rod. Each takes flanges up to .8".



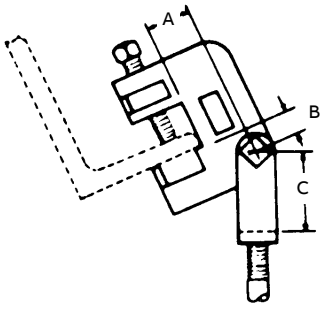
Assembly requires two H-116-C (⅜") or two H-116-D (½") square nuts to attach hanger rod. ⅛" steel.
* Load rating of 500 lbs. with a safety factor of 3. ** Load rating of 800 lbs. with a safety factor of 3. Galv-Krom® finish.

E-232 Clamp with swing connector (⅜" or ½" Rod)

Cat. No.	Diameter for rod (in)	Dimensions (in) A	B	C	Weight (lbs/C)	Design load (lbs)
E-232-3/8*	⅜	9/16	7/16	1	48	25
E-232-1/2**	½	⅞	29/64	1⅝	76	15



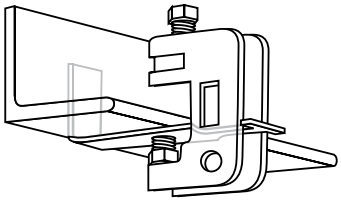
E-232 clamp with swing connector affords a convenient method of attaching to angled beams.



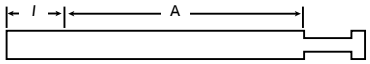
* Load rating of 400 lbs. with a safety factor of 3. ** Load rating of 550 lbs. with a safety factor of 3.
Galv-Krom® finish.

E-233 Anchor clip

Cat. No.	Rod size (in)	Max. beam width "A"	For use with	Weight (lbs/C)
E-233-3/8-6	⅜	6	E-231-3/8	20
E-233-3/8-10	⅜	10	E-232-3/8	33
E-233-1/2-6	½	6	E-231-1/2	26
E-233-1/2-10	½	10	E-232-1/2	37



For use with E-231 and E-232 clamps when hanger rod is not in straight through position.



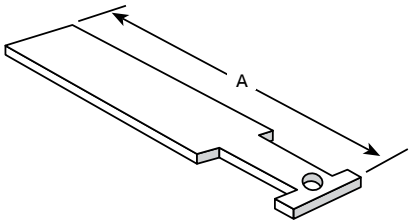
Anchor clips should be used when clamps are subject to excessive vibration. To obtain the correct size clips, add 1" to the flange width.
If length required is not standard, order next largest standard length. Galv-Krom® finish.

Beam clamps and hanger rod supports

Beam clamps

U-568 Beam clamps

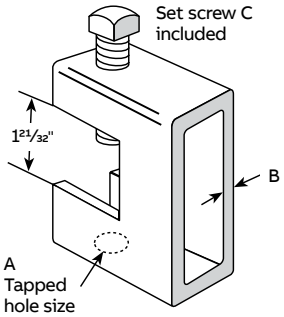
Cat. No.	Beam flange width (in)	Dimension A (in)	Std. ctn.
U-568-6	6	9	25
U-568-8	12	15	25



16 ga. material.

E-235 Heavy-duty beam clamp

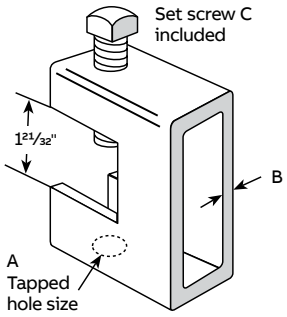
Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)	Design load (lbs)
E-235-3/8-HD	3/8	1/8	3/8 x 2 3/4	109	1,300
E-235-1/2-HD	1/2	1/4	1/2 x 2 3/4	201	3,150



Finish: Hot-dipped galvanized.

U-564 Heavy-duty beam clamp

Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)	Design load (lbs)
U-564-3/8	3/8	1/4	3/8 x 2 3/4	1,300	25
U-564-1/2	1/2	1/4	1/2 x 2 3/4	3,150	15



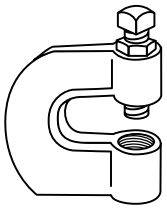
Finish: Hot-dipped galvanized.

Beam clamps and hanger rod supports

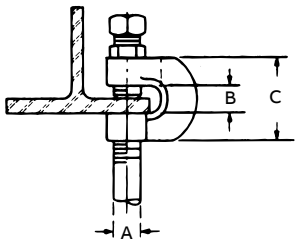
Clamps with locknuts & beam clamps for hanging rods

M-775L Clamp with lock nut

Cat. No.	Rod size (in) A	B	C	Design load (lbs)	Std. ctn. (lbs)
M-775L-1/2	½	¾	2	440	50
M-775L-5/8	⅝	¾	2	440	50
M-775L-3/4	¾	¾	2	500	50



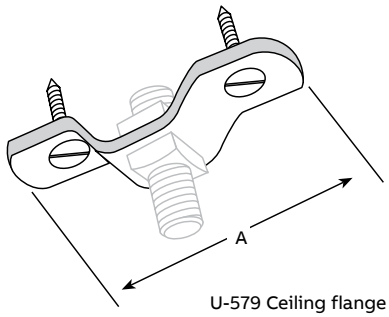
M-775L



Standard Finishes - GoldGalv® brand or Black (B) Malleable Iron.
EG = Electro-Galv, B = Black.

U-579 Beam clamp for hanging rod

Cat. No.	A (in)	Std. ctn.
U579-3/8	3½	25
U-579-1/2	4¼	25

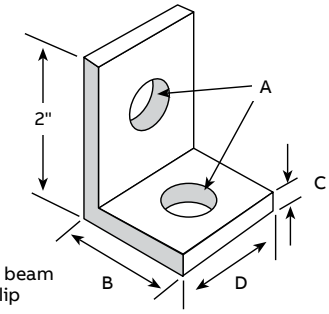


U-579 Ceiling flange

Nuts and wood screws not included. Mounting holes ¹³⁄₃₂".
Finishes - GoldGalv® brand Malleable Iron.

540 Beam clamp for hanging rod

Cat. No.	Dimensions (in) A	B	C	D	Std. ctn. (lbs)
540-3/8	⅛	1⅞	¼	⅞	25
540-5/8	¹¹⁄₁₆	2½	⅜	2	25



540 Side beam hanger clip

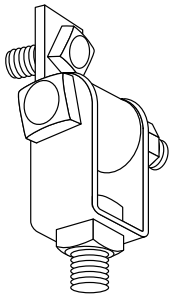
Finishes - GoldGalv® brand or Black (B).

Beam clamps and hanger rod supports

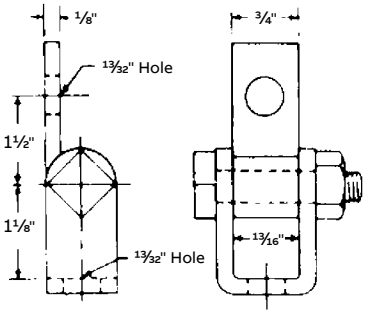
Swing connector & channel to beam clamps

S5413/8 Swing connector (⅜" Rod)

Cat. No.	Weight (lbs/C)
S5413/8	28



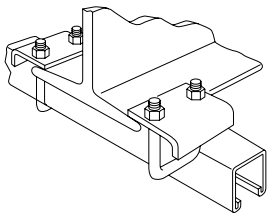
Used to secure a ⅜" hanger rod to the side or bottom of beam or ceiling.



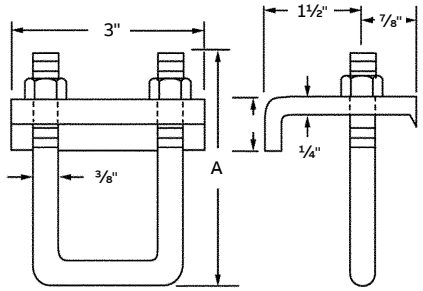
Assembly requires two (⅜") square nuts. Also screw or bolt for fastening to beam or ceiling. ⅛" steel.
Load rating of 700 lbs. with a safety factor of 3. Galv-Krom® finish.

U501 Channel to beam clamp

Cat. No.	For structure channel	Dimension A (in)	Weight (lbs/C)
U501	B-900, B-905, B-906, B-907	3¼	76
U501SS	Stainless steel	3¼	76
U502	B-901, B-900-2A, B-902, B-903	4¾	88
U502SS	Stainless steel	4¾	88



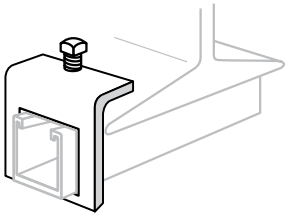
Hardened points bite into beam flange. Fits all I-beams where edge of beam flange does not exceed .8" thickness.

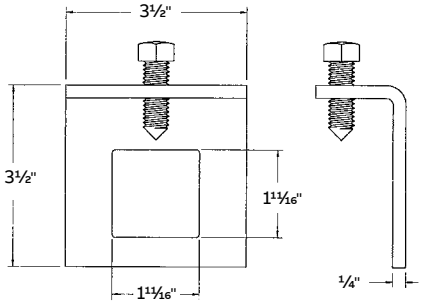


* Load rating of 2,200 lbs. with a safety factor of 3. ¼" steel, ⅜-inch U-bolt.
Standard finish: Galv-Krom®.

A597 Channel to beam clamp

Cat. No.	Design load (lbs/EA)	Channel series	Weight (lbs/C)
A597	800	B-900, B-905, B-995	108





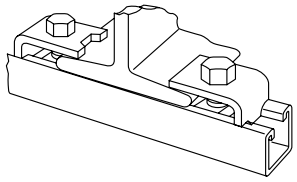
½" x 1 ½" set screw included.
Galv-Krom® finish.

Beam clamps and hanger rod supports

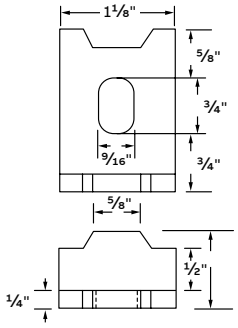
Channel to beam clamp, channel clip & centre beam clamp

512-U Channel to beam clamp

Cat. No.	Design load (lbs)	Weight (lbs/C)
512-U	500	25



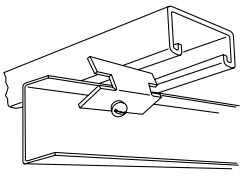
Secures all sizes of Kindorf® channel to beams where flange edge does not exceed .8" thickness.



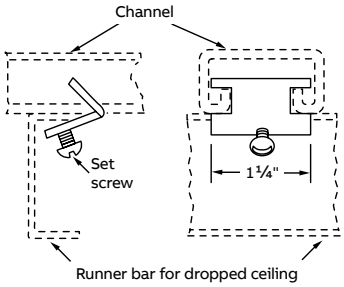
Load rating each clamp 800 lbs. with a safety factor of 3. Assembly requires one H-113-E bolt and one B-910-½ steel nut per clamp – order separately.
¼" steel. Galv-Krom® finish.

E-764 Channel clip

Cat. No.	Weight (lbs/C)
E-764	4



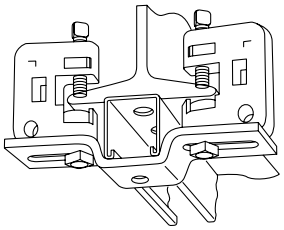
Complete with set screw for clipping a length of channel slot-side down and across the runner bars of a dropped ceiling installation.



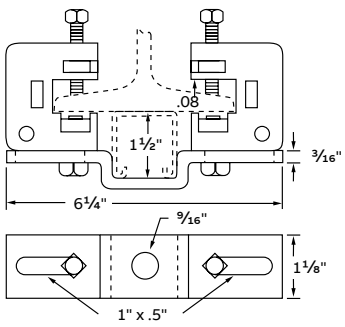
At least two required per each such application.
Galv-Krom® finish.

E-765 Center beam clamp

Cat. No.	load rating (lbs)	Weight (lbs/C)
E-765	800	112



Clamps 1½" x 1½" Kindorf® channel to beams where beam flange does not exceed ¾" thickness and 4" to 6¾" wide.



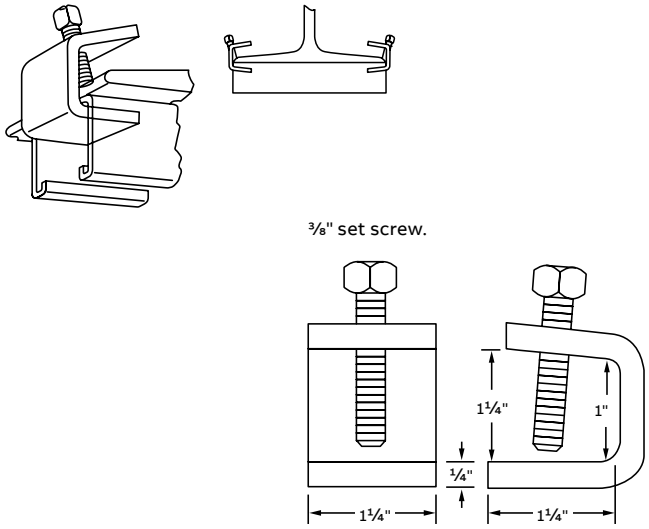
Load rating is 800 lbs. with a safety factor of 3. Furnished assembled. ⅛" steel clamps, 3⁄16" steel strap.
Galv-Krom® finish.

Beam clamps and hanger rod supports

Channel supports, column mount supports, single-beam & double beam clamps

U514 Channel support

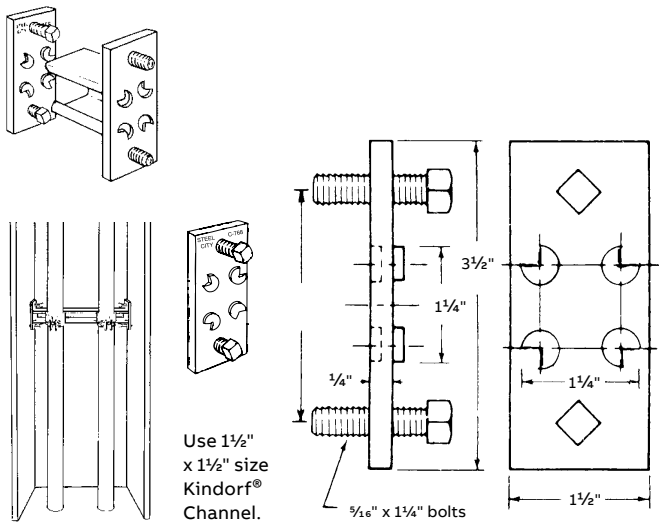
Cat. No.	load rating (lbs)	Weight (lbs/C)
U514	800	44



Supports any size Kindorf® channel. Clamps to I-beam where flange edge does not exceed .8" thickness. Load rating is 800 lbs. with a safety factor of 3. ¼" steel. Galv-Krom® finish.

E-768 Column mount support

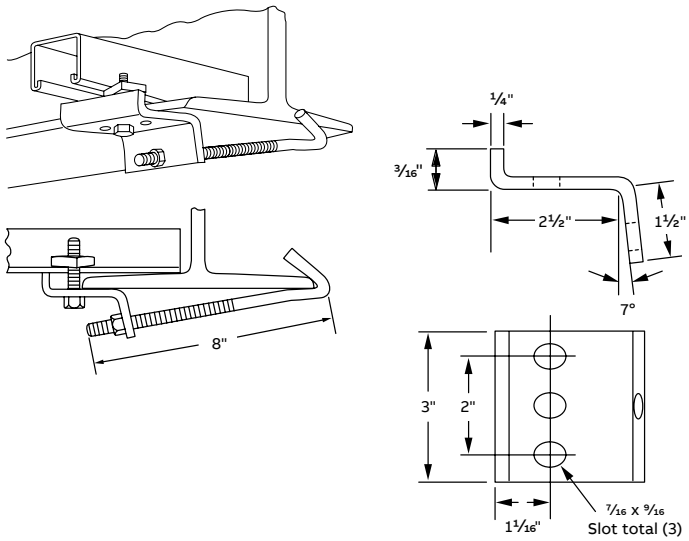
Cat. No.	load rating (lbs)	Weight (lbs/C)
E-768	800	50



For use with 1½" x 1½" channel. Provides a rigid support between 'H' beam flanges for mounting pipe, conduit, outlet boxes and panel boards. Two E-768's required for installation. Use C-105, C-106 or C-107 straps for mounting ½" to 8" pipe on channel section. Load rating of 800# with a safety factor of 3. Galv-Krom® finish.

E-781 Single-beam clamp

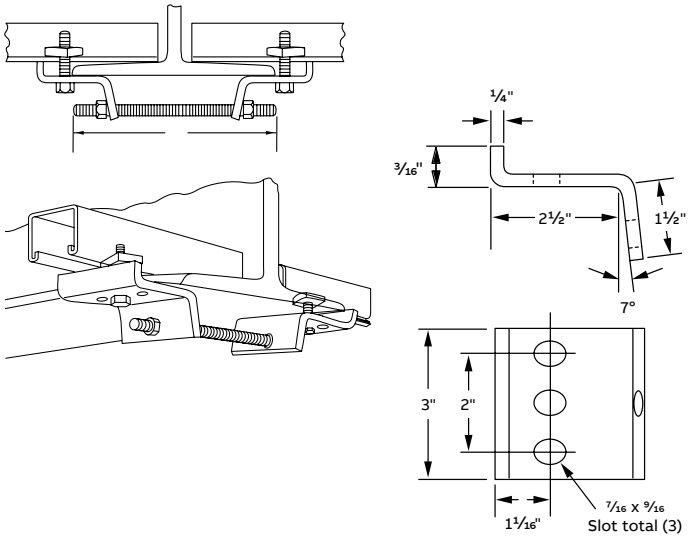
Cat. No.	Weight (lbs/C)
E-781	133



For use in attaching channel on top of beam flange with slot side down. Members are shipped assembled for easy installation. Galv-Krom® finish.

E-782 Double-beam clamp

Cat. No.	Weight (lbs/C)
E-782	235



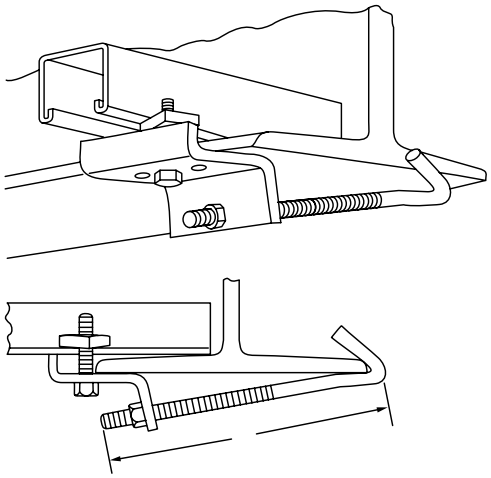
For use in attaching channel on both sides of a beam flange with slot side down. Members are shipped assembled for easy installation. Galv-Krom® finish.

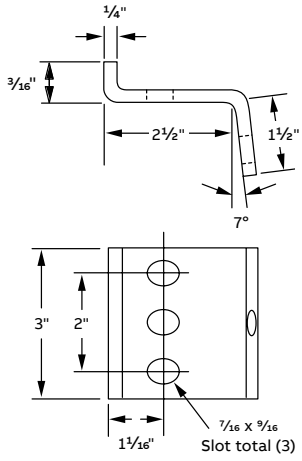
Beam clamps and hanger rod supports

Single & double beam clamps

U-504 Single beam clamp

Cat. No.	Weight (lbs/C)
U504	133



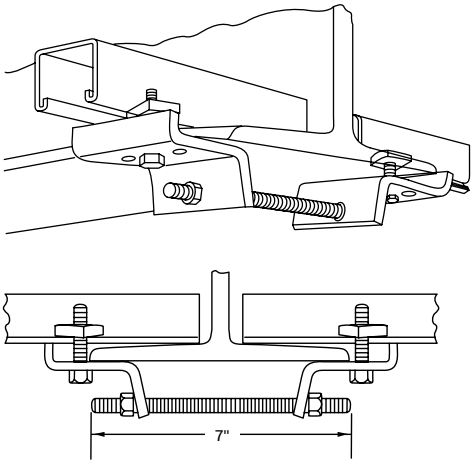


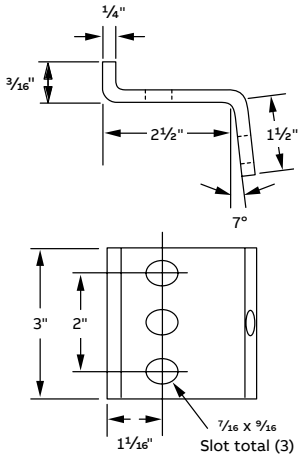
For use in attaching channel on top of beam flange with slot side down. Members are shipped assembled for easy installation.

Galv-Krom® finish.

U-505 Double beam clamp

Cat. No.	Weight (lbs/C)
U505	235

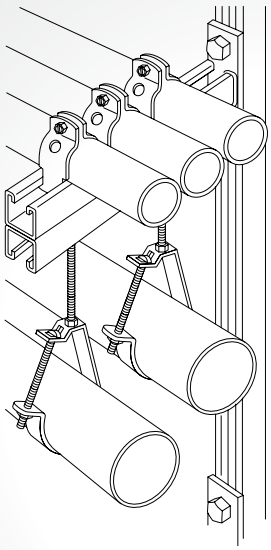




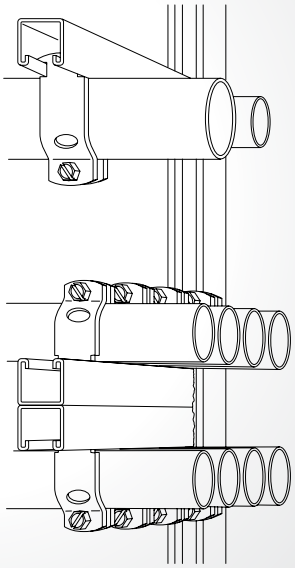
For use in attaching channel on both sides of a beam flange with slot side down. Members are shipped assembled for easy installation.

Galv-Krom® finish.

Wall and support brackets



F-721 Wall bracket
hangs and supports pipe runs.

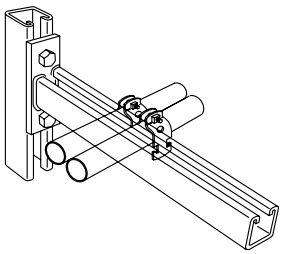


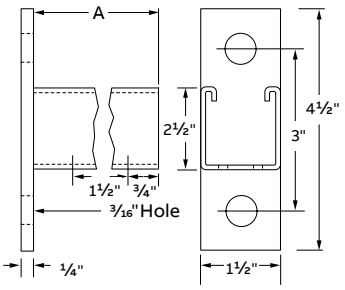
Conduit installations supported above and below by F-721 wall bracket.

Kindorf® wall brackets provide a ready-made shelving arrangement that can be attached quickly to the supporting channels. Utilizing the built-in advantages of the Kindorf® Channel, the support bracket members allow a great deal of flexibility in meeting the structural framing needs. Axle supports and a variety of wall brackets all adapt to the standard Kindorf® channel and allow additional flexibility in the support of cables, conduit, pipe and other equipment. The application of axle supports and bracket members can be made on either the continuous slot of the channel or the pre-punched hole side. Utilizing the 1½" hole spacing, greater adaptability is attained with a minimum of fittings.

F-720 Wall bracket

Cat. No.	Dim. A (in)	End load rating (lbs)*	Weight (lbs/C)
F720 6**	6	600	132
F-720-9**	9	450	155
F-720-12**	12	300	200
F-720-18	18	200	275
F-720-24**	24	150	350

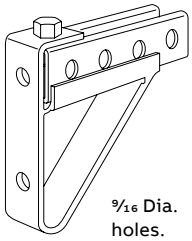


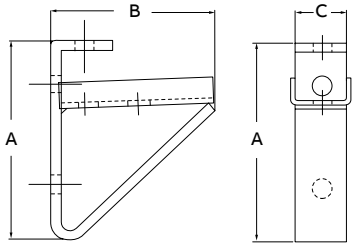


Mounts on Kindorf® channel, concrete inserts or directly to wall. Continuous-slot accepts C-105, C-106 and C-107 series pipe straps. Bracket is 12-gauge steel, 1½" x 1½" channel welded to a ¼" back plate. May be attached to either the continuous slot side or pre-punched holes in back or side of Kindorf® channel. * Safety factor of 3. ** This product available in green & hot-dipped galvanized. Standard finish: Galv-Krom®.

F-715 Wall bracket

Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)
F-715	5 27⁄32	4⅝	1½	163

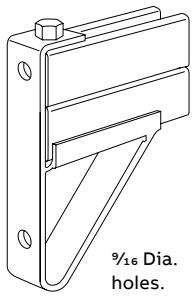


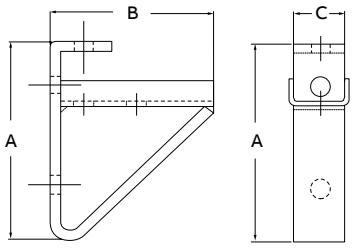


Mounts on Kindorf® channel or directly to wall. F-715 bracket supports 1½" or 1⅜" channels. Brackets allow for a variety of support channel lengths. The continuous tray on brackets prevent lateral movement of supported channels. Support channels can be fastened from top, bottom or both. Galv-Krom® finish.

F-716-3 Wall bracket

Cat. No.	Dimensions (in) A	B	C	Weight (lbs/C)
F-716-3	7 11⁄32	4⅝	1½	179





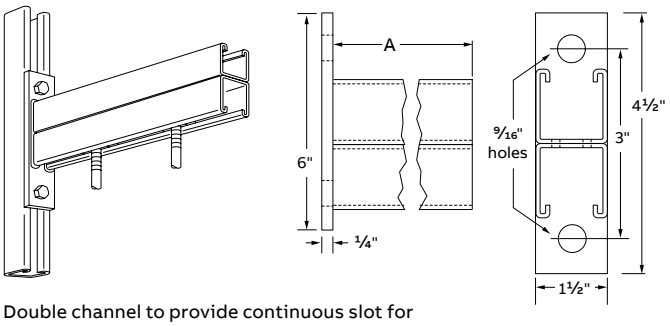
Mounts on Kindorf® channel or directly to wall. F-716-3 bracket supports 3" deep or back-to-back channels. Brackets allow for a variety of support channel lengths. The continuous tray on brackets prevent lateral movement of supported channels. Support channels can be fastened from top, bottom or both. Galv-Krom® finish.

Wall and support brackets

Wall brackets, axle supports & telephone cable hook

F-721 Wall bracket

Cat. No.	Dim. A (in)	End load rating (lbs)*	Weight (lbs/C)
F721-18	18	300	568
F-721-24	24	225	736
F-721-30	30	180	904
F-721-36	36	150	1072

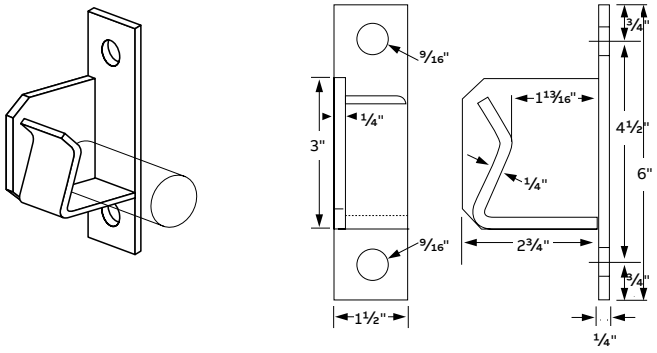


Double channel to provide continuous slot for both top and bottom mounting. 12-ga. steel, ¼-inch back plate. May be attached to either the continuous slot side or pre-punched holes in back or side of Kindorf® channel.

* Safety factor of 3.
Standard finish: Galv-Krom®.

F-735 and F-736 Axle supports

Cat. No.	Description	Weight (lbs/C)
F-735	Left hand	165
F-736	Right hand	165

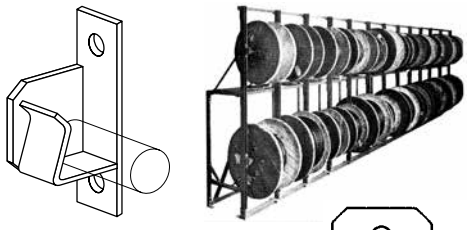


For use on storage racks constructed on Kindorf® channel. Supports reels of electrical cables, wire rope, chain and other materials. Left-hand axle support illustrated. F-736 identical except right hand. May be attached to either the continuous slot side or pre-punched holes in back or side of Kindorf® channel.

Assembly requires two B-910-½ steel nuts and two H-113-B bolts.
Accepts up to 1¼" steel bar or pipe for axle. Galv-Krom® finish.

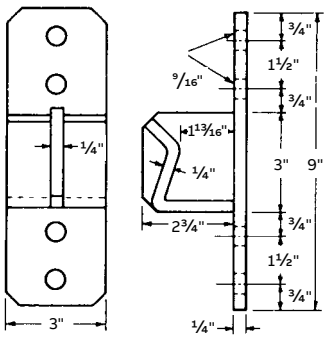
F-737 Double axle support

Cat. No.	Weight (lbs/C)
F-737	335



To be used as center support for tandem reel assembly.

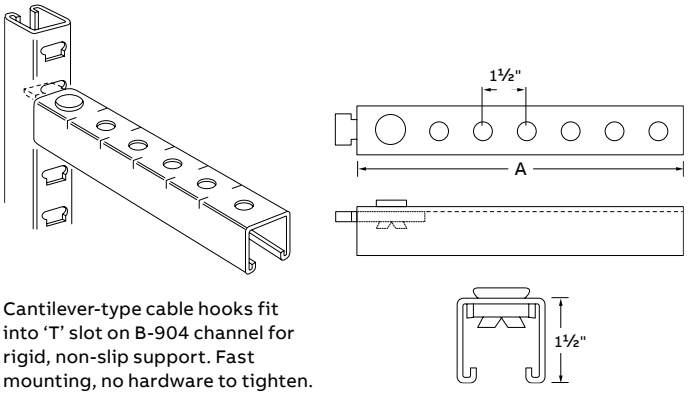
Typical Kindorf® Space-Saver reel rack. Kindorf® reel racks are easy to build, exceptionally strong and economical. Racks adjust easily to accommodate a variety of reel sizes. No special tools needed.



Assembly requires four B-910-½ steel nuts and four H-113-B bolts.
To be used with F-735 and F-736. ¼" steel.
Galv-Krom® finish.

F-739 Telephone cable hook

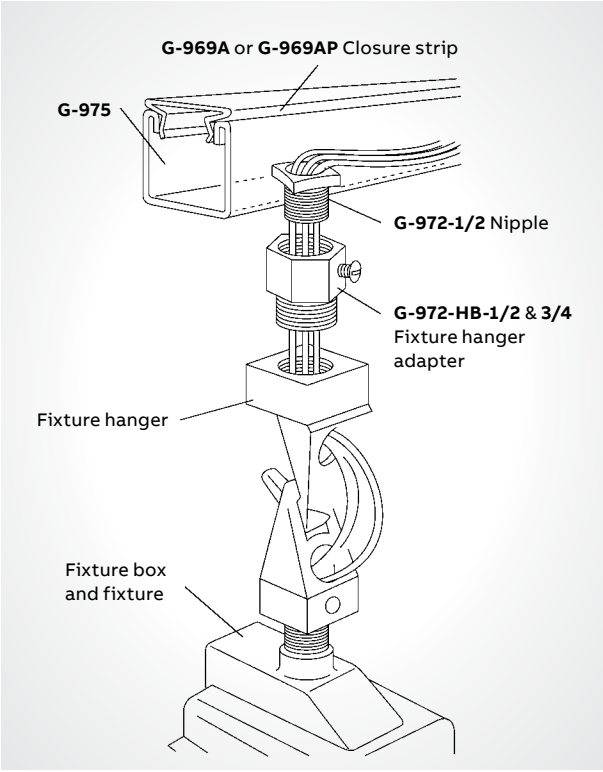
Cat. No.	Dim. A (in)	Weight (lbs/C)
F-739-4-1/2	4½	81
F-739-7-1/2	7½	122
F-739-10-1/2	10½	162
F-739-13-1/2	13½	198
F-739-18	18	278



Cantilever-type cable hooks fit into 'T' slot on B-904 channel for rigid, non-slip support. Fast mounting, no hardware to tighten.

Has 9/16" diameter holes on 1½" centers to allow for easy tie banding of cables.
Galv-Krom® 12-ga. steel.

Surface raceway and lighting support systems for mounting or suspending high-intensity lighting fixtures in high-bay installations.



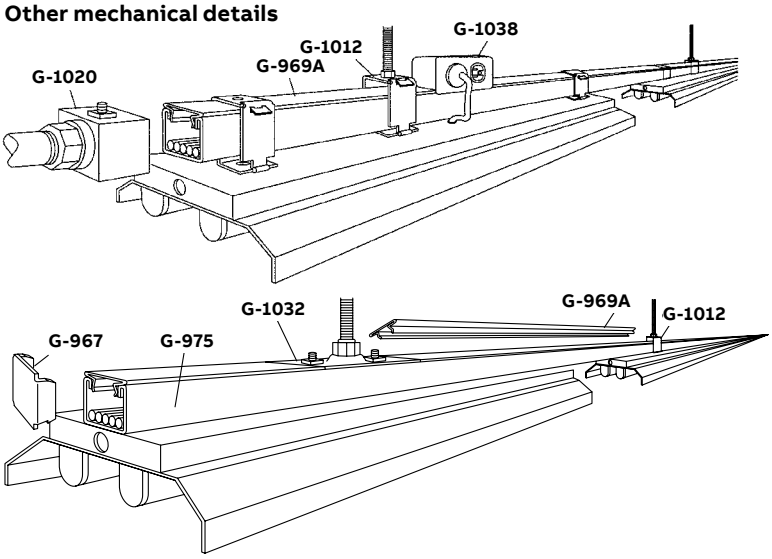
The Kindorf® Lighting Support System consists of high-quality construction materials that afford definite installation advantages to those most concerned with lighting installations. When used as a surface metal raceway, it is UL Listed and complies with National Electrical Code® Article 386.

To the owner
A flexible installation requiring fewer attachments to the building structure with built-in provisions for easy maintenance and future modifications when lighting fixtures must be added, deleted or relocated. Kindorf® channel and fittings form a strong, economical and attractive support and wiring system for fixtures and other equipment.

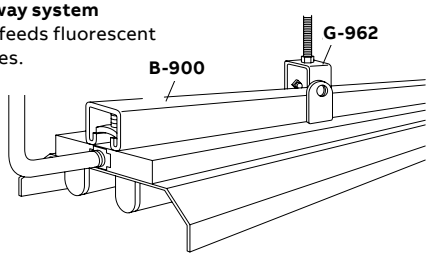
To the architect and engineer
A system of construction least demanding on general design conditions and readily adaptable to all spacing of pillars, purlins and other structural components. Supply will not delay a job because Kindorf® channel is stocked at many locations throughout the country. The Kindorf® System saves planning time because it is designed for fast and easy installation by the contractor with little or no detailing.

To the contractor
The Kindorf® System consists of time-saving materials that will simultaneously provide for the electrical feed and the mechanical support of lighting and other equipment. Kindorf® affords a means of making fewer attachments to the structure at wider spacing. It ensures true and rigid alignment and lends itself to systematic preassembly methods which economize on labor. No special tools for installation and no painting is required. Kindorf® speeds all jobs because a complete line of fittings assures easy solution of many installation problems as they arise in the field.

Other mechanical details



Channel raceway system
supports and feeds fluorescent lighting fixtures.



Surface raceway and lighting support systems

Electrical conductors “lay-in” the channel

* Listed by Underwriters Laboratories, Inc.

Kindorf® Surface Raceway channels* provide a central wiring distribution system with conductor capacity that exceeds requirements of any lighting layout and with “power to spare” for other uses. Channel adapts to any interval of structural support – may be dropped to any level where it becomes a rigid platform for fixture attachment. Lighting fixtures may be spaced and fastened anywhere along the channel system with “plug-in” or direct-feed electrical connection.

Branch lighting circuit conductors are completely enclosed in channel from panel to fixture, eliminating the ordinary “clutter” of external conductors and protecting the wires from physical damage.

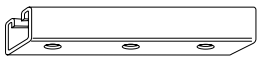
Kindorf® channels, installed slot-side down, are designed to provide fixture support only. A range of accessory fittings permit fixture attachment to the channel safely and securely in an approved manner. Channels with solid base or with slots are generally used for simple channel support systems.

Channel support systems combine economy of investment with maximum strength and rigidity. The continuous-slot channel provides complete flexibility of lighting layout with fixture spacing continuous or intermittent. Fixtures may be added or relocated to meet changing requirements without disturbing the basic support system. The rigid channels maintain fixture alignment and adapt to any interval of structural support.

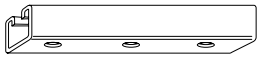
Surface raceway channel systems

Knock-out type

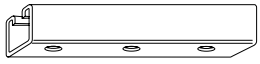
by means of ½" channel knockouts on 6" centers



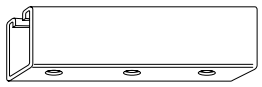
G-975-M
1½ x 1½ x 14 ga



G-975
1½ x 1½ x 12 ga

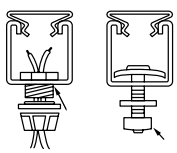


G-965
1½ x 1½ x 14 ga



G-955
1½ x 3 x 12 ga

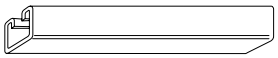
Nipple lock nut and bushing



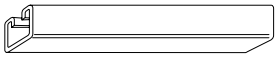
G-972-1/2 **G-974-1-1/4**

Plug-in type

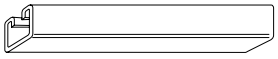
by means of sliding fixture hanger



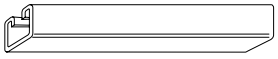
B-900-M
1½ x 1½ x 14 ga



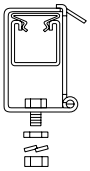
B-900
1½ x 1½ x 12 ga



B-901
1½ x ⅞ x 12 ga



B-906
1½ x ¾ x 14 ga



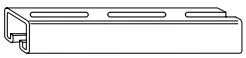
Hanger with H-115-A bolt and square nut plus G-1016 and H-118-C washers

G-1012

Channel support lighting systems

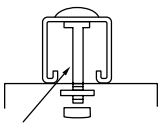
Shoulder-bolt type

by means of special shoulder bolt 1³⁄₃₂" x 3" slots on 4" centers



G-953
1½ x 1½ x 12 ga

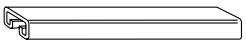
G-956
1½ x 1½ x 12 ga



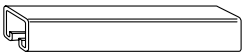
G-973-2-1/4

Spring-nut type

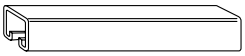
by means of spring-nut and bolt combination



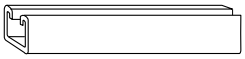
B-906
1½ x ¾ x 14 ga



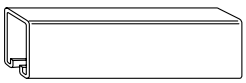
B-900-M
1½ x 1½ x 14 ga



B-900
1½ x 1½ x 12 ga



B-901
1½ x ⅞ x 12 ga



G-902
1½ x 3 x 12 ga

B-911-1/4

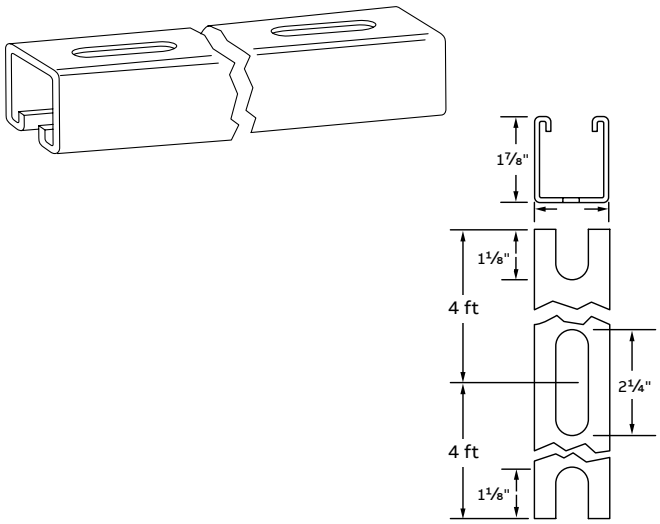
H-111-B

Surface raceway and lighting support systems

Hanging channels

U514 Channel support

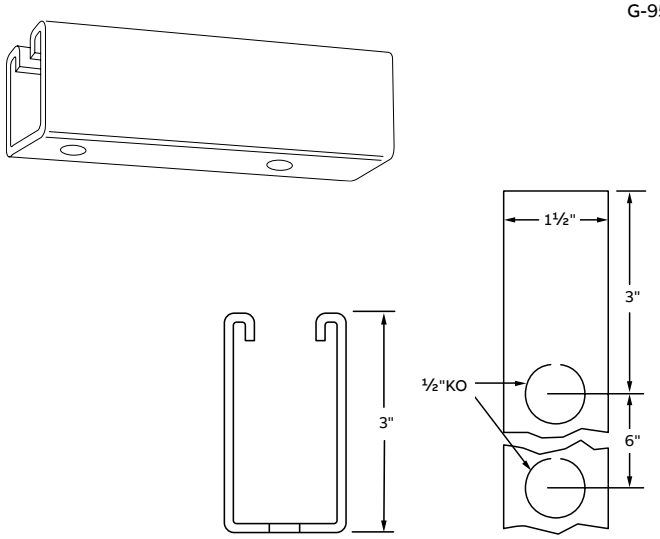
Cat. No.	Description	Joiner
G-950	1½" x 1⅞" x 12 ga	G-978C



¹¹⁄₁₆" x 2¼" slots on 4 foot centers. 20 ft. lengths only 194 lbs/C ft.
Standard finish: Galv-Krom®.

G-955 Fixture hanging channel

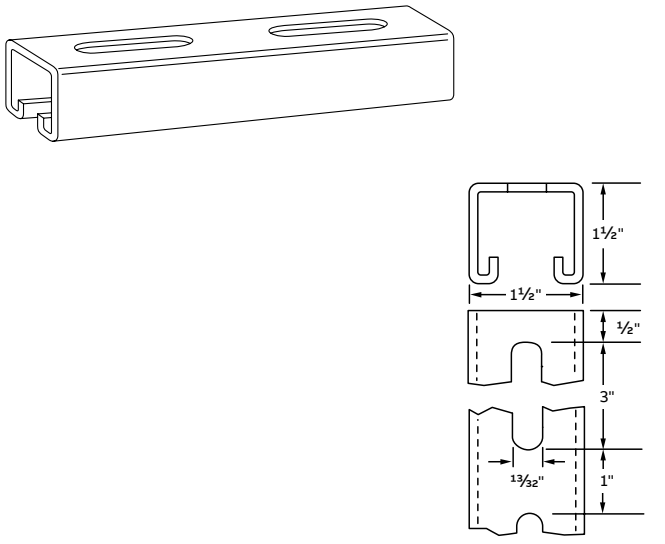
Cat. No.	Description	Joiner	End cap
G-955	1½" x 3" x 12 ga	G-978-D	G-957
			G-959



270 lbs/C ft. UL Listed for raceway. ½" KOs on 6" centers.
Standard finish: Galv-Krom®.

G-953 Fixture hanging channel

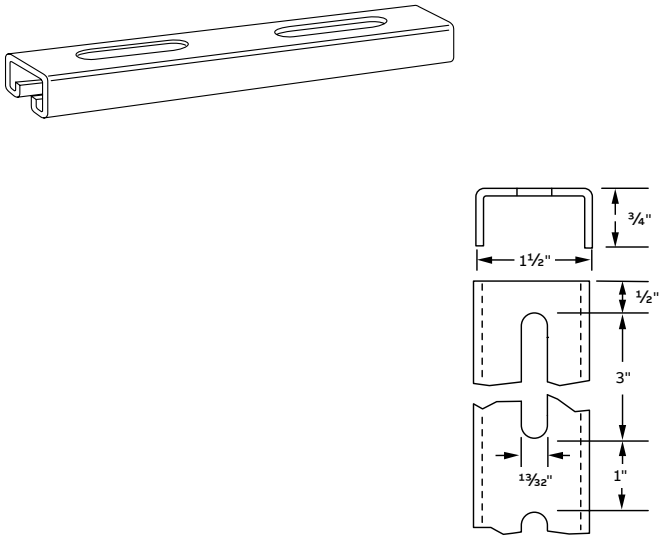
Cat. No.	Description	Joiner
G-953	1½" x 1½" x 12 ga	G-958



Fixtures attached to channel of G-973-2-¼ shoulder bolts. 154 lbs/C ft.
¹³⁄₃₂" x 3" slots on 4" centers. Standard finish: Galv-Krom.

G-956 Fixture hanging channel

Cat. No.	Description	Joiner
G-956	1½" x ¾" x 14 ga	G-960



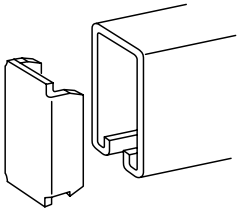
Fixtures attached to channel by means of G-973-1-1/2 shoulder bolts or G-973-2-1/4 fixture bolts. 80 lbs/C ft. ¹³⁄₃₂" x 3" slots on 4" centers. Standard finish: Galv-Krom®.

Surface raceway and lighting support systems

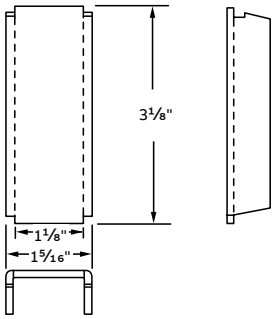
End caps & channel joiners

G-957 End cap

Cat. No.	Weight (lbs/C)
G-957	14



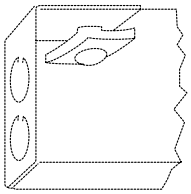
Blank end cap for use with G-955 and B-902 channel.



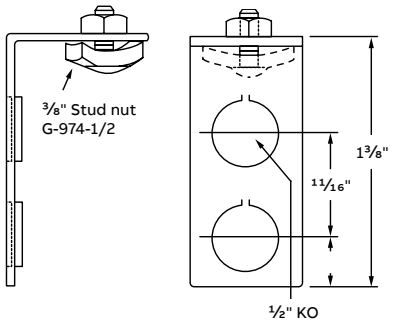
14 ga steel. UL Listed for raceway.
Galv-Krom® finish.

G-959 End cap

Cat. No.	Description	Weight (lbs/C)
G-959	With two ½" knockouts	31



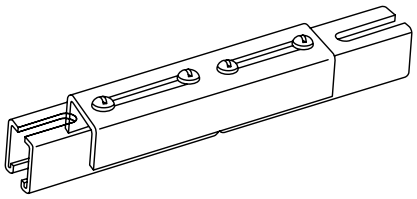
For use with G-955 and B-902 channel.



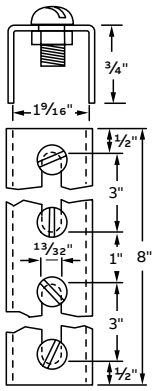
12 ga steel. UL Listed for raceway.
Galv-Krom® finish.

G-958 Channel joiner

Cat. No.	Weight (lbs/C)
G-958	92



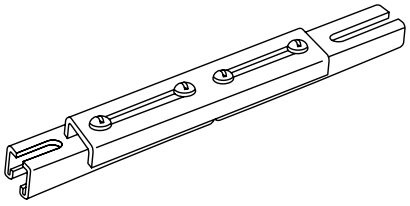
For 1½" deep-slotted channel G-953.



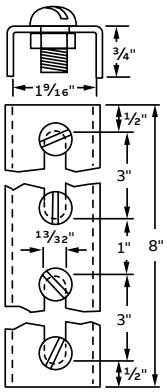
Four ⅜" x ¾" bolts and nuts are furnished with the joiner. 14 ga steel.
Galv-Krom® finish.

G-960 Channel joiner

Cat. No.	Weight (lbs/C)
G-960	70



For ¾" deep-slotted channel G-956.



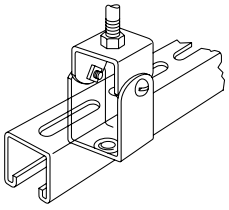
Four ⅜" x ¾" bolts and nuts are furnished with the joiner. 14 ga steel.
Galv-Krom® finish.

Surface raceway and lighting support systems

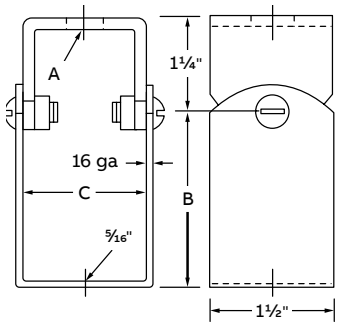
Channel hangers, fixture hanging channel & blank end cap

G-962 and G-962-D Channel hangers

Cat. No.	Weight (lbs/C)	Cat. No.	Weight (lbs/C)	Hanger size (in)	Weight (lbs/C)
G 962 1	40	G 962 1	47	¼ and ⅜ rod	13/32
G-962-2	42	G-962-2	47	½ rod and ¼ pipe	9/16
G-962-3	39	G-962-3	47	⅜ pipe and ⅝ rod	11/16
G-962-4*	47	G-962-D-4**	47	½ pipe	⅞



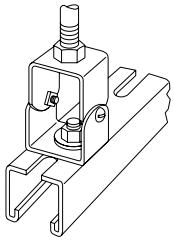
G-962 fits around 1½" or 1⅞" deep channel. G-962-D series hangers for 3" deep channel.



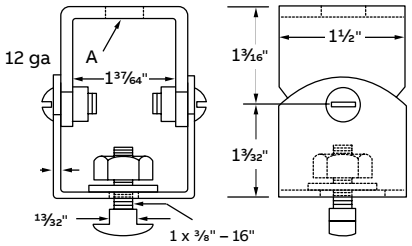
* Load rating of 600 lbs. with a safety factor of 3. ** Load rating of 700 lbs. with a safety factor of 3. "B" dimension for G-962: 2½"; for G-962-D: 4". UL Listed for raceway. "C" dimension for G-962, 1 37/64", for G-962-D, 3 7/64". Galv-Krom® finish.

G-963 Channel hanger

Cat. No.	Hanger Size (in)	Dim. A (in)
G-963-1	¼ and ⅜ rod	13/32
G-963-2	½ rod and ¼ pipe	9/16



For use with G-953 or G-956 channel. Does not interfere with fluorescent fixtures.

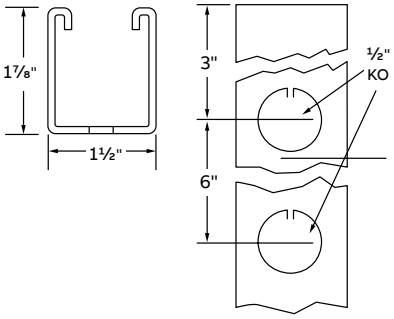


Load rating of 900 lbs. with a safety factor of 3. 48 lbs/C. Galv-Krom® finish.

G-965 Fixture hanging channel

Cat. No.	Description	Joiner	End cap
G-965	1½" x 1⅞" 12 ga, 190#/C ft	G-978-C	6959

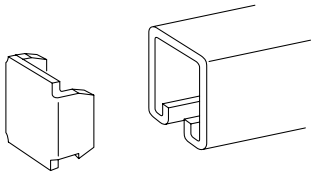
Provides a combination fixture support and surface raceway.



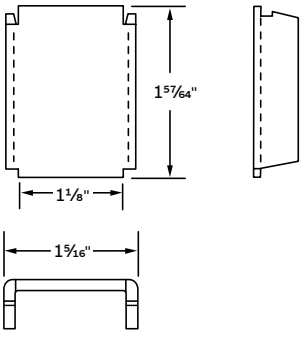
UL Listed for raceway. ½" knockouts on 6" centers. Standard finish: Galv-Krom®.

G-966 Blank end cap

Cat. No.	Weight (lbs/C)
G-966	8



For 1⅞" deep channel.



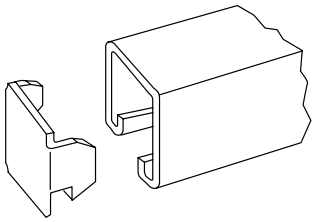
UL Listed for raceway. Galv-Krom® finish.

Surface raceway and lighting support systems

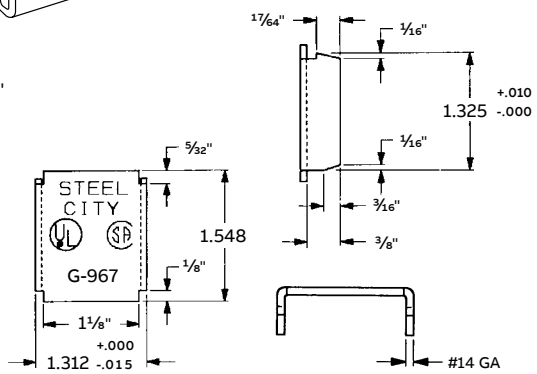
End caps & channel joiners

G-967 Blank end cap

Cat. No.	Weight (lbs/C)
G-967	6



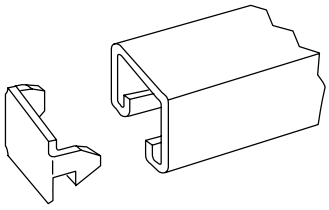
For use with 1½" deep channel.



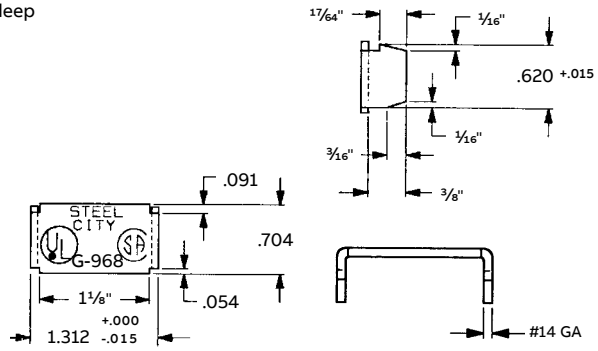
UL Listed for raceway.
Galv-Krom® finish.

G-968 Blank end cap

Cat. No.	Weight (lbs/C)
G-968	3



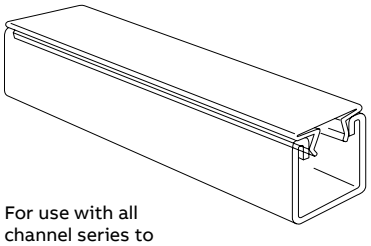
For ¾" deep channel.



UL Listed for raceway.
Galv-Krom® finish.

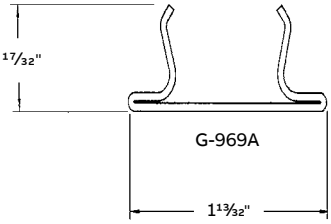
G-969A Closure strip for Kindorf® channel

Cat. No.	Description
G-969A	Steel Closure Strip – Galv-Krom® finish
G-969AP	Plastic Closure Strip – Gold



For use with all channel series to complete enclosure.

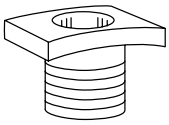
G-969AP



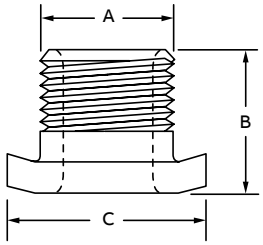
19 ga. steel. 35 lbs/C.
UL Listed for raceway.

G-972 Nipple malleable iron

Cat. No.	Dimensions (In) A	B	C	Weight (lbs/C)
G-972-1/2	½ pipe size	⅞	1¼	7
G-972-3/4	¾ pipe size	⅞	1¼	11
G-972-L-1/2	½ pipe size	2	1¼	9



The ½" size can nipple fixtures through channel knockouts. All sizes can be fastened to the open slot of all Kindorf® channels. Locknut supplied with nipple.



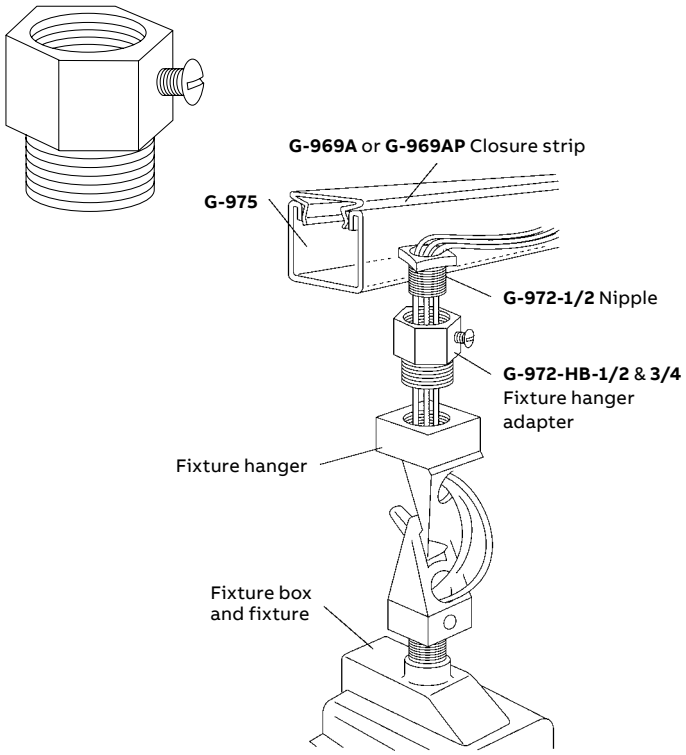
The extra length of the G-972-L-1/2 permits its use as a spacing nipple when locked into knockout or continuous slot. Load rating of 750 lbs. with a safety factor of 3.
Galv-Krom® finish.

Surface raceway and lighting support systems

Fixture hanger adapter, fastener, shoulder type fixture bolt & nut

G-972-HB-1/2 Steel fixture hanger adapter

Cat. No.	Description	Weight (lbs/C)
G 972 HB ½	Galv-Krom® finish	17



Fixture hanger adapter
The Fixture Hanger Adapter extends the flexibility of the Kindorf® System by easily adapting the ¾" hanger size of high-intensity fixtures to channel mounting.

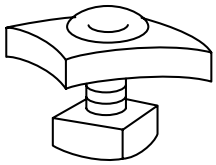
The hanger adapter securely mounts the fixture hanger or box to the channel through the ½" KO in the base. No special tools are needed for installation of fittings and fixtures.

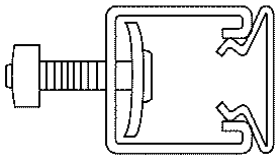
Kindorf® channel, with ½" KOs every 6", hangs and feeds the fixtures – thus simplifying installation.

Shoulder type fixture bolt and nut
For use in fastening fixtures to slotted channels. Permits the preassembly of hardware to the fixture. The head of the G-973 is simply inserted into the channel slot and twisted 90° to seat. The fixture is secured tightly when the nut is run home.

G-974 Fastener

Cat. No.	Size (in)	Weight (lbs/C)
G-974-1/2	¼ x ½	8
G-974-3/4	¼ x ¾	8½
G-974-1	¼ x 1	9
G 974 1-1/4	¼ x 1¼	10
G-974-1-1/2	¼ x 1½	11

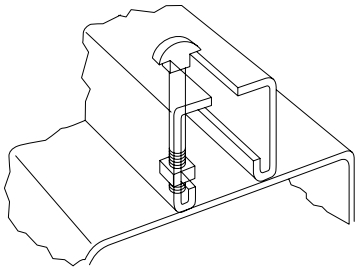




Will fasten fluorescent fixtures to G-975 through knockouts or to the open slot of all Kindorf® channels when installed slot down.
Galv-Krom® finish.

G-973 Shoulder type fixture bolt and nut

Cat. No.	Used with channel	Size (in)	Weight (lbs/C)
G 973-1-1/2	G-956	½ x 1½	7
G 973-2-1/4	G-953	⅜ x 2¼	10



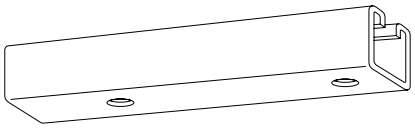
Load rating of 900 lbs. with a safety factor of 3. 48 lbs/C.
Galv-Krom® finish.

Surface raceway and lighting support systems

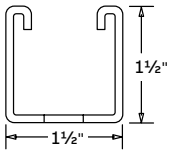
Fixture hanging channel, connectors & joiners

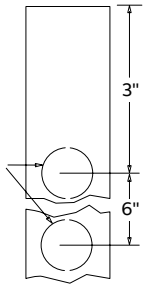
G-975 Fixture hanging channel

Cat. No.	Description	Joiner	End cap
G-975-10	1½" x 1½" 12 ga	G978A	G967
G-975-20	1½" x 1½" 12 ga	G978A	G967
G-975-M-10	1½" x 1½" 14 ga	G1503-S	G967
G-975-M-20	1½" x 1½" 14 ga	G1503-S	G967



Designed to provide a combination fixture support and surface raceway. Fixture attaches to KOs by G-972-1/2 nipple for wiring, or a G-974 stud nut where wiring is not required.

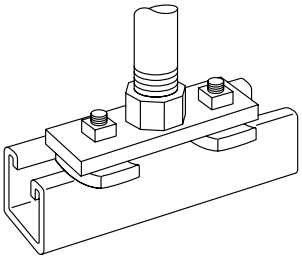




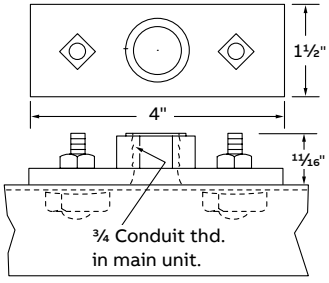
G-975: 160 lbs/C ft G-975-M: 107 lbs/C ft UL Listed for raceway. ½" knockouts on 6" centers. Standard finish: Galv-Krom®.

G-976 Connector

Cat. No.	Description	Weight (lbs/C)
G-976	Galv-Krom® finish	54



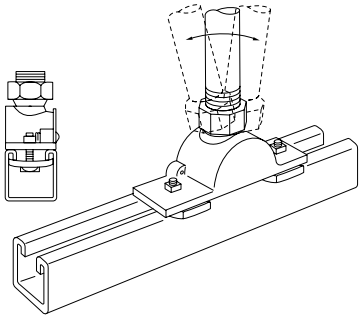
Accepts either ½" or ¾" conduit to feed control channel when used as a combination raceway and lighting fixture support. Includes two stud nuts. Malleable iron.



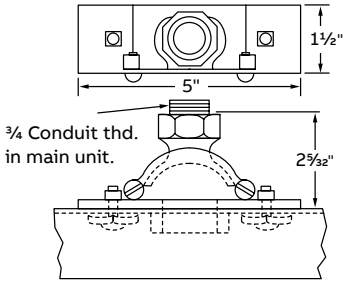
Load rating of 1,000 lbs. with a safety factor of 3.
UL Listed for raceway.

G-977 Swing connector (channel feed hanger)

Cat. No.	Description	Weight (lbs/C)
G-977	Galv-Krom® finish	130



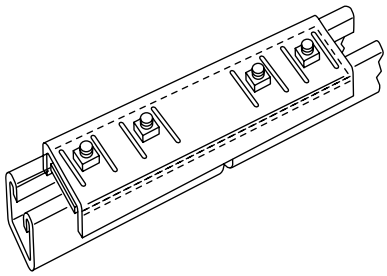
Provides a 15° swing in either direction to the channel run. Accepts ½" or ¾" conduit, or may be adapted for use with 3⁄8" fixture stem when specified.



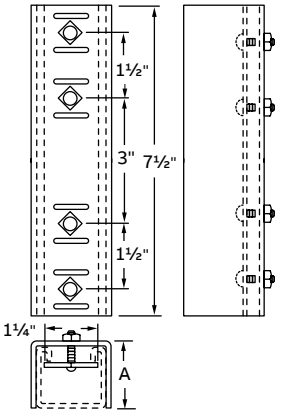
Includes two stud nuts. Malleable iron. UL Listed for raceway.
Load rating of 1,300 lbs. with a safety factor of 3.

G-978 Joiners

Cat. No.	Type of channel applicable	Dim. A (in)	Weight (lbs/C)
G-978	Use with G-975, G-975-M and B-900, B-900-M	1½	107
G-978-L	Use with B-906	¾	87
G-978-D	Use with G-955 and B-902	3	137
G-978-C	Use with B-901, G-950 and G-965	1⅞	122



To splice lengths of raceway channel. Installed by tightening nuts on 1⁄4" studs which are permanently attached to a smooth inner plate.



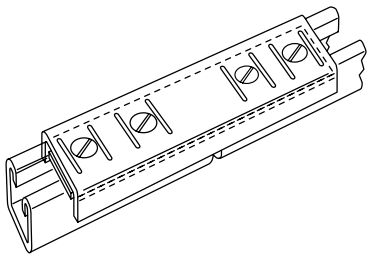
Nuts included. 14 ga steel. UL Listed for raceway.
Galv-Krom® finish.

Surface raceway and lighting support systems

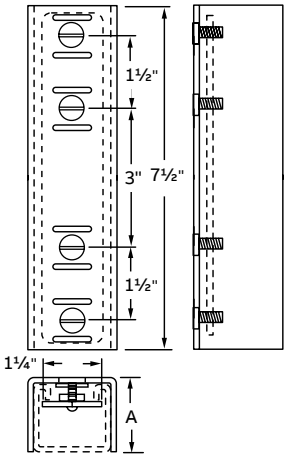
Joiners, end caps, panel adapters & "lay in" channel hanger

G-978-A Joiners

Cat. No.	Type of channel applicable	Dim. A (in)	Weight (lbs/C)
G-978A	Use with G-975, G-975-M and B-900, B-900-M	1½	103
G-978-AL	Use with B-906	¾	83



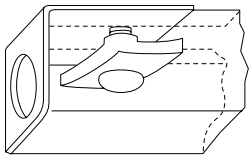
For installations where fixtures are mounted flush to slot-down channels. Fastening is accomplished by tightening flat head machine screws.



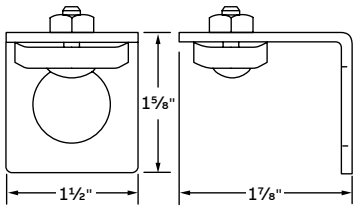
14 ga steel.
Galv-Krom® finish.

G-979 End caps

Cat. No.	Description	Weight (lbs/C)
G-968	For ⅞" hole, ½" conduit	25
G-974-3/4	For 13⁄32" hole, ¾" conduit	25



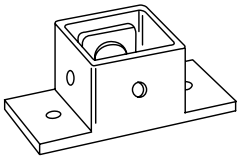
Use with G-975 or B-900 channel to provide conduit entrance.



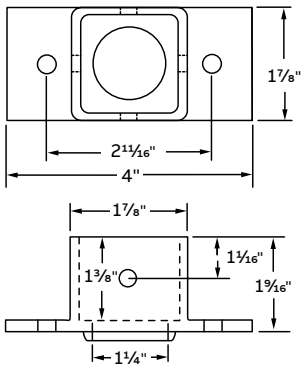
Furnished with stud nut. 12 ga steel. UL Listed for raceway.
Galv-Krom® finish.

G-1007 Panel adapter

Cat. No.	Weight (lbs/C)
G-1007	36



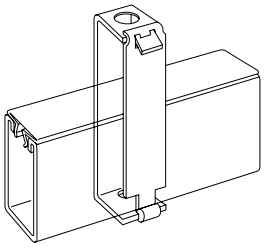
Mounts 1½" x 1½" raceway channel to panel board.



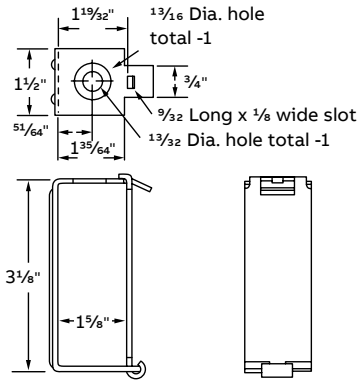
Complete with stud nuts. UL Listed for raceway.
Galv-Krom® finish.

G-1012 "Lay-In" channel hanger

Cat. No.	Description	Weight (lbs/C)
G-1012	Galv-Krom® finish	33



Hinged channel hanger for raceway channel.



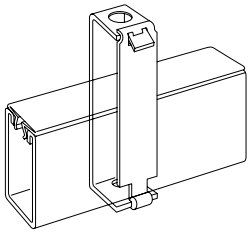
14 ga steel. UL Listed for raceway.
Load rating of 500 lbs. with a safety factor of 3.

Surface raceway and lighting support systems

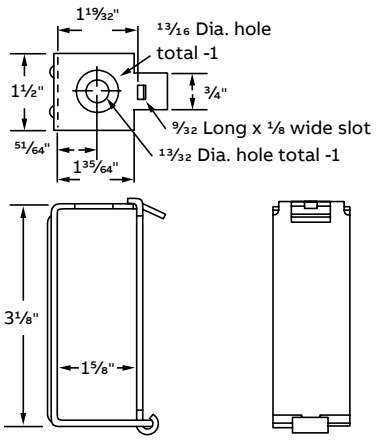
"Lay-In" channel hanger, hex swivel nuts, rubber washer & mercury vapor hanger

G-1012-D "Lay-in" channel hanger

Cat. No.	Description	Weight (lbs/C)
G-1012-D	Galv-Krom® finish	40



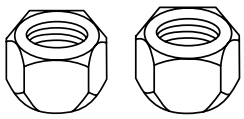
Hinged channel hanger for 3" deep raceway channel.



14 ga. steel. UL Listed for raceway.
Load rating of 450 lbs with a safety factor of 3.

G-1013 Hex swivel nuts

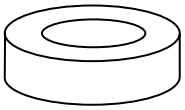
Cat. No.	Description	Weight (lbs/C)
G-1013-3/8	For 3/8" hanger rod	7
G-1013-1/2	For 1/2" hanger rod	7



Two required for each G-1012 channel hanger to provide swivel action.

G-1016 Rubber washer

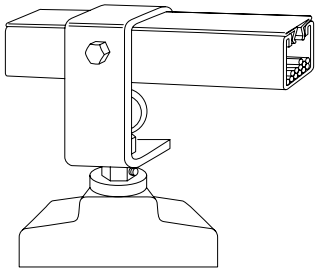
Cat. No.	Weight (lbs/C)
G-1016	1



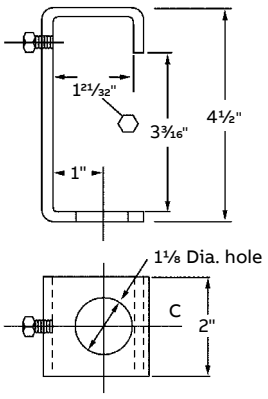
Washers are 1" diameter, 1/4" thick with 5/16" hole. Use with G-1012 fixture hanger as cushion between fixture and hanger.

G-1017 Mercury vapor hanger

Cat. No.	Used with channel	Depth Size (in)	Weight (lbs/C)
G-1017	B-900, B-901	4 1/2	76
	G-975, G-965		



Two required for each G-1012 channel hanger to provide swivel action.



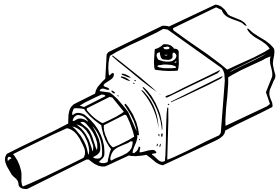
Galv-Krom® finish.

Surface raceway and lighting support systems

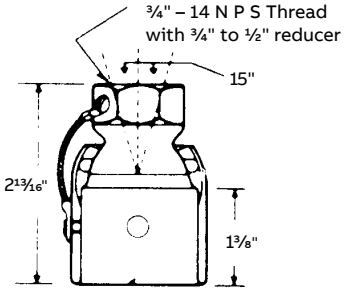
End swivel joint, threaded end fitting, channel swivel joint & swivel cover

G-1020 End swivel joint

Cat. No.	Description	Weight (lbs/C)
G- 1020	Galv-Krom® finish	40



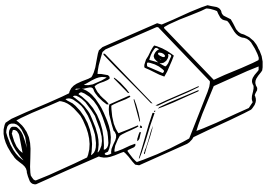
Mounts to 1½" x 1½" raceway channel. Threaded for ¾" conduit or fitting. Swivel action adapter for ½" conduit furnished.



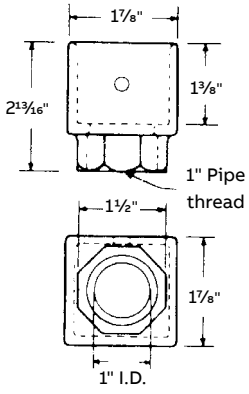
UL Listed for raceway.

G-1021 Threaded end fitting

Cat. No.	Description	Weight (lbs/C)
G-1021	Galv-Krom® finish	32



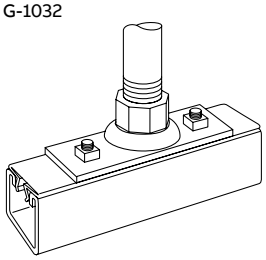
Mounts to 1½" x 1½" raceway channel. Threaded for 1" conduit or fitting. No swivel action.



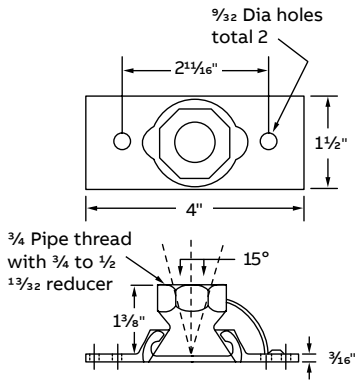
UL Listed for raceway.

G-1032 Channel swivel joint

Cat. No.	Description	Weight (lbs/C)
G-1032	Galv-Krom® finish	25



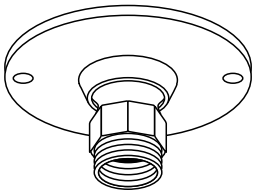
Provides a 15° swivel action (to offset possible movement) for connection of ½" or ¾" conduit to raceway channels. May be accepted for use with ⅜" fixture stem when specified. Order two G-974 ¾" fasteners for channel mounting.



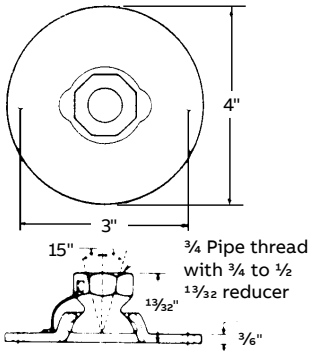
Load rating of 500 lbs. with a safety factor of 3.
UL Listed for raceway.

G-1033 4" Diameter swivel cover

Cat. No.	Description	Weight (lbs/C)
G-1033	Galv-Krom® finish	35



Cover for G-2000 through G-2004 junction boxes. Use with ¾" or ½" conduit. Swivel action.



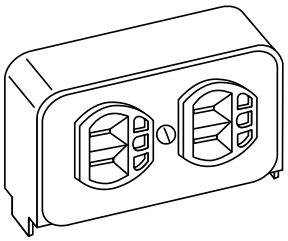
Load rating 400 lbs. with a safety factor of 3.
UL Listed for raceway.

Surface raceway and lighting support systems

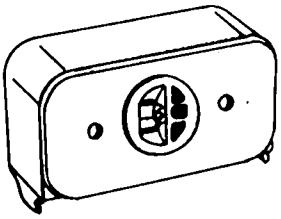
Raceway outlets, housing, cover plates & nylon bushing

Raceway outlets

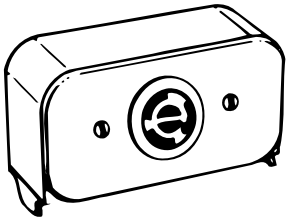
Cat. No.	Description	Weight (lbs/C)
G-1038	Gold finish	55
G-1038-A	Gold finish	50
G-1038-D	Gold finish	60
G-1038-E	Gold finish	50



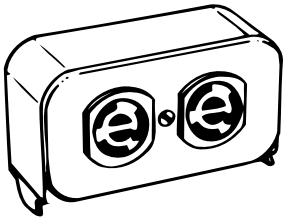
Complete unit including housing, standard duplex 3 wire, 15 amp, 125 volt NEMA ground receptacle and cover plate.



Complete unit including housing, standard single 3 wire, 15 amp, 125 volt NEMA ground receptacle and cover plate.



Complete unit including housing, single, 3 wire, 15 amp, 277 volt twistlock receptacle and cover plate.

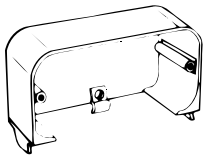


Complete unit including housing, duplex, 3 wire, 15 amp, 277 volt twistlock receptacle and cover plate.

UL Listed for raceway.

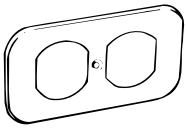
G-1038-B Housing only

Cat. No.	Description	Weight (lbs/C)
G-1038-B	Gold finish	25



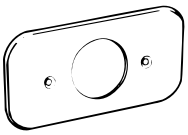
G-1038-C Duplex cover plate

Cat. No.	Description	Weight (lbs/C)
G-1038-B	Gold finish	12



G-1038-CA Single cover plate

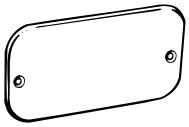
Cat. No.	Description	Weight (lbs/C)
G-1038-CA	Gold finish	14



Size of opening: 1.391 diameter

G-1038-CX Blank cover plate

Cat. No.	Description	Weight (lbs/C)
G-1038-CX	Gold finish	15



G-1060 Nylon bushing

Cat. No.	Weight (lbs/C)
G-1016	2

Strain relief bushing to protect lead from fluorescent fixture.

Surface raceway and lighting support systems

Channel joiners for "lay-in" wiring

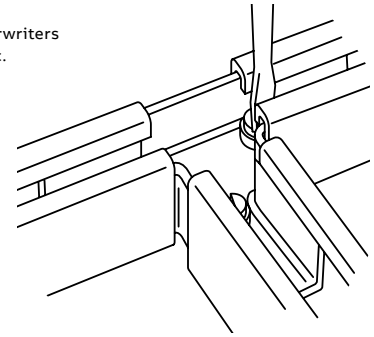
* Listed by Underwriters Laboratories, Inc.

01 Tee (T)

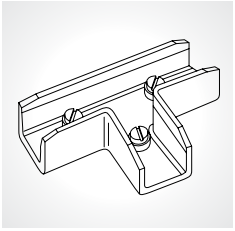
02 Elbow (L)

03 Cross (X)

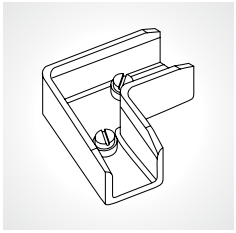
04 Straight (S)



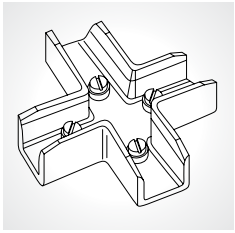
01



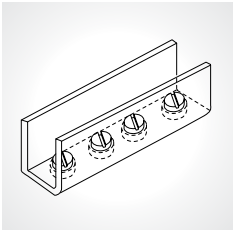
02



03



04



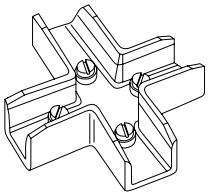
The direction-change joiner fittings for Kindorf® Channels* expand to three, the number of channel depths available for complete raceway wiring systems. Joiner fittings are made for 1½", 1⅞" and 3" depths of 1½" wide channels.

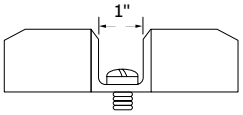
These three systems provide raceway conductor fill capacities for any lighting layout and with erected strength to spare for lighting fixture support. The joiner fitting rests inside the channel without obstructing the channel, or the lay-in of electrical conductors. No time-consuming “fishing” of conductors at the elbows, tee and crosses.

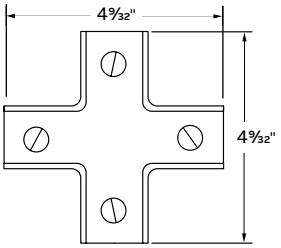
Installation is fast. Simply insert the fitting into the end of the channel and turn the captive set-screw. This “jack-screws” the fitting sidewalls beneath the channel lips for snug, strong joints. Standard Kindorf® Channel Closure Strip is used for a completely enclosed raceway.

X-Style – Cast aluminium G-1500X, G-1870X and G-3000X channel joiners for lay-in wiring

Cat. No.	For use with channel no.	Weight (lbs/C)
G-1500-X	B-900 & G-975	44
G-1870-X	B-901 & G-965	51
G-3000-X	B-902 & G-955	79



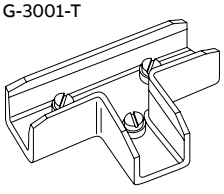


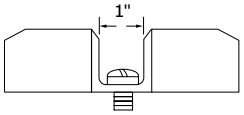


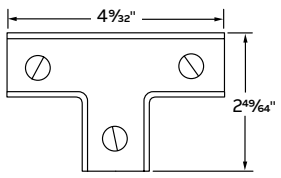
Galv-Krom® finish.

T-Style – Cast aluminium G-1501T, G-1871T and G-3001T channel joiners for lay-in wiring

Cat. No.	For use with channel no.	Weight (lbs/C)
G-1501-T	B-900 & G-975	34
G-1871-T	B-901 & G-965	45
G-3001-T	B-902 & G-955	66







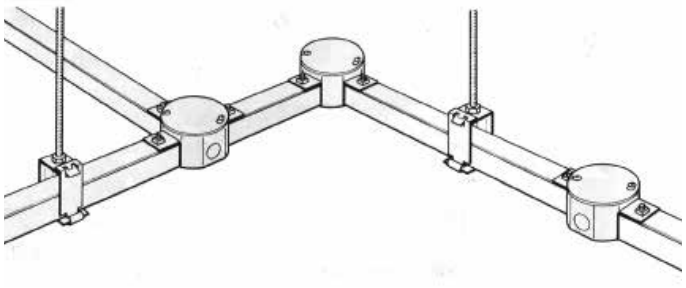
Galv-Krom® finish.

Surface raceway and lighting support systems

Kindorf® Raceway system fittings & L-style channel joiners

Kindorf® Raceway system fittings for 1½" x 1½" channel systems

Assembly components	Quantity
Octagon box	1
Box cover	1
Locknuts	1, 2, 3 or 4 (as required)
Nipples	1, 2, 3 or 4 (as required)
End caps	1, 2, 3 or 4 (as required)



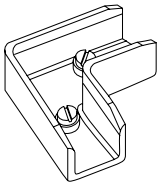
The Kindorf® Channel system serves both as a raceway for electrical conductors and a support system for the electrical outlets or tap-offs. Kindorf® is a complete wiring and support system with fittings and accessories for the design and installation of your electrical system.

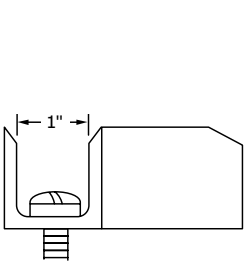
A full line of direction change junction boxes are provided for use with the Kindorf® raceway system. These are made up of a standard Steel City® octagon box, box cover and attachment fittings. Assemblies as shown are available complete, or members can be purchased separately to make up a junction.

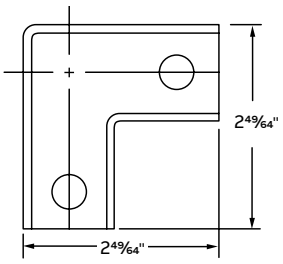
Junction boxes for 1½" x 1½" raceway channels – Galv-Krom® finish
When purchased as an assembly, the octagon box and cover are Galv-Krom® finish to match the channel and end cap and all parts are factory fabricated.

L-Style – Cast aluminium G-1502L, G-1872L and G-3002L channel joiners for lay-in wiring

Cat. No.	For use with channel no.	Weight (lbs/C)
G-1502-L	B-900 & G-975	25
G-1872-L	B-901 & G-965	32
G-3002-L	B-902 & G-955	51



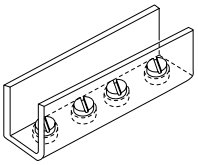


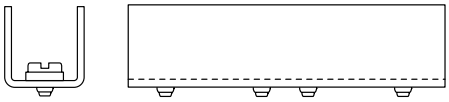


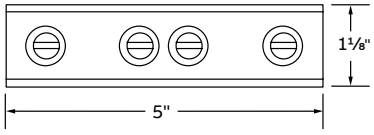
Galv-Krom® finish.

L-Style – G-1503S, G-1873S and G-3003S channel joiners for lay-in wiring

Cat. No.	For use with channel no.	Weight (lbs/C)
G-1501-T	B-900 & G-975	21
G-1871-T	B-901 & G-965	25
G-3001-T	B-902 & G-955	36







Galv-Krom® finish.

Surface raceway and lighting support systems

Raceway junction boxes

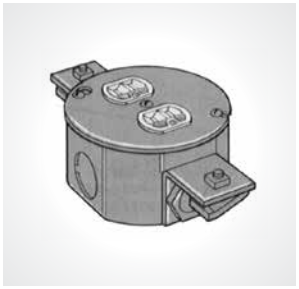
01

02

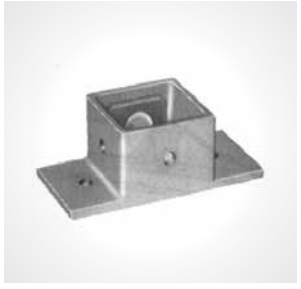
03

04

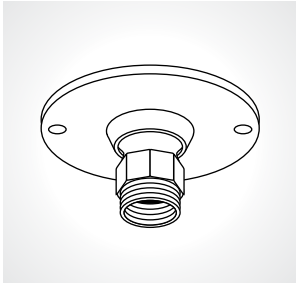
05



06



07



08

01 **G-2000** Type “E”
100 lbs/C

02 **G-2001** Type “C”
121 lbs/C

03 **G-2002** Type “L” 90°

04 **G-2003** Type “T”
140 lbs/C

05 **G-2004** Type “X”
150 lbs/C

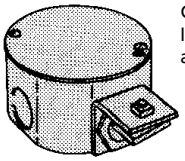
06 **G-2001** Junction box with 5402-LR outlet box cover and field mounted duplex receptacle.

07 **G-2003** Type “T”
140 lbs/C

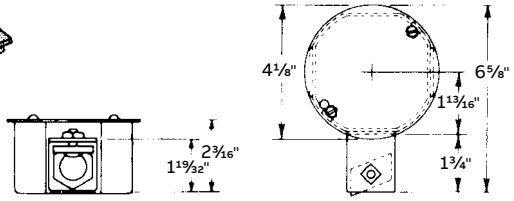
08 **G-1033** for ½" or ¾" conduit feed from outlet box 35 lbs/C

G-2000 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2000	Galv-Krom® finish	123



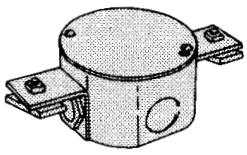
Complete with cover, locknuts, nipples and end caps.



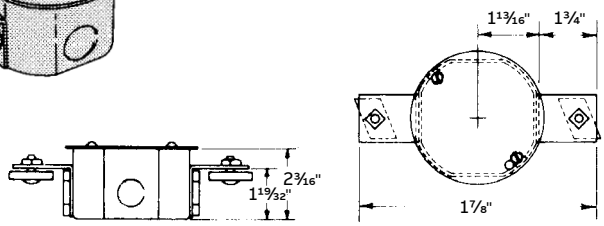
Type “E” dead end junction box for raceway channel.
Accepts standard devices and covers for 4" octagon outlet boxes.

G-2001 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2001	Galv-Krom® finish	147



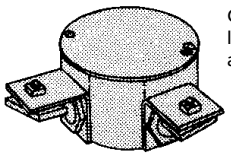
Complete with cover, locknuts, nipples and end caps.



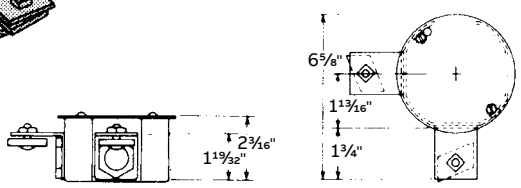
Type “C” straight through junction box for two raceway channels.
Accepts standard devices and covers for 4" octagon outlet boxes.

G-2002 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2002	Galv-Krom® finish	120



Complete with cover, locknuts, nipples and end caps.



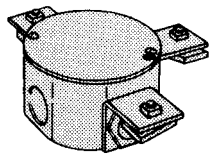
Type “L” 90° junction box for two raceway channels.
Accepts standard devices and covers for 4" octagon outlet boxes.

Surface raceway and lighting support systems

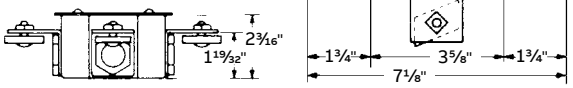
Junction boxes

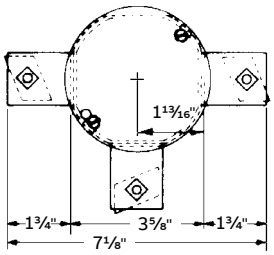
G-2003 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2003	Galv-Krom® finish	140



Complete with cover, locknuts, nipples and end caps.

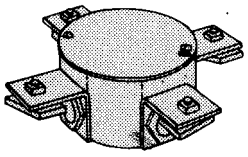




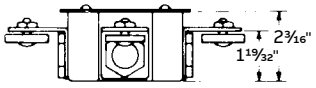
Type “T” junction box for three raceway channels.
Accepts standard devices and covers for 4" octagon outlet boxes.

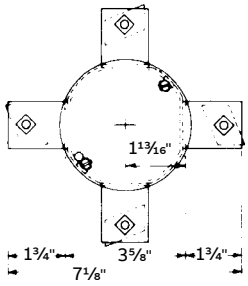
G-2004 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2004	Galv-Krom® finish	150



Complete with cover, locknuts, nipples and end caps.

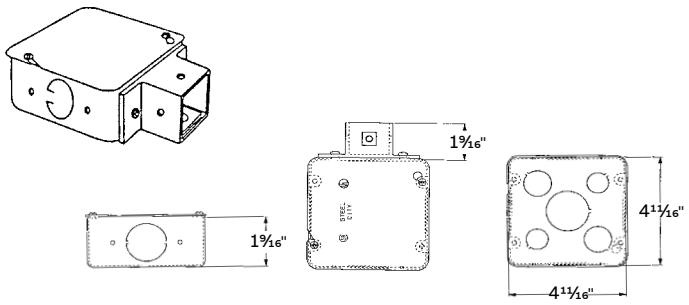




Type “X” junction box for four raceway channels.
Accepts standard devices and covers for 4" octagon outlet boxes.

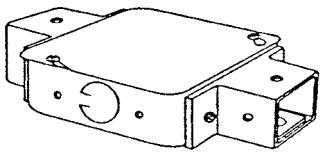
G-2005 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2005	Galv-Krom® finish	189



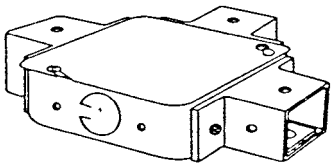
G-2006 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2006	Galv-Krom® finish	225



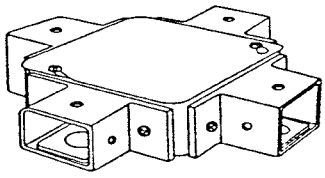
G-2007 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2007	Galv-Krom® finish	261



G-2008 Junction box

Cat. No.	Description	Weight (lbs/C)
G-2008	Galv-Krom® finish	290



Hardware and threaded components

H104 Hanger rod, continuous thread – Galv-Krom®

Cat. No.	Size	Weight (lbs/100 PCS)
H104-1/4X6	¼" – 20	73
H104-1/4X10		124
H104-1/4X12		148
H104-3/8X6	⅜" – 16	172
H104-3/8X10		293
H104-3/8X12		348
H104-1/2X6	½" – 13	313
H104-1/2X10		530
H104-1/2X12		648
H104-5/8X6	⅝" – 11	510
H104-5/8X10		850
H104-5/8X12		1,020

Suffix indicates rod size and length.

H104-EG Hanger rod, continuous thread – SilverGalv®

Cat. No.	Size	Weight (lbs/100 PCS)
H104-1/4X6-EG	¼" – 20	73
H104-1/4X10-EG		124
H104-1/4X12-EG		148
H104-3/8X6-EG	⅜" – 16	172
H104-3/8X10-EG		293
H104-3/8X12-EG		348
H104-1/2X6-EG	½" – 13	313
H104-1/2X10-EG		530
H104-1/2X12-EG		648
H104-5/8X6-EG	⅝" – 11	510
H104-5/8X10-EG		850
H104-5/8X12-EG		1,020

Suffix indicates rod size and length.

National coarse thread

Size (in)	Threads per inch	(lbs/100 ft)	Design load (lbs)
¼	20	12.5	150
⅜	16	29	610
½	13	53.5	1,130
⅝	11	85	1,810
¾	10	123	2,710
⅞	9	130	3,770
1	8	214	4,960

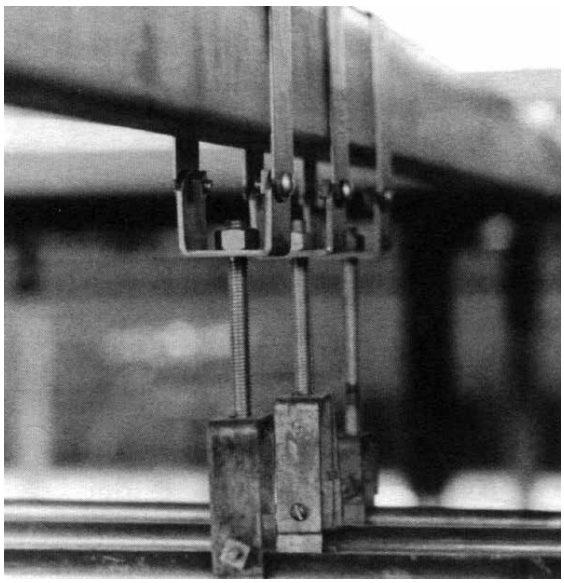
Grade ASTM A-510.

"Threads" are an integral part of erector systems because nearly everything hangs by or is secured by threaded fasteners. Kindorf® threaded hardware includes continuous rolled-thread hanger rod, and special and standard screws and nuts designed with the necessary holding power to serve the requirements of framing and hanging installations.

It is vital that each thread be fully protected against rust and corrosion because they are usually exposed to corrosive atmospheres. Kindorf® threaded hardware and accessories are completely protected by the same Galv-Krom® finish that protects Kindorf® channel and fittings. Kindorf® extra-quality threads are always:

- Free-running – clean, uniform
- Corrosion resistant – no paint required
- Burr-free – smooth finish

Trouble-free threaded hardware is an investment in fast installation and low maintenance. Free-running threads are a time saving asset on every job – saving fingers and tempers, and eliminating delays that result when threads must be specially treated before use. Threaded rod is packed in tubes to prevent damage during shipment. Kindorf® threaded hardware is produced from high-tensile strength carbon steel with Unified National Coarse (U.N.C.) threads. Galv-Krom® finish is standard.



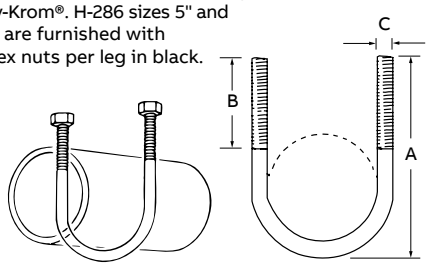
Hardware and threaded components

U-bolts, swivel eye, rod coupling, eyelet or stud & saddle-type washer

H115 U-Bolts

Cat. No. & pipe size	Rec. max. load (lbs)	Dimensions (in) A	B	C	Weight (lbs/C)
H115-1/2	1,500	2¾	1¾	5/16	13
H115-3/4	2,000	3 1/16	1¾	5/16	15
H115-1	2,500	3 5/16	1⅞	5/16	16
H115-1-1/4	2,500	3½	1¾	5/16	17
H115-1-1/2	2,500	3¾	1¾	5/16	18
H115-2	3,300	4 11/16	2 1/16	⅜	32
H115-2-1/2	4,000	5⅛	2 1/16	⅜	34
H115-3	4,000	5 11/16	2	⅜	38
H115-3-1/2	4,000	6 3/16	2	⅜	40
H115-4	4,000	6 15/16	2¼	⅜	46
H115-5	4,000	8 5/32	2¼	½	128
H115-6	4,000	9¾	2⅝	⅝	239
H115-8	4,000	11¾	2⅝	⅝	283

"U" bolt to support, anchor or guide pipe lines. Sizes through 4" are furnished with one hex nut per leg in Galv-Krom®. H-286 sizes 5" and above are furnished with two hex nuts per leg in black.

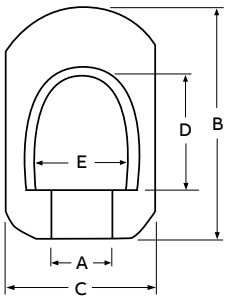


Complies with Fed. Spec.
WW-H-171E and MSS SP-69 Type 24.

H-272 Swivel eye

Cat. No.	Dimensions (in) A	B	C	D	E	Load rating (lbs)	Weight (lbs/C)
H115-1/2	⅜ – 16	2¾	1½	1 3/16	⅞	2,000	19
H115-3/4	½ – 13	2¾	1½	1 3/16	⅞	2,000	19

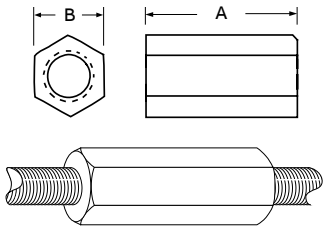
H-272 swivel eye has ⅜" or ½" tapped hole for hanger rod applications.



Safety factor of 3.

H119 Steel rod coupling

Cat. No.	Threads	Dimensions (in) A	B	Load rating (lbs)	Weight (lbs/C)
H119-1/4	¼ – 20	⅞	⅜	240	2
H119-3/8	⅜ – 16	1½	½	610	4
H119-1/2	½ – 13	1¼	⅝	1,130	5
H119-5/8	⅝ – 11	1⅞	13/16	1,810	10



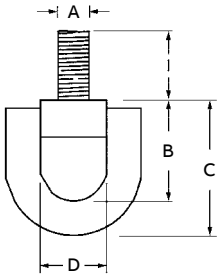
For coupling lengths of H-193 hanger rod. Right-hand threaded. Threads tapered to lock rods in place.

Galv-Krom® finish.

E120, E130 Eyelet with ½" or ⅜" Stud

Cat. No.	Dimensions (in) A	B	C	D	Load rating (lbs)	Weight (lbs/C)
E120-3/8	⅜ – 16	1⅜	1¾	½	1,000	23
E130-1/2	½ – 13	1½	2	¾	1,800	28

For bolting to a supporting member to furnish suspension for rope, chain or cable.



Galv-Krom® finish.

H-120 Saddle-type washer

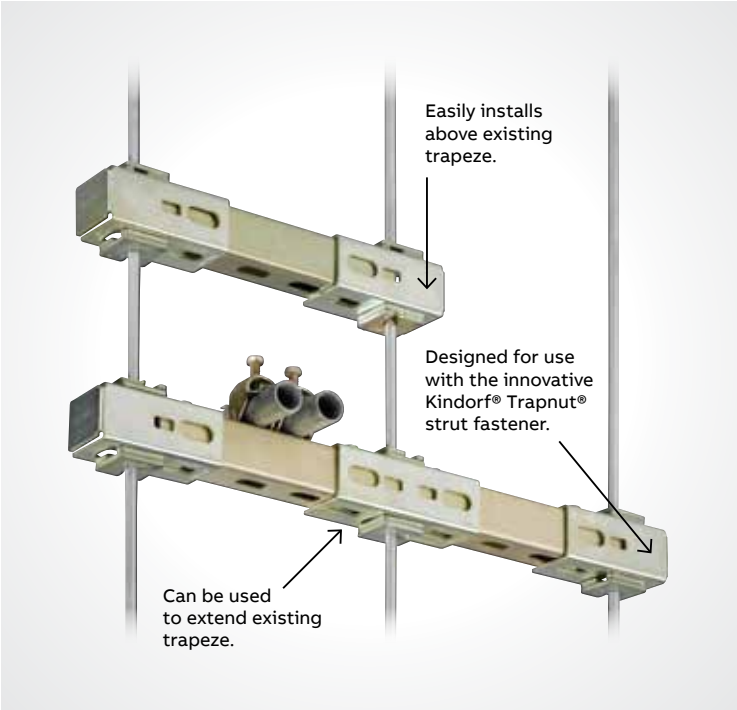
Cat. No.	Weight (lbs/C)
H-120	7

For rigid attachment of rod to channel.
For use with either 3/8" or 1/2" hanger rod.

Standard finish: Galv-Krom® unless otherwise specified.

Hardware and threaded components

Trap-Eze™ connector & Trapnut® strut fastener



"Threads" are an integral part of erector systems because nearly everything hangs by or is secured by threaded fasteners. Kindorf® threaded hardware includes continuous rolled-thread hanger rod, and special and standard screws and nuts designed with the necessary holding power to serve the requirements of framing and hanging installations. It is vital that each thread be fully protected against rust and corrosion because they are usually exposed to corrosive atmospheres. Kindorf® threaded hardware and accessories are completely protected by the same Galv-Krom® finish that protects Kindorf® channel and fittings. Kindorf® extra-quality threads are always:

- Easily installs above or to the side of an existing assembly, eliminating the need to disassemble and reassemble the trapeze
- Connectors can be reused upon disassembly of a trapeze
- Designed for either ⅜" and ½" threaded rod
- Designed for use with the innovative Kindorf® Trapnut® Strut Fastener, which can take up to 43% less time than standard nuts and washers on retrofit trapeze applications
- View window provides safety zone for strut length

Trap-Eze™ Connector

Cat. No.	Description	Std. Ctn.
For 1½" Kindorf® channels		
B998	Trap-Eze™ End connector gold-galv	20
B999	Trap-Eze™ Mid connector gold-galv	10
B998EG	Trap-Eze™ End connector EG	20
B999EG	Trap-Eze™ Mid connector EG	10
For 1⅝" strut channels		
AB221	Trap-Eze™ End connector gold-galv	20
AB222	Trap-Eze™ Mid connector gold-galv	10
AB221EG	Trap-Eze™ End connector EG	20
AB222EG	Trap-Eze™ Mid connector EG	10

View window provides strut length safety zone for rough cuts versus precision cuts.

Unique safety slot maintains bracket position on threaded rod and prevents disengagement of the trapeze system.

Trapnut® Strut fastener

Cat. No.	Description	Size (in)	Design load (lbs)	Std. Ctn.
H-122-1/4	¼" Galv-Krom®	¼	150	50
H-122-3/8	⅜" Galv-Krom®	⅜	590	50
H-122-1/2	½" Galv-Krom®	½	1,080	50
H-122-1/4-EG	¼" SilverGalv®	¼	150	50
H-122-3/8-EG	⅜" SilverGalv®	⅜	590	50
H-122-1/2-EG	½" SilverGalv®	½	1,080	50
H-122-1/4-SS6	¼" Type 316 Stainless steel	¼	150	50
H-122-3/8-SS6	⅜" Type 316 Stainless steel	⅜	590	50
H-122-1/2-SS6	½" Type 316 Stainless steel	½	1,080	50

H 122 3/8 Trapnut® strut fastener Galv-Krom®.

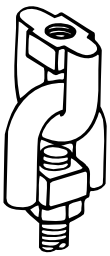
H 122 3/8 EG Trapnut® strut fastener SilverGalv®.

Hardware and threaded components

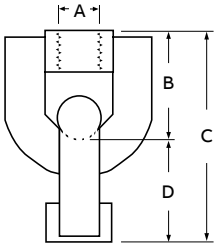
Swivel joint, stud, spacer assembly & hex head cap screw

E122 Swivel joint

Cat. No.	Dimensions (in) A	B	C	Load rating	Weight (lbs/C)
E122-3/8	⅜ – 16	1⅜	2¾	1,000	28
E122-1/2	½ – 13	1½	3	1,800	48



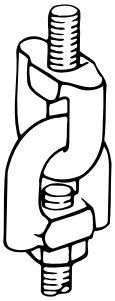
Permits hanger rod to swing freely in any direction.



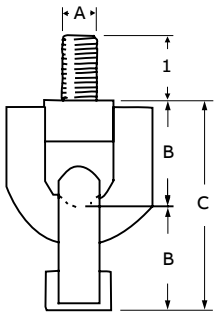
Safety factor of 3.
Galv-Krom® finish.

H115 U-Bolts

Cat. No.	Dimensions (in) A	B	C	Load rating	Weight (lbs/C)
E122-3/8	⅜ – 16	1⅜	2¾	1,000	25
E122-1/2	½ – 13	1½	3	1,800	52



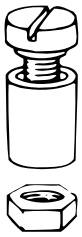
Same as H-260 but with a ⅜" or ½" stud on one end.



Safety factor of 3.
Galv-Krom® finish.

H-134-S Spacer assembly

Cat. No.	Weight (lbs/C)
H-134-S	21



Used for attaching fixture to channel with a uniform 1" clearance between fixture and supporting channel. Assembly includes a 1" spacer, a ⅝" – 18 x 1½" bolt and jam nut, all galvanized.

Approved for G.S.A. installations.

E142 Hex head cap screw – Less nut

Cat. No.	Sizes (in)	Weight (lbs/C)
B998	½ – 13 x ¾	7.0
B999	½ – 13 x 1	9.0
AB222	½ – 13 x 1	9.0
AB221EG	½ – 13 x 1¼	9.0
B999	½ – 13 x 1½	10.0
AB222	½ – 13 x 1¾	13.0
AB221EG	½ – 13 x 2	14.0
B999	½ – 13 x 2¼	16.0
AB222	½ – 13 x 2½	16.0
AB221EG	½ – 13 x 3	20.0
B999	½ – 13 x 4	25.0
AB222	⅜ – 16 x ¾	3.0
AB221EG	⅜ – 16 x 1	4.0
B999	⅜ – 13 x 1⁶¹⁄₆₄	4.0
AB222	⅜ – 16 x 1½	5.0
AB221EG	⅜ – 16 x 1¾	6.0
B999	⅜ – 16 x 2¼	7.0
AB222	⅜ – 16 x 2¼	7.0
B999	¼ x ¾	1.0
AB222	¼ x 1	1.0
AB221EG	¼ x 1¼	1.5
AB222EG	¼ x 1½	2.0

Standard finish: Galv-Krom® unless otherwise specified.

Hardware and threaded components

Nuts, washers and beam clamp

E145 Hex nut

Cat. No.	Size (in)	Weight (lbs/C)
E145-1/4	¼ – 20	1.2
E145-5/16	5/16 – 18	2.0
E145-3/8	⅜ – 16	3.2
E145-1/2	½ – 13	5.0
E145-3/8	⅝ – 11	9.0

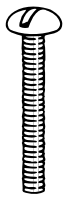
Standard finish: Galv-Krom® unless otherwise specified.

E146 Square nut

Cat. No.	Size (in)	Weight (lbs/C)
E146-1/4	¼ – 20	1.00
E146-5/16	5/16 – 18	2.40
E146-3/8	⅜ – 16	2.37
E146-1/2	½ – 13	6.00
E146-5/8	⅝ – 11	11.00

Standard finish: Galv-Krom® unless otherwise specified.

54, E149 Round head machine screw – Less nut



Cat. No.	Size (in)	Weight (lbs/C)
E146-1/4	¼ – 20 x ½	1.00
E146-5/16	¼ – 20 x ¾	1.25
E146-3/8	¼ – 20 x 1¼	1.76
E146-1/2	¼ – 20 x 2	2.54
E146-5/8	⅜ – 16 x ¾	3.45

Standard finish: Galv-Krom® unless otherwise specified.

E147 Flat steel washer

Cat. No.	Size (in)	Weight (lbs/C)
E147-1/4	¼	0.67
E147-5/16	5/16	1.20
E147-3/8	⅜	2.00
E147-1/2	½	3.85
E147-5/8	⅝	7.70
E147-3/4	¾	9.00

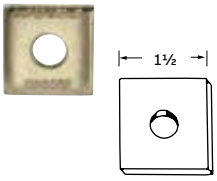
Standard finish: Galv-Krom® unless otherwise specified.

E148 Lock washer

Cat. No.	Size (in)	Weight (lbs/C)
E148-1/4	¼	0.259
E148-5/16	5/16	0.550
E148-3/8	⅜	0.630
E148-1/2	½	1.436
E148-5/8	⅝	2.587
E148-3/4	¾	4.293

Standard finish: Galv-Krom® unless otherwise specified.

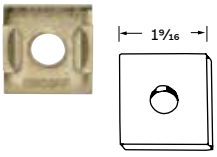
AB241 Square washer



Cat. No.	Dimensions (in) Size	Dimensions (in) Thickness	Weight (lbs/C)
E122-3/8	¼	⅛	8.10
E122-1/2	5/16	⅛	8.00
E122-1/2	⅜	3/16	11.50
E122-1/2	½	¼	14.36
E122-1/2	⅝	¼	13.50
E122-1/2	¾	¼	12.50
E122-1/2	⅞	¼	13.00

Standard finish: Galv-Krom® unless otherwise specified.

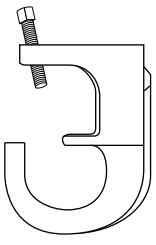
Located square washers



Cat. No.	Bolt size (in)	Weight (lbs/C)
E122-3/8	¼	100
E122-1/2	5/16	100
E122-1/2	⅜	100
E122-1/2	½	100
E122-1/2	⅝	100

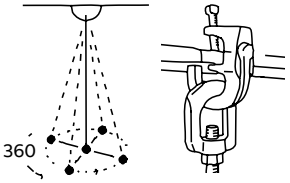
GoldGalv® is standard finish.
Add “EG” suffix for SilverGalv®.

H-550 Swivel beam clamp



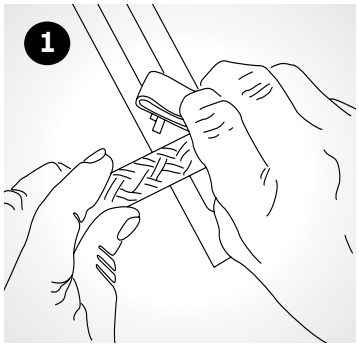
Cat. No.	Description	Weight (lbs/C)
H-550	Max. load rating 500 lbs. with a safety factor of 3	33

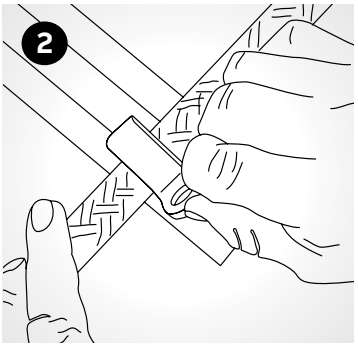
One-piece malleable-iron casting. Attaches to beam flanges up to 3/4" thickness.

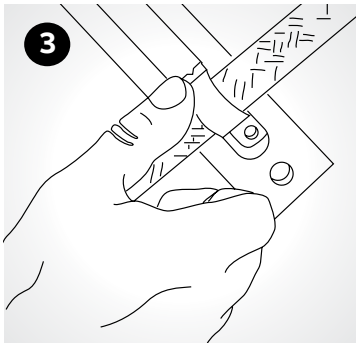


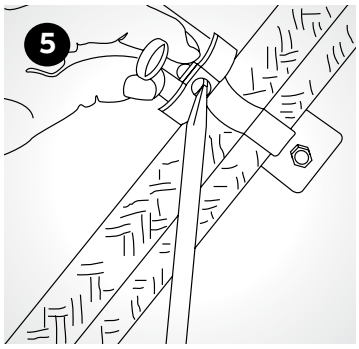
Galv-Krom® finish.

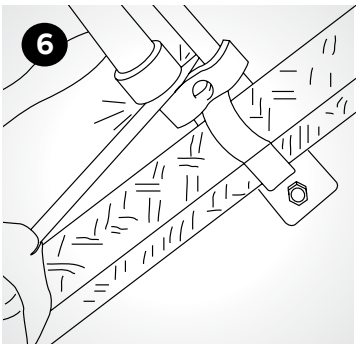
Cable and mounting systems
Kindorf® J-800 system









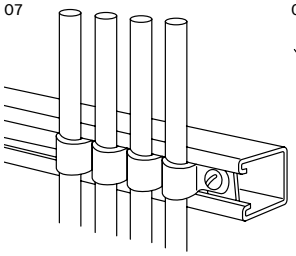


Designed originally to eliminate costly and time consuming methods of installing cables aboard ships, the Kindorf® J-800 series of straps, hangers and brackets has found ever-widening applications by mechanical and electrical contractors in general construction. The J-800 system has proven to be a work-saver when used to install tubing or cable. Tubing and cable of various construction and fabrication can be racked efficiently with built-in provisions for making additions or changes at a later date. They can be secured in all combinations and sequences of sizes. A variety of hangers and brackets secures multiple runs as well as single branch take-offs.

Installation of J-800 straps on Kindorf® supports is simple, requiring only a screwdriver or small wrench. Each run is gripped individually on a hanger and all runs are secured by tightening a single locking device. Loosening the locking device permits fast access to the runs, making it easy to add, remove or adjust them at any time.

J-800 installations have withstood the severe conditions of service at sea for many years. In countless installations, they have proven their ability to withstand the effects of salt air, moisture, shock and vibration. J-800 racking is well known for its fast, yet precise, installation method. A proven method that results in labor economy and neat, workman-like installation.

—
07



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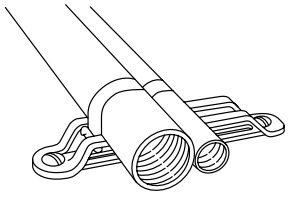

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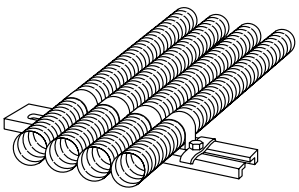

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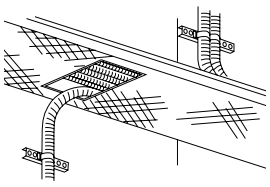


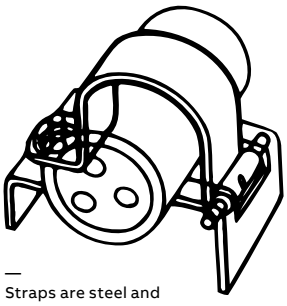
—
01 Insert pin of strap in slot of hanger.
—
02 Close Kindorf® cable strap down over cable.
—
03 Push strap and cable to end of hanger slot so tongue of strap hooks below slot.

—
04 Apply second cable strap, hooking strap tongue under pin of first strap.
—
05 Apply locking device and tighten screw moderately.
—
06 Drive locking device tight against cable strap. Tighten locking device screw.

—
07 Copper tubing.
—
08 Shipboard cables.
—
09 Flexible tubing.
—
10 Armored cable (Take-off from cable tray).

Cable and mounting systems

J-800 Interlocking straps



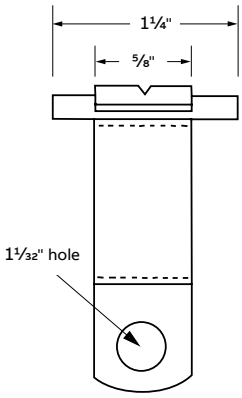
Straps are steel and have Galv-Krom® finish.

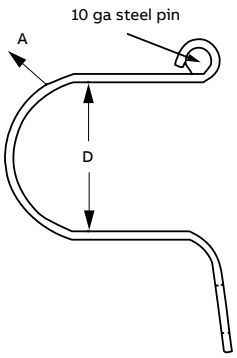
One J-800 strap of the proper diameter is used to secure each run. All straps have a 1¼" pin. In multiple runs the pin is simply twist inserted into the supporting Kindorf® hanger, bracket or channel slot then the strap is closed over the cable or tube to lock the strap tongue under the pin of the adjacent strap.

The same procedure is used for single runs, except the strap tongue is secured directly to the hanger. When all multiple runs have been assembled, they are secured by a single locking device.

J-800 straps can be installed along the continuous slot of any Kindorf® channel. This increases their versatility and extends their possible applications.

J-800 Interlocking straps





Cat. No. & size	Strap size	A Gauge	Dimensions (in)	Weight (lbs/C)	Use in new Kindorf®	Use in old Kindorf®	Use in J Series mountings
J 800 8	8	18	.2500	2.50	–	.250	.250
J-800-10	10	18	.3124	2.60	–	.313	.313
J-800-12	12	18	.3750	2.75	.250	.375	.375
J-800-14	14	18	.4375	2.90	.313	.438	.438
J-800-16	16	18	.5000	2.75	.375	.500	.500
J-800-18	18	18	.5625	2.90	.438	.563	.563
J-800-20	20	18	.6250	3.35	.500	.625	.625
J-800-22	22	18	.6875	3.50	.563	.688	.688
J-800-24	24	18	.7500	3.65	.625	.750	.750
J-800-26	26	18	.8125	3.80	.688	.813	.813
J-800-28	28	18	.8750	3.95	.750	.875	.875
J-800-30	30	18	.9375	4.10	.813	.938	.938
J-800-32	32	18	1.0000	4.25	.875	1.000	1.000
J-800-34	34	18	1.0625	4.40	.938	1.063	1.063
J-800-36	36	18	1.1250	4.55	1.000	1.125	1.125
J-800-38	38	18	1.1875	4.70	1.063	1.188	1.188
J-800-40	40	18	1.2500	4.85	1.125	1.250	1.250
J-800-42	42	18	1.3125	5.00	1.188	1.313	1.313
J-800-44	44	18	1.3750	5.15	1.250	1.375	1.375
J-800-46	46	18	1.4375	5.30	1.313	1.438	1.438
J-800-48	48	18	1.5000	5.45	1.375	1.500	1.500
J-800-50	50	16	1.5625	6.38	1.438	1.563	1.563
J-800-52	52	16	1.6250	6.55	1.500	1.625	1.625
J-800-54	54	16	1.6875	6.73	1.563	1.688	1.688
J-800-56	56	16	1.7500	6.90	1.625	1.750	1.750
J-800-58	58	16	1.8125	7.08	1.688	1.813	1.813
J-800-60	60	16	1.8750	7.25	1.750	1.875	1.875
J-800-62	62	16	1.9375	7.43	1.813	1.938	1.938
J-800-64	64	16	2.0000	7.6	1.875	2.000	2.000
J-800-68	68	16	2.1250	7.95	1.938	2.063	2.063
J-800-72	72	16	2.2500	8.30	2.000	2.250	2.250
J-800-76	76	16	2.3750	8.65	2.125	2.375	2.375
J-800-80	80	16	2.5000	9.00	2.250	2.500	2.500
J-800-84	84	16	2.6250	9.35	2.375	2.625	2.625

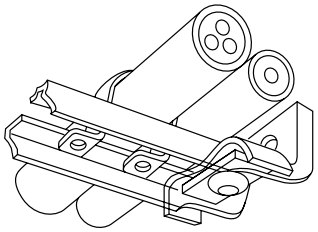
Separate strap sizes rack ¼" through 2⅝" dia. rounds in ¹⁄₁₆" increments.

Cable and mounting systems

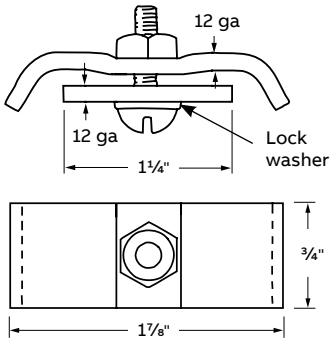
Locking devices

J-850 Locking device

Cat. No.	Description
J-850	Steel, Galv-Krom® finish, 11 lbs/C



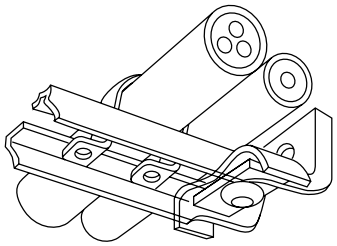
Secures single or multiple interlocked assemblies on bar hangers, mounting brackets and continuous slot channel. For installations not subject to severe shock.



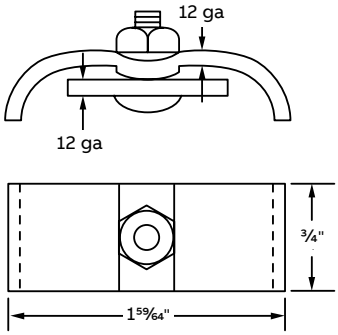
Includes ¼" screw, nut and lock washer.

J-851 Locking device

Cat. No.	Description
J-851	Steel, Galv-Krom® finish, 11 lbs/C



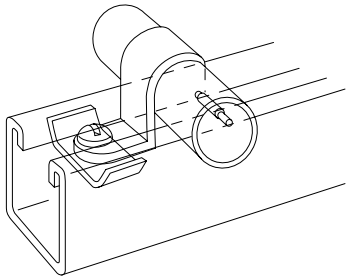
Two required for each G-1012 channel hanger to provide swivel action.



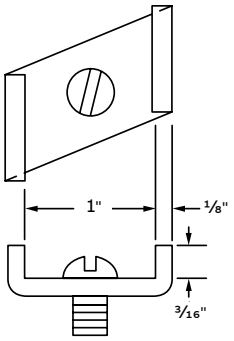
Includes ¼" screw, nut and lock washer.

J-852 Locking device

Cat. No.	Description
J-852	Steel, Galv-Krom® finish, 11 lbs/C

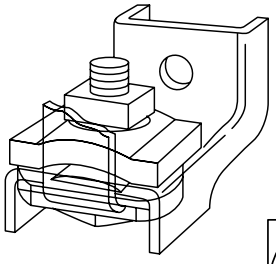


Secures single or multiple interlocked assemblies on bar hangers, mounting brackets and continuous slot channels. Designed for use with B-900 Kindorf channels.

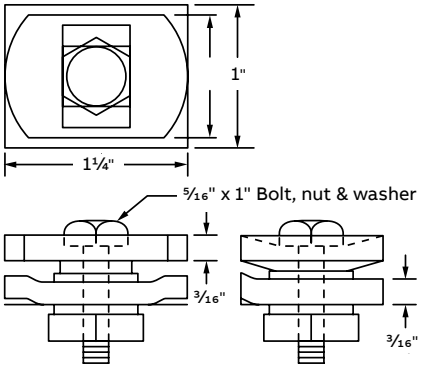


J-855 Locking device – Heavy-Duty

Cat. No.	Description
J-855	Steel, Galv-Krom® finish, 11 lbs/C



For use with channel-type hangers in installations subject to extreme shock.



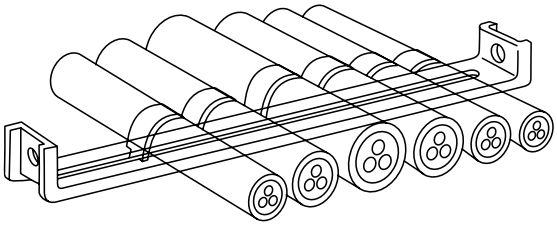
Includes ⁵⁄₁₆" bolt, nut and washer.

Cable and mounting systems

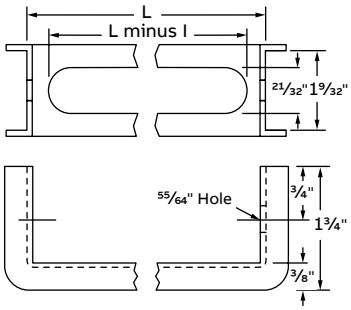
Mounting brackets

J-860 Mounting brackets

Cat. No.	Dimension L (in)	Weight (lbs/C)
J-860-6	6	42
J-860-9	9	48
J-860-12	12	59

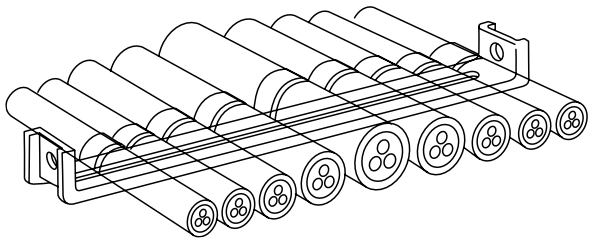


U-style channel, 12 ga steel, with Galv-Krom® finish, ⅜" turned edge. Six sizes.

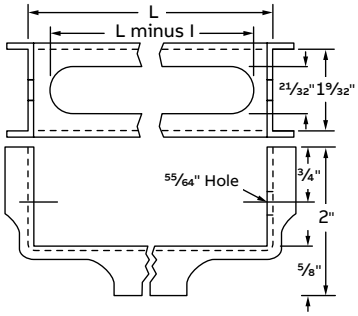


J-861 Mounting brackets

Cat. No.	Dimension L (in)	Weight (lbs/C)
J-861-10	10	64
J-861-12	12	73
J-861-14	14	86
J-861-15	15	89
J-861-16	16	96
J-861-18	18	100

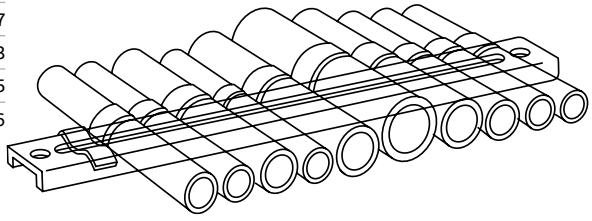


U-style channel, 12 ga steel, with Galv-Krom® finish, ⅝" turned edge. Six sizes.

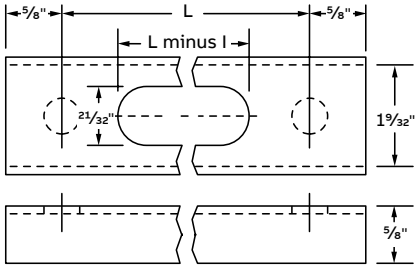


J-863 Mounting brackets

Cat. No.	Dimension L (in)	Weight (lbs/C)
J-863-6	6	42
J-863-9	9	57
J-863-12	12	73
J-863-15	15	85
J-863-18	18	106



Straight, heavy-duty channel. 12 ga steel, with Galv-Krom® finish. Five sizes.

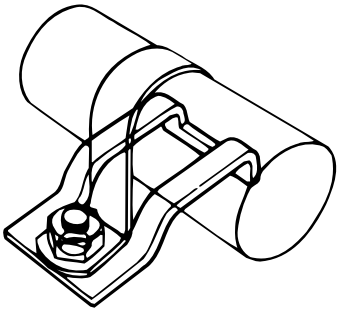


Cable and mounting systems

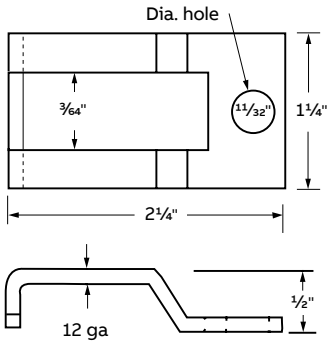
Bar hangers

J-865 Bar hanger

Cat. No.	Description
J-865	Steel, Galv-Krom® finish, 6.7 lbs/C

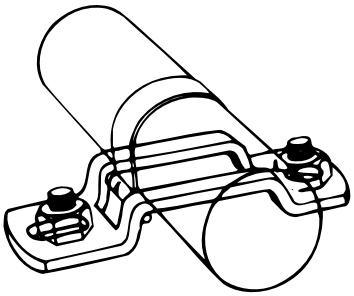


Supports one cable or tube up to 11⁄16" O.D. Only one stud or screw necessary for mounting.

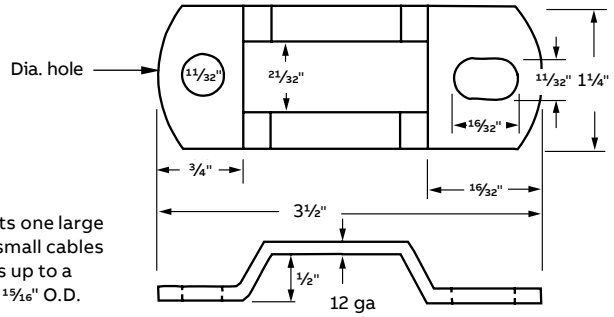


J-866 Bar hanger

Cat. No.	Description
J-866	Steel, Galv-Krom® finish, 9 lbs/C

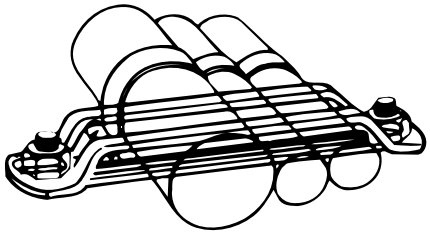


Supports one large or two small cables or tubes up to a total of 15⁄16" O.D.

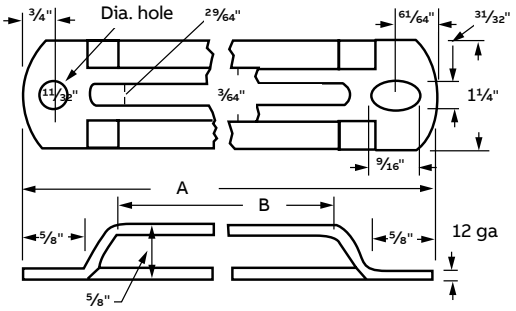


J-867 Bar hanger

Cat. No.	Dimensions (in) A	Dimensions (in) B	Weight (lbs/C)
J-867-1	5⅛	2⅞	15
J-867-2	7⅛	4⅞	20
J-867-3	9⅛	6⅞	27



Cable or tube assembly locks in place with one short ¼" screw and nut. Use two studs, welding pads or bolts to mount.



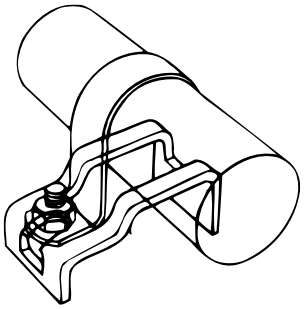
Steel, Galv-Krom® finish.

Cable and mounting systems

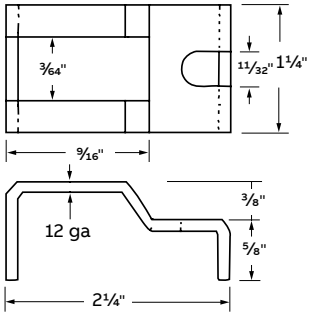
Bar hangers

J-868 Bar hanger

Cat. No.	Description
J 868	Steel, Galv-Krom® finish, 8.3 lbs/C



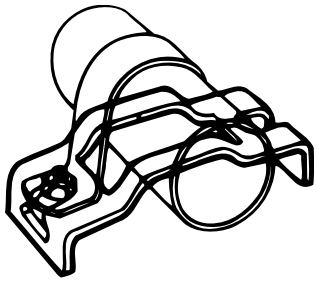
Supports one cable or tube up to 11/16" O.D. Strap fastens to hanger by short machine screw and nut.



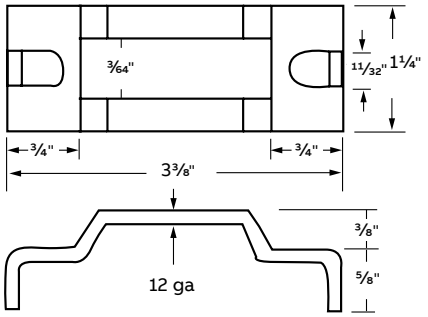
Use one stud or weld to mount.

J-869 Bar hanger

Cat. No.	Description
J-869	Steel, Galv-Krom® finish, 11.2 lbs/C

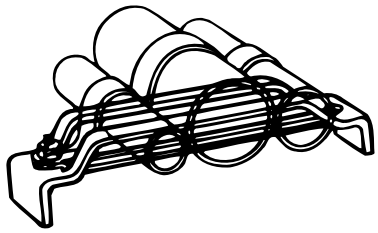


Supports one large or two small cables or tubes up to a total of 15/16" O.D. Both ends of hanger have nut-engaging slot.

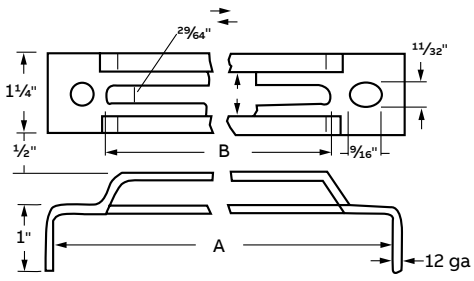


J-870 Bar hanger

Cat. No.	Dimensions (in) A	Dimensions (in) B	Weight (lbs/C)
J-870-1	5 1/8	3 7/16	22.5
J-870-2	7 1/8	5 7/16	28.0
J-870-3	9 1/8	7 7/16	33.3



Supports cable or tube assembly, locked in place with one short 1/4" screw and nut. Mount by welding.



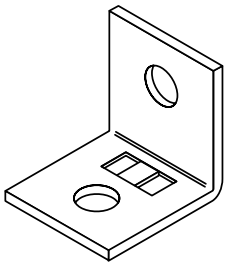
Steel, Galv-Krom® finish.

Cable and mounting systems

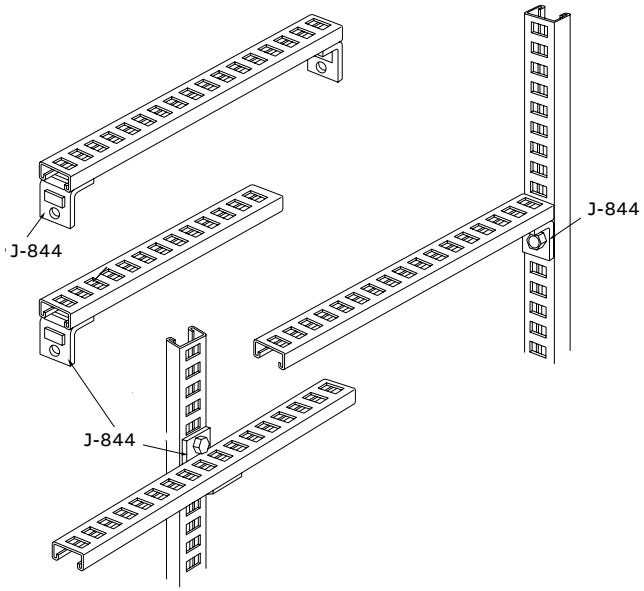
Channel angle connector & slotted channel

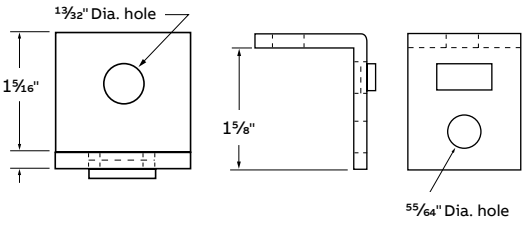
J-844 Channel angle connector

Cat. No.	Description
J-844	Galv-Krom® finish



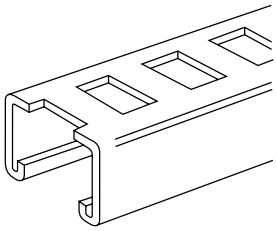
Angle Connector provides "On-the-Job" Versatility for Cable Racking and Mounting.





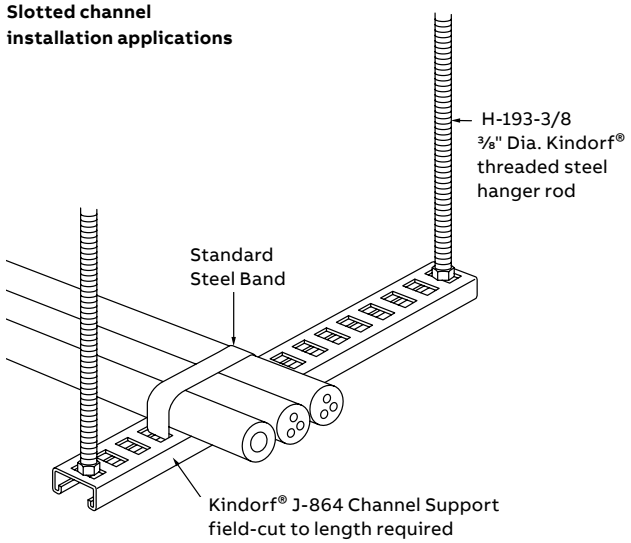
J-864 Slotted channel

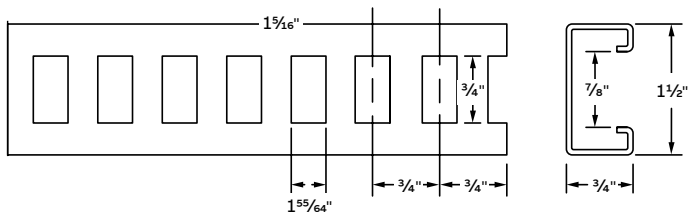
Cat. No.	Description	Weight (lbs/C)
Mount, band or support at any slot		
J-864	10' Length 3⁄4" deep Kindorf® slotted channel	65



10' length slotted channel provides "cut to length" versatility. For use with standard marine steel banding. Uniformly spaced slot size 13⁄32" x 3⁄4" spaced on 3⁄4" centers. Cut anywhere along entire length.

Slotted channel installation applications





Galv-Krom® finish.

Right angle slotted angle systems

Create the support framing you need
Right Angle is manufactured from commercial-quality steel in three different sizes. The small sizes are 14 ga steel, the larger size is 12 ga steel. With this offering, an endless variety of metal framing requirements can be met, from lightweight supporting needs to larger shelving needs such as inventory storage. One of the legs on all sizes is 1⅝" wide, while the other is either 1⅝", 2⅜" or 3⅛" long. Depending on the frame requirements, a single size can be utilized throughout, or the sizes can be interchanged to get the most efficient usage from the material. This book will serve as a guide to plan and build your structure.

Installation time is reduced – inventory space is minimal
Scribe marks are placed every ¾" which saves planning, layout and cutting time and ensures accuracy. The exclusive slot and hole pattern, repeated every 3", is scientifically designed for ease of assembly and rigidity. No welding is necessary, no holes to drill. A 9⁄16" wrench is the only tool required for assembly. The proper nuts and bolts are included with the material to ensure fast and easy erection.

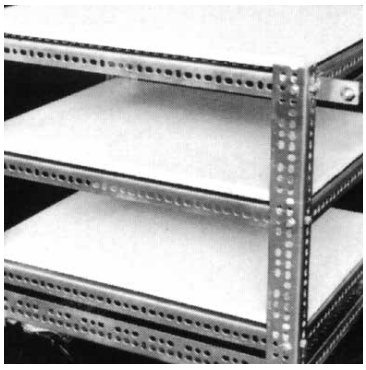
Right Angle Metal Framing is packaged in 10' and 12' lengths to minimize cut offs and ensure maximum use of material. 120' (10 x 12' lengths) of Right Angle takes up the same amount of space as one 2 x 4. A standard package includes five pieces to a bundle, therefore handling and storage space are significantly reduced. The importance of cutting Right Angle easily, quickly and accurately is the key to time saving assembly. The Steel City® Portable Cutter provides these advantages and makes layout and erection of any structure a “light-work” job.

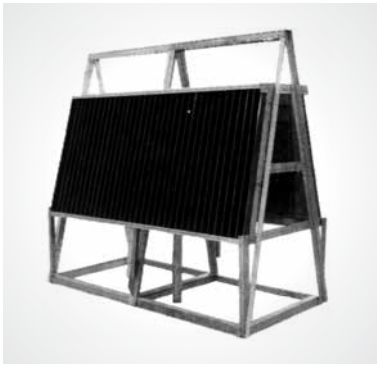
Kindorf® Right Angle comes standard with our Galv-Krom® Finish, which ensures a long-lasting, durable installation
The Galv-Krom® finish is a two-part finishing process that protects the entire system, including all nuts and bolts. The first part of the finish is electro-galvanized zinc that covers the bare steel. The second part is a gold zinc dichromate that is applied over the zinc base.

Three aspects of the Galv-Krom® process are worthy of note:
1. Zinc Coating – In the first part of the Galv-Krom® process, a .5 mil coating of zinc is placed on the bare steel. This ensures the sacrificial quality of any galvanizing and becomes a working finish. The zinc literally sacrifices itself over bare steel and protects cut edges or scratches which may occur during construction. Galv-Krom® is in compliance with ASTM B633-78 Type II coating.

2. Electrogalvanizing – Because the zinc is applied through a temperature-controlled electrolytic process, a cohesive bond with the steel is assured. This prohibits chipping or peeling. It also distributes the zinc evenly so all components – including threads – can be equally protected.

3. Gold Trivalent Chromium Barrier – The second part of the Galv-Krom® finish is a gold trivalent chromium that is applied over the zinc base. This second layer of plating forms a nonporous barrier which protects the underlying zinc and adds additional resistance to corrosion. In addition, the gold trivalent chromium covering provides an excellent base if the surface is to be painted.



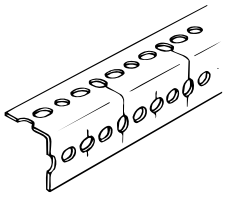


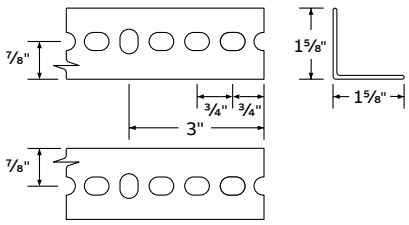
Right angle slotted angle systems

Slotted angle, heavy-duty & extra heavy-duty

Type RA-160 Slotted angle

Cat. No.	Length (ft)	(ft) per pkg.	Weight per 100 ft (lbs)
RA-160-10	10	50	75
RA-160-12	12	60	75



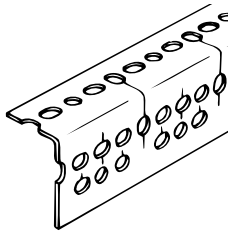


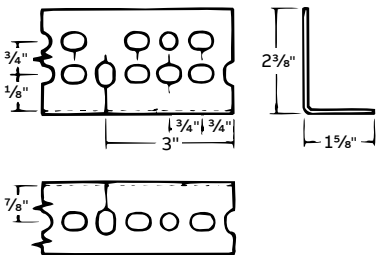
Type RA-160 slotted angle

- 1⅝" x 1⅝" x .080" (14 gauge)
- Designed for light-duty applications where extra strength is not a requirement
- Ideal material for light racking and shelving
- Packaged in five 10 ft or 12 ft lengths complete with thirty-six ⅜" x ⅝" long hex head bolts and nuts
- Standard package 10' lengths: 39 lbs, 12' lengths: 48 lbs

Type RA-225 – For heavy-duty

Cat. No.	Length (ft)	(ft) per pkg.	Weight per 100 ft (lbs)
RA-225-10	10	50	93
RA-225-12	12	60	93



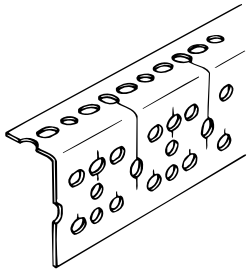


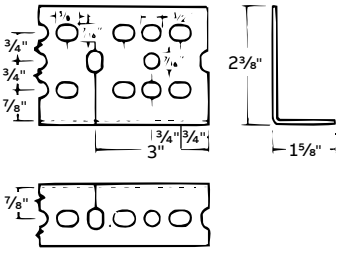
Type RA-225 – For heavy-duty

- 2⅜" x 1⅝" x .080" (14 gauge)
- Wide range versatility for nearly every type of framing
- Well suited for electrical applications
- Slot-and-hole pattern provides ready-made anchoring points for panel-board framing and fixtures of all kinds
- Packaged in five 10 ft or 12 ft lengths complete with thirty-six ⅜" x ⅝" long hex head bolts and nuts
- Standard package 10' lengths: 48 lbs, 12' lengths: 56 lbs

Type RA-300 – For extra heavy-duty

Cat. No.	Length (ft)	(ft) per pkg.	Weight per 100 ft (lbs)
RA-300-10	10	50	135
RA-300-12	12	60	135





Type RA-300 – For extra heavy-duty

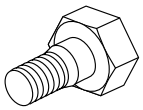
- 3⅛" x 1⅝" x .104" (12 gauge)
- Used where heavy loads are involved
- Racks and shelving for heavy material and large structures such as ramps and balconies are typical uses
- Packaged in five 10 ft or 12 ft lengths complete with thirty-six ⅜" x ¾" long hex head bolts and nuts
- Standard package 10' lengths: 72 lbs, 12' lengths: 84 lbs

Right angle slotted angle systems

Nuts serrated, gusset plate, portable cutter & nylon bushing

Nuts serrated – For self-locking

Cat. No.	Std. Ctn.	Weight per 100 sets
RA-BN-5/8	100	4 lbs, ⅜" – 16 x ⅝"
RA-BN-3/4	100	5 lbs, ⅜" – 16 x ¾"

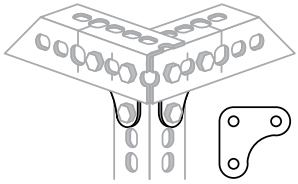


100 sets per package No. RA-BN-5/8, ⅜" – 16 x ⅝" long for RA-160 and RA-225. No. RA-BN-3/4, ⅜" – 16 x ¾" long for RA-300.

A 9⁄16" wrench is only tool needed for assembly.

Gusset plate

Cat. No.	Std. Ctn.	Weight per 100 sets
RA-GP	25	10



Three hole connector for extra rigid angle assembly. For use with all three types of right angle. Galvanized steel. For proper assembly, insert plate between the angle flanges for 3-bolt connection.

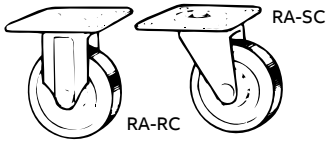
Portable Cutter

Cat. No.	Std. Ctn.	Weight each
RA-C	1	17

Designed for use with all three types of slotted angle. Cuts with single stroke of handle. Produces clean, burr-free cuts.

G-1060 Nylon bushing

Cat. No.	Std. Ctn.	Weight each
RA-RC	2	2
RA-SC	2	3

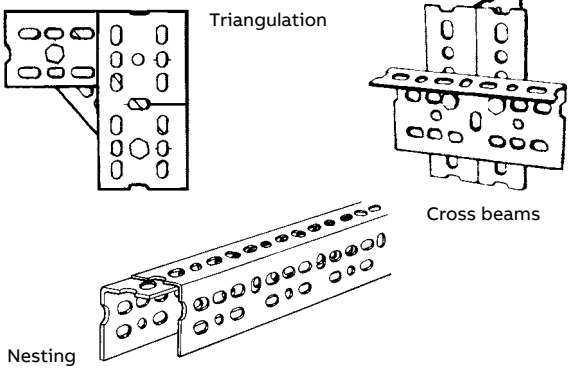


Hard rubber composition. 3½" diameter with load rating of 225 lbs per wheel. Plate has ¹³⁄₃₂" diameter holes for mounting on all three types of slotted angle.

Helpful hints to maximize right angle erection.

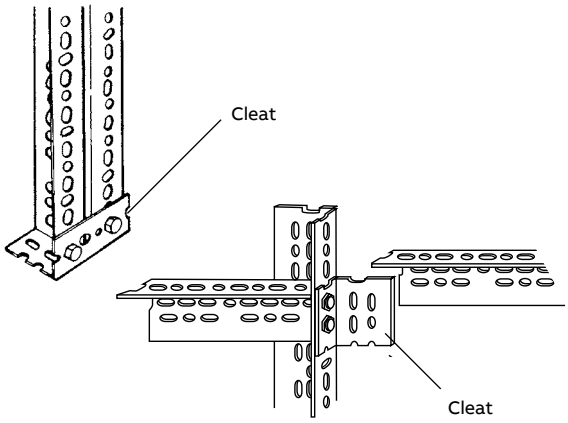
Slot and hole pattern

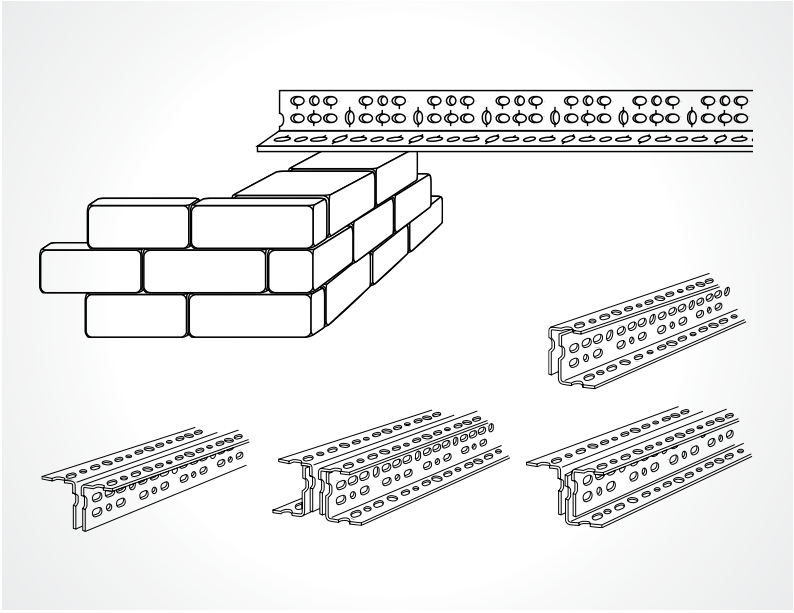
The Right Angle hole pattern is simple and flexible. It is repeated every 3" along the entire length of the Right Angle. An extended line marks the 3" increments (vertical slots), while shorter lines mark every ¾" increment. With this hole pattern, nesting, triangulation, cross beams and many additional combinations are possible.



Cleat sections

Cut Off Cleats are small sections of Right Angle used to reinforce joints or used as feet to support vertical columns. These feet prevent damage to floor surfaces or can be used to bolt a structure to the floor. Additional joints can be made using cut off cleats. Simply butt the cleat against a column and behind a right side beam, as shown in the illustration.



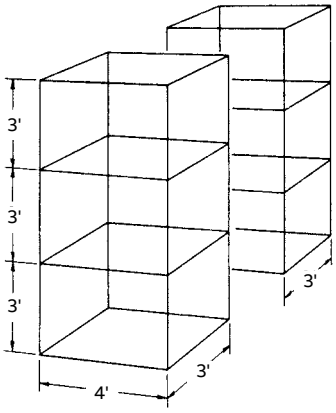


01

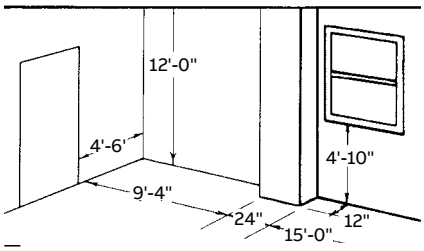
Helpful hints (continued)

When a beam rests on a ledge of other material (such as a wall) the long flange should extend upward. Right Angle beams are at their strongest when assembled with the long flange downward. Vertical columns may be in either direction. Place short flange of vertical column in front for shelving to permit wider opening for handling material (fIgure 01)

Variety of combinations to meet needs
Greater strength is obtained by joining sections of Right Angle in various combinations for beams and columns. See the load charts on page B-90 for the combination that best suits your need.



02



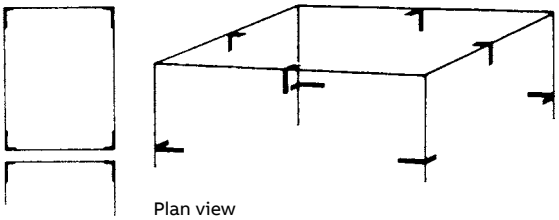
03

Procedure for laying out structure

1. Measure the space
Right Angle structures may be built to the size of the space available. Measure the space and make a sketch of the area.

2. Sketch the Planned Structure
Sketch the structure you plan to build listing all vital dimensions. Include length, width and height of all sections so that load limits can be calculated safely.

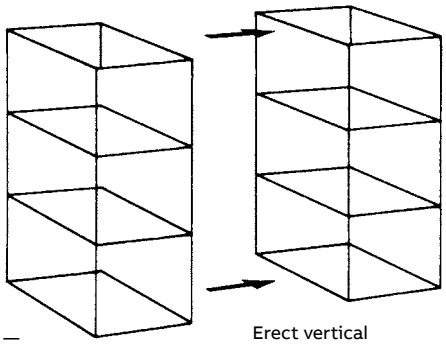
3. Plan flange direction
Right Angle beams are at their strongest position with the long flange downward. Vertical uprights may be in either direction for equal strength. Be sure to measure the material to be shelved to allow space for handling. Your sketch will also be used as a cutting and assembly plan.



04

4. Assembling the structure
Follow your plan for cutting sections and for layout. Assemble the structure as a series of frames, or bays and bolt together as units. Use as many bolts as possible and turn nuts up finger-tight. Square-up and level the entire structure. Proceed to tighten bolts with wrench, starting with corners to assure permanent squareness. Use diagonal bracing, if necessary. Add shelves.

Your Right Angle structure is ready for a useful lifetime.



05

Erect vertical frames into bays.

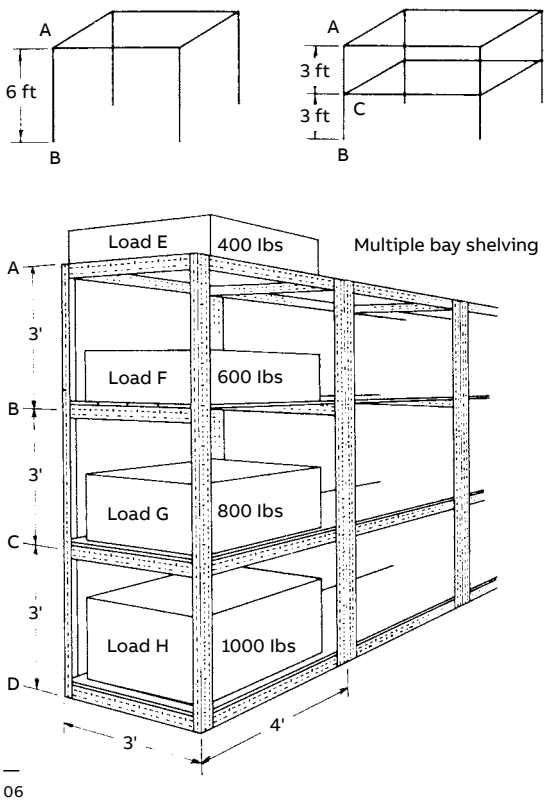
01 Beam combinations.

02 Measure the space.

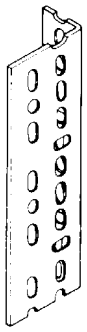
03 Sketch the planned structure.

04 Plan flange direction.

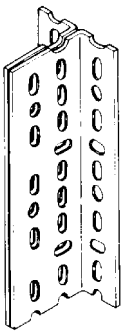
05 Assembling the structure.



06



Single section



07 T-Section

06 FIgure load limits.

07 Single section / T-Section.

Figure Load Limits

Figure the load your structure must bear on each level or shelf. This is necessary to determine the sections required to carry the load safely. The load tables will enable you to determine the Right Angle gauge and section combination needed.

Load limit example for evenly distributed loads
Using the sketch shown (figure 06) and the load tables based on a safety factor of 2.1, calculate the weight supportable by a structure with two or more shelves. A 6 ft high single shelf structure AB will support a load of 5,200 lbs using RA-225 Right Angle (4 single uprights x 1,100 lbs each) from table.

When an additional shelf is framed at C, columns become the same as two 3-ft. uprights, AC and CB, and the total safe load is 10,200 lbs on columns CB (4 x 2,550 lbs), based on a safety factor of 2.1. This load can be divided between the shelves in any convenient way, so long as the total load on columns CB does not exceed 10,200 lbs. If shelf loads are unequal, the heavier load should go on the lower shelf to avoid top-heavy instability.

Use the same method of calculating for three or more shelves with the load tables as reference.

How to determine weight to be supported.

Multiple-bay shelving is typical of many Right Angle weight-bearing structures. Load tables are your guide to the weights supportable by RA-160, RA-225 and RA-300. Strengths are increased where needed by combining sections for beams or columns, and by adding braces.

Example for checking load safety
This structure is erected as 3 separate bays and bolted together, using RA-225.

Beam load bearing
Load E = 400 lbs evenly distributed on two 4' beams. Refer to beam load tables for RA-225: Two 4' beams will support 1,090 lbs – safe load.
Load F = 600 lbs on solid shelf evenly distributes weight to two 3' beams. Refer to beam load tables: Two 3' beams will support 1,560 lbs – safe load.
Load G = 800 lbs on shelf supported by two 3' beams and two 4' beams. Add the 4 sections: 3 + 3 + 4 + 4 = 14 ft. Divide total load G by 14, i.e. 800 ÷ 14 = 57 lbs per ft.
Compute wt. on longest beam – two 4' sections, or 8 ft. Multiply 8' x 57 lbs per ft load = 456 lbs supported by the two 4' beam. Refer to load tables: Two 4' beams support 1,090 lbs – safe load.
Since the 3' beams are stronger, they are also safe for the load. **Load H**, any load on shelf supported by beams at floor level – considered safe.

The example illustrates methods of figuring loads on three different types of shelf construction. It is not a typical bay. It should be remembered that a safe beam load does not assure a safe structure – column load safety must also be computed.

Column load bearing
Four columns support load equally.
Column section AB = b load E, or 100 lbs.
Column section BC = b load F, or 150 lbs, PLUS b load E, 100 lbs or 250 lbs.
Column section CD = b load G, or 200 lbs. PLUS 150 lbs., b load F, PLUS 100 lbs., b load E, for a total load on section CD of 450 lbs.
Load H is at floor level, does not count.
Assuming a 9' high structure, the 9' column is supported at 3' intervals by ties for shelving, the 3' column section data is used. Refer to column load tables: 3 column (vertical) supports 2,550 lbs – safe for the load.

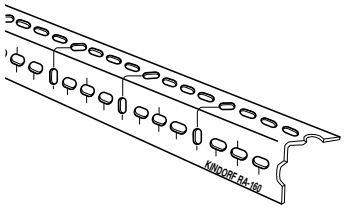
Figures are for a free-standing, unbraced structure. Common uprights in two or more bay structures carry a double load. See page B-90 for load tables.

Right angle slotted angle systems

Column loads

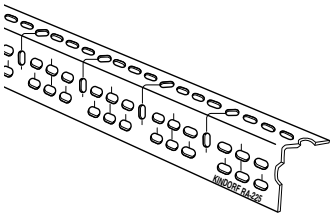
RA 160 – 14 ga x 1⅝" x 1⅝" Single section

	T-Section	Single section
3'	3,880	1,500
4'	3,500	1,200
5'	3,000	950
6'	2,500	750



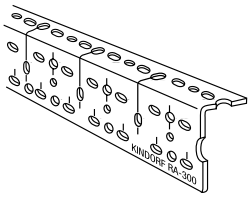
RA 225 – 14 ga x 2⅜" x 1⅝" Narrow channel

	T-Section	Single section
3'	5,550	2,550
4'	5,050	1,900
5'	4,400	1,550
6'	3,850	1,300
7'	3,400	970
8'	3,000	–
9'	2,650	–
10'	2,300	–



RA 300 – 12 ga x 3⅛" x 1⅝" Broad channels

	T-Section	Single section
3'	8,000	3,500
4'	7,100	2,900
5'	6,300	2,400
6'	5,550	1,800
7'	4,750	1,300
8'	4,000	1,000
9'	3,200	–
10'	2,400	–



NOTE: Values shown are static loads (lbs.) applied vertically to an unbraced column. Min. safety factor of 2.1. To increase load capacity columns can be reinforced with side braces cut to size.

Beam loads

	Broad channel	Narrow channel	Single section
3'	2,550	1,490	770
4'	1,780	1,040	530
5'	1,330	770	400
6'	1,030	600	310
7'	820	470	240
8'	590	380	–
9'	420	310	–
10'	310	230	–
3'	4,110	3,050	1,560
4'	2,870	2,130	1,090
5'	2,140	1,580	810
6'	1,660	1,230	630
7'	1,330	980	500
8'	1,080	790	410
9'	890	650	330
10'	720	540	280
3'	7,570	6,300	3,220
4'	5,290	4,400	2,250
5'	3,950	3,280	1,680
6'	3,060	2,540	1,300
7'	2,440	2,020	1,040
8'	1,990	1,650	840
9'	1,650	1,360	690
10'	1,380	1,140	580

NOTE: Values shown are for a pair of beams supporting an evenly distributed load (lbs). For a concentrated load these values should be halved. Min. safety factor of 1.4. Multiple angle beams should be bolted every 6 in. with bolts staggered in alternate rows. To increase load capacity tie angles can be cut to size and bolted between beams.

Non-metallic channel and accessories

Channel simple beam loading table

Cat. No.	Max. uniform beam load lbs.	Def (in.)	1/360 SPAN lbs.	Def (in.)	Max column load (lbs)
12 inches					
NB-900-10-P	1,430	.066	723	.033	3439
NB-900-10-V	1,430	.066	723	.033	3439
NB-900-2A-10-P	4231	.036	3940	.033	7007
NB-900-2A-10-V	4231	.036	3940	.033	7007
18 inches					
NB-900-10-P	953	.148	321	.050	3136
NB-900-10-V	953	.148	321	.050	3136
NB-900-2A-10-P	2,821	.081	1751	.050	6501
NB-900-2A-10-V	2,821	.081	1751	.050	6501
24 inches					
NB-900-10-P	715	.264	180	.067	2778
NB-900-10-V	715	.264	180	.067	2778
NB-900-2A-10-P	2,115	.143	985	.067	5909
NB-900-2A-10-V	2,115	.143	985	.067	5909
30 inches					
NB-900-10-P	572	.412	115	.083	2369
NB-900-10-V	572	.412	115	.083	2369
NB-900-2A-10-P	1,692	.224	630	.083	5236
NB-900-2A-10-V	1,692	.224	630	.083	5236
36 inches					
NB-900-10-P	476	.593	80	.100	1,906
NB-900-10-V	476	.593	80	.100	1,906
NB-900-2A-10-P	1,410	.322	437	.100	4,482
NB-900-2A-10-V	1,410	.322	437	.100	4,482
48 inches					
NB-900-10-P	357	1.055	45	.133	1,091
NB-900-10-V	357	1.055	45	.133	1,091
NB-900-2A-10-P	1,057	.573	246	.133	2,809
NB-900-2A-10-V	1,057	.573	246	.133	2,809
60 inches					
NB-900-10- P	286	1.648	28	.167	698
NB-900-10-V	286	1.648	28	.167	698
NB-900-2A-10-P	846	.895	157	.167	1,798
NB-900-2A-10-V	846	.895	157	.167	1,798
72 inches					
NB-900-10-P	238	2.373	20	.200	485
NB-900-10-V	238	2.373	20	.200	485
NB-900-2A-10-P	705	1.289	109	.200	1,248
NB-900-2A-10-V	705	1.289	109	.200	1,248

Deflection in excess of 3.00 inches; midspan support is recommended.
Table lists the total allowable load for various simple spans based on a minimum safety factor of 3. All beams should be supported in a manner to prevent rotation at supports. For beams longer than 72 inches, contact manufacturer's engineering department. Recommend sealing ends of channel with sealant after cutting.

Channels

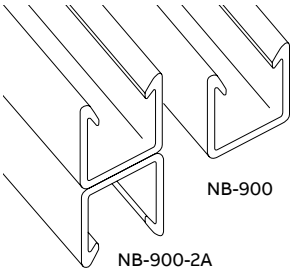
Kindorf® strut is a complete corrosion-proof system, with a comprehensive selection of channels and accessories. Cost-efficient, extremely durable, easy to use, and made of the strongest non-metallic materials available.

Kindorf®: Demanding products for demanding environments:

- Can't rust under the worst of conditions
- Cost effective
- Maintenance free
- Easy to use, cut and drill
- Ideal for a wide variety of applications
- Unsurpassed reliability

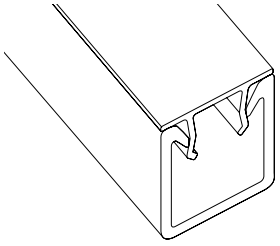
Channels

Cat. No.	Description	Material	Color	Weight (lbs/100 ft)
NB-900-10-P	1½" x 1½" x 10' Single channel	Polyester	Gray	55
NB-900-10-V	1½" x 1½" x 10' Single channel	Vinylester	Beige	55
NB-900-2A-10-P	3" x 1½" x 10' Back-to-back	Polyester	Gray	110
NB-900-2A-10-V	3" x 1½" x 10' Back-to-back	Vinylester	Beige	110



Channel closure strip

Cat. No.	Description	Material	Color	Weight (lbs/100 ft)
NG-969-5	Standard Length 5'	Rigid PVC	Dark gray	20



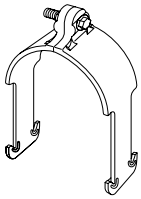
All beams should be supported in a manner to prevent rotation at supports.
For beams longer than 72 inches, contact manufacturer's engineering department.
Recommend sealing ends of channel with sealant after cutting.

Non-metallic channel and accessories

Pipe clamps, clevis hangers & fittings

Pipe clamps

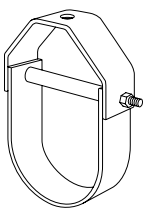
Cat. No.	Nominal (in)	Conduit/Pipe Style: PVC Sch. 80	Rigid	PVC coated metal (Typ.)	Rec. torque (lbs)	design Load*	Weight (lbs) per 100
NC-105-1/2	½	.840	.840	.920	5	100	4
NC-105-3/4	¾	1.050	1.050	1.130	5	100	4
NC-105-1	1	1.315	1.315	1.395	5	200	4.8
NC-105-1 1/4	–	–	–	–	–	–	–
NC-105-1 1/2	1½	1.900	1.900	1.980	5	200	6.4
NC-105-2	2	2.375	2.375	2.455	5	200	8
NC-105-3	3	3.500	3.500	3.580	20	300	10
NC-105-4	4	4.500	4.500	4.580	20	300	10
NC-105-6	6	6.625	6.625	6.705	20	300	16.3



* Design load is based on pullout values with a safety factor of 3.
Material: Polyurethane. Color: Gray.

Clevis hangers

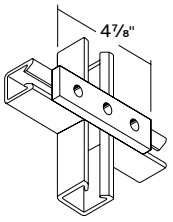
Cat. No.	Nominal diameter	(A) Max pipe OD	(B) Dimension height	(C) Hanger rod size	Max. load	Weight (lbs) per 100
NC-149-1	1	1½	2¾	½	60	20.8
NC-149-1 1/2	1½	2	3½	½	60	24
NC-149-2	2	2⅝	4¾	½	90	38
NC-149-2 1/2	2½	3¼	5½	½	120	40
NC-149-3	3	3⅞	7	⅝	160	62.5
NC-149-4	4	5⅛	8½	⅝	250	88
NC-149-6	6	7⅛	10⅞	⅝	400	170
NC-149-8	8	9¼	14	⅝	450	250
NC-149-10	10	11⅜	18	⅝	500	400
NC-149-12	12	13½	21½	⅝	600	550
NC-149-14	14	15¾	24½	¾	700	700
NC-149-16	16	18	27⅜	¾	800	1,150
NC-149-19	19	21	34¼	¾	900	1,700



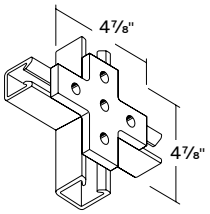
Design loads given are in pounds at 70° F with a safety factor of 3.
Insulate hangers from pipe at higher temperatures.
Material: Polyester. Color: Yellow and Gray.

Fittings

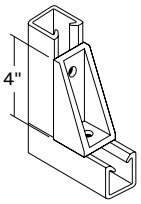
Cat. No.	Material	Color	Weight (lbs) per 100
NB-935-P	Polyester	Gray	13
NB-935-V	Vinylester	Beige	13
NB-931	Polyurethane	Gray	14
NB-947	Polyurethane	Gray	24
NB-949-P	Polyester	Gray	22
NB-936-P	Polyester	Gray	28
NB-936-V	Vinylester	Beige	28
NB-937-P	Polyester	Gray	20
NB-924	Polyurethane	Gray	56
NB-944	Polyurethane	Gray	34
NB-925	Polyurethane	Gray	70
NB-918	Polyurethane	Gray	4.6



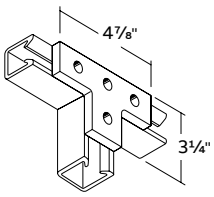
NB-935-P
NB-935-V



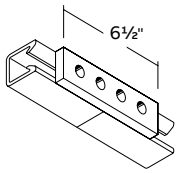
NB-947



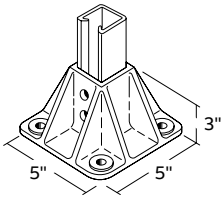
NB-918



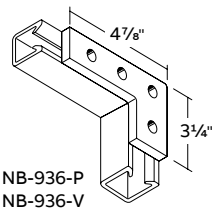
NB-937-P



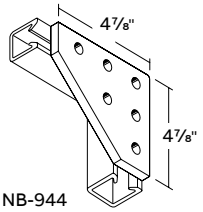
NB-949-P



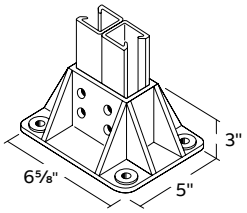
NB-924



NB-936-P
NB-936-V

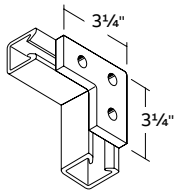


NB-944



NB-925

Polyester and Vinylester Kindorf® fittings are suited for use with all 1½" and 1⅝" channels.
Kindorf® fittings are manufactured from 3⁄16" flat material.
Consult the Chemical Compatibility Chart to ensure material will withstand the specific chemical environment.
All holes in Kindorf® fittings are 13⁄32" in diameter.

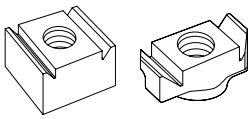


NB-931

Non-metallic channel and accessories

Accessories

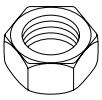
Channel nuts



Cat. No.	Thread size (in)	Max. load (lbs)	Max. torque (lbs)	Weight (lbs) per 100
NB-910-3/8	⅜	450	35	1.8
NB-910-3/8-HD	⅜	1,370	100	2.6
NB-910-1/2	½	450	40	1.8
NB-910-1/2-HD	½	1,500	130	5.2

Safety factor of 3. Material: Glass fiber reinforced polyurethane. Color: Gray.

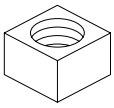
Hex nuts



Cat. No.	Size (in)	Max. load (lbs)	Max. torque (lbs)	Weight (lbs) per 100
NH-114-C	⅜	456	50	.33
NH-114-D	½	830	125	.8

Safety factor of 3. Material: Glass fiber reinforced polyurethane. Color: Gray.

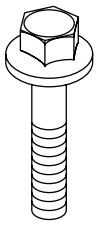
Square nuts



Cat. No.	Size (in)	Thread shear per (lbs)	Max. torque (lbs)	Weight (lbs) per 100
NH-116-C	⅜	1,300	125	1.8
NH-116-D	½	1,600	200	2.8
NH-116-E	⅝	1,600	200	5.6

Safety factor of 3. Material: Vinylester. Color: Gray.

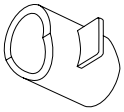
Hex head bolts



Cat. No.	Size (in)	Thread shear per (lbs)	Max. torque (lbs)	Weight (lbs) per 100
NH-113-P	⅜ x 1¼	360	30	1.4
NH-113-U	⅜ x 2½	360	30	2
NH-113-C*	½ x 1¼	600	90	1.4
NH-113-H*	½ x 2½	600	90	2

Safety factor of 3. Material: Glass fiber reinforced polyurethane. Color: Gray.
* With molded washer.

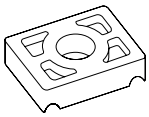
Channel reinforcement spacer



Cat. No.	Hole size (in)	Weight (lbs) per 100
E147-1/4	⅜ – ½	1.6

Material: Polyurethane. Color: Gray

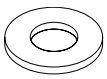
Channel washers



Cat. No.	Size (in)	Weight (lbs) per 100
NH-119-C	⅜	4
NH-119-D	½	3.6
NH-119-E	⅝	3.6

Material: Glass fiber reinforced polyurethane. Color: Gray.

Flat washers / Threaded rods



Cat. No.	Size (in)	Weight (lbs) per 100
Flat washers		
NH-117-C	⅜	.6
NH-117-D	½	.6
NH-117-E	⅝	.8

Material: Rigid PVC. Color: Gray.

Cat. No.	Size	Thread shear per (lbs)	Max. torque (lbs)	Weight (lbs) per 100
Threaded rods				
NH-193-3/8-4	⅜" x 4'	300	30	7.0
NH-193-1/2-4	½" x 4'	510	80	12
NH-193-5/8-4	⅝" x 4'	1,600	200	18

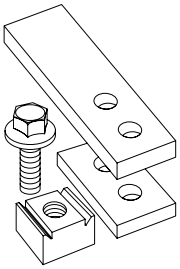
Safety factor of 3. Material: Vinylester. Color: Gray.

Rod couplers

Cat. No.	Size (in)	Max. load per (lbs)	Weight (lbs) per 100
NH-195-3/8	⅜	880	6.4
NH-195-1/2	½	1,000	6.4
NH-195-5/8	⅝	1,700	13.2

Safety factor of 3. Material: Glass fiber reinforced polyurethane. Color: Gray.

Channel to beam clamp assembly



Cat. No.	Std. Weight (lbs)	Maximum load per (lbs)
NE-763-3/8	110	200
NE-763-1/2	120	200

Kit consists of:

Description	Std. Ctn.	Material	Colour
Channel nuts	4	Polyurethane	Gray
Clips (set)	2	Vinylester	Beige
Bolts	4	Polyurethane	Gray

Non-metallic channel and accessories

Kindorf® Brush-on & spray-on fiberglass end sealant

Kindorf® Brush-on fiberglass end sealant

	Cat. No.	Description	Size	Weight (lbs/100)
	NH-600	Brush-on sealant	1 qt.	220

When fabricating Type "P" or "V" Series materials, Kindorf® Fiberglass End Sealant should be used. After cutting or drilling the channel, interior glass fibers may fray and lose strength due to exposure to the environment. Kindorf® sealant protects the exposed glass fibers and prevents deterioration. Kindorf® sealant exceeds Vinylester (V) material in corrosion resistance.

Kindorf® Spray-on fiberglass end sealant

Cat. No.	Description	Size	Weight (lbs/100)
NH-601	Spray-on sealant	12 oz	100

Kindorf® Spray-On Fiberglass End Sealant provides a quick and easy corrosion-resistant coating when applied to fiberglass channel and accessories. Kindorf® Spray-On Fiberglass End Sealant is a rubberized spray which is supplied in a 12 oz. pressurized can.

Chemical resistance – Type operating ranges for: Polyester -30° F–150° F / Vinylester -35° F–200° F / Polyurethane -40° F–130° F / Nylon -20° F–150° F

	Polyester		Vinylester		Rigid PVC		Polyurethane	
Chemical	**70°F**	**160°F**	**70°F**	**160°F**	**70°F**	**160°F**	**70°F**	**160°F**
Acetic acid, <50%	•	•	•	•	†	†	•	–
Acetone, <10%	†	†	†	†	–	–	–	–
Aluminum hydroxide	•	•	•	•	–	–	–	–
Ammonium hydroxide, <20%	†	†	•	150°	•	•	•	–
Ammonium nitrate	•	•	•	•	–	–	–	–
Ammonium phosphate	•	•	•	•	–	–	–	–
Benzene	•	•	†	†	–	–	–	–
Benzoic Acid	•	•	•	•	•	•	•	–
Bromine, Wet Gas	†	†	•	100°	•	†	–	–
Butylene Glycol	•	•	•	•	–	–	–	–
Butyric Acid, <50%	•	•	•	•	–	–	–	–
Chlorine, Dry Gas	•	•	•	•	–	–	–	–
Chlorine, Wet Gas	†	†	•	•	–	–	–	–
Chlorine, Liquid	†	†	†	†	–	–	–	–
Chlorine, Water	•	•	•	•	•	•	•	–
Chromic Acid, <5%	†	†	•	•	–	–	–	–
Copper Chloride	•	•	•	•	•	•	•	–
Copper Cyanide	•	•	•	•	•	•	•	–
Copper Nitrate	•	•	•	•	–	–	–	–
Copper Sulfate	•	•	•	•	•	•	•	–
Esters, Fatty Acids	•	•	•	•	–	–	–	–
Ferric Chloride	•	•	•	•	•	•	–	–
Ferrous Chloride	•	•	•	•	–	–	–	–
Fluoboric Acid	•	120°	•	•	•	•	•	–
Fluosilicic Acid, <32%	†	†	•	100°	–	–	–	–
Formic Acid, <50%	†	†	•	100°	†	†	•	–
Gasoline, aviation	•	†	•	•	–	–	–	–
Hydrochloric acid, <37%	•	†	•	•	•	•	•	–
Hydroflouric acid, <20%	†	†	•	100°	•	†	–	–
Hydrogen chloride, wet gas	•	†	•	•	–	–	–	–
Hydrogen sulfide, wet gas	•	†	•	•	•	•	–	–
Lactic acid	•	†	•	•	•	•	•	–
Nickel sulfate, low pH	†	†	•	•	–	–	–	–
Nickel sulfate, high pH	†	†	•	•	–	–	–	–
Nitric acid, <35%	†	†	•	120°	•	•	•	—
Perchloric acid, <10%	†	†	•	150°	–	–	–	–
Phosphoric acid	•	•	•	•	•	•	•	—
Potassium chloride	•	•	•	•	•	•	•	—
Potassium nitrate	•	•	•	•	–	–	–	–
Potassium persulfate	†	†	•	•	–	–	–	–
Sodium hydroxide, <50%	†	†	•	180°	•	•	•	–
Sodium hypochlorite, <15%	†	†	•	150°	•	•	•	–
Sodium nitrate	•	•	•	•	–	–	–	–
Sodium sulfate	•	†	•	•	–	–	–	–
Sodium sulfide	†	†	•	•	•	•	•	–
Sulfuric acid, <70%	†	†	•	•	•	•	•	–
Sulfuric acid >70%	†	†	•	102°	†	†	–	–
Trisodium phosphate	†	†	•	•	•	•	•	–
Urea	•	†	•	150°	–	–	–	–
Vegetable oils	•	•	•	•	–	–	–	–
Vinegar	•	•	•	•	–	–	–	–
White Liquor	–	–	•	•	•	•	•	–

Key: • Recommended for use / ° Recommended up to temperature indicated / † Not recommended for use / – No information available at this time

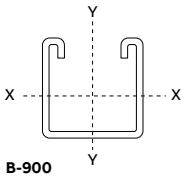
NOTE: The guidelines presented in this table assume the typical application of Kindorf® products where exposure is limited to fumes, vapors, and occasional splashes from chemicals. This information is intended as a guideline and does not guarantee product performance for the applications listed. In special situations where chemical resistance is critical, the factory should be consulted. Some applications may require a screening test of samples in the chemical environment of interest. The user is advised to determine suitability of the product for its particular use. Class I fire rated per ASTM E-84 and are UL-94 V-0.

Technical information

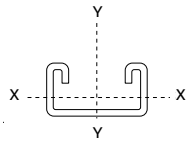
Metallic engineering data and specifications

Metallic engineering data and specifications

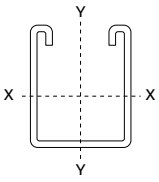
Channel	Area	(lbs/ft)	X-X Axis I	X-X Axis S	X-X Axis R	Y-Y Axis I	Y-Y Axis S	Y-Y Axis R
Steel section properties **Material properties: f=30,000, E=30,000,000**								
B-906	.217	.740	.018	.041	.272	.077	.105	.559
B-900	.521	1.776	.155	.179	.545	.200	.259	.619
B-900-M	.354	1.206	.101	.123	.535	.129	.175	.603
B-901	.595	2.028	.263	.251	.665	.238	.309	.632
B-902	.837	2.852	.909	.552	1.042	.363	.471	.658



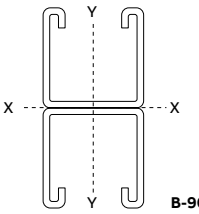
B-900
1½" x 1½" x 12 Ga steel
B-900-M
1½" x 1½" x 14 Ga steel



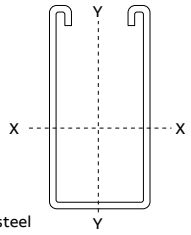
B-906
1½" x ¾" x 14 Ga steel



B-901
1⅞" x 1½" x 12 Ga steel



B-900-2A
1½" x 3" x 12 Ga steel



B-902
1½" x 3" x 12 Ga steel

Channel load data

Span	Channel	Simple beam uniformly distributed load: Max. load	Deflection 1/240 Span load	Design load	Simple beam concentrated center load: Max. load	Deflection 1/240 Span load	Design load	Col. load for K=1
12"	B-906	820	.034	1,200	820	410	.027	750	410	7,337
	B-900	3,580	.017	10,333	3,580	1,790	.014	6,458	1,790	7,628
	B-900-M	2,460	.018	6,733	2,460	1,230	.015	4,208	1,230	7,625
	B-901	5,020	.014	17,533	5,020	2,510	.011	10,958	2,510	7,660
	B-902	11,040	.009	60,600	11,040	5,520	.007	37,875	5,520	7,699
18"	B-906	547	.077	533	533	273	.062	333	273	6,852
	B-900	2,387	.039	4,593	2,387	1,193	.031	2,870	1,193	7,507
	B-900-M	1,640	.041	2,993	1,640	820	.033	1,870	820	7,499
	B-901	3,347	.032	7,793	3,347	1,673	.026	4,870	1,673	7,579
	B-902	7,360	.020	26,933	7,360	3,680	.016	16,833	3,680	7,665
24"	B-906	410	.137	300	300	205	.109	188	188	6,172
	B-900	1,790	.069	2,583	1,790	895	.055	1615	895	7,338
	B-900-M	1,230	.073	1,683	1,230	615	.058	1,052	615	7,324
	B-901	2,510	.057	4,383	2,510	1,255	.046	2,740	1,255	7,465
	B-902	5,520	.036	15,150	5,520	2,760	.029	9,469	2,760	7,619
30"	B-906	328	.214	192	192	164	.171	120	120	5,299
	B-900	1,432	.108	1,653	1,432	716	.067	1,033	716	7,121
	B-900-M	984	.114	1,077	984	492	.091	673	492	7,098
	B-901	2,008	.089	2,805	2,008	1,004	.072	1,753	1004	7,319
	B-902	4,416	.057	9,696	4,416	2,208	.046	6,060	2,208	7,560
36"	B-906	273	.308	133	133	137	.246	83	83	4,231
	B-900	1,193	.156	1,148	1,148	597	.125	718	597	6,855
	B-900-M	820	.164	748	748	410	.132	468	410	6,822
	B-901	1,673	.129	1,948	1,673	837	.103	1,218	837	7,140
	B-902	3,680	.082	6,733	3,680	1,840	.066	4,208	1,840	7,487

For channel with holes in bottom, multiply load by .95. For channel with holes in bottom and sides, multiply load by .90. For extruded aluminum channel, multiply load by .33.
Column loads calculated in accordance with ANSI Light Gauge Cold-Formed Steel Design Manual, Section 3.6.

Technical information

Channel load data (continued)

Channel load data

Span	Channel	Simple beam uniformly distributed load				Simple beam concentrated center load				Col. load for K=1
		Max. load	Deflection 1/240 Span load		Design load	Max. load	Deflection 1/240 Span load		Design load	
42"	B-906	234	.419	98	98	117	.335	61	61	3,125
	B-900	1,023	.212	844	844	511	.170	527	511	6,541
	B-900-M	703	.224	550	550	351	.179	344	344	6,496
	B-901	1,434	.175	1,431	1,431	717	.140	895	717	6,929
	B-902	3,154	.112	4,947	3,154	1,577	.089	3,092	1,577	7,401
48"	B-906	205	.547	75	75	103	.437	47	47	2,392
	B-900	895	.277	646	646	448	.222	404	404	6,178
	B-900-M	615	.292	421	421	308	.234	263	263	6,120
	B-901	1,255	.229	1,096	1,096	628	.183	685	628	6,686
	B-902	2,760	.146	3,788	2,760	1,380	.117	2,367	1,380	7,302
54"	B-906	182	.692	59	59	91	.554	37	37	1,890
	B-900	796	.351	510	510	398	.281	319	319	5,767
	B-900-M	547	.370	333	333	273	.296	208	208	5,693
	B-901	1,116	.290	866	866	558	.232	541	541	6,410
	B-902	2,453	.184	2,993	2,453	1,227	.148	1,870	1,227	7,189
60"	B-906	164	.854	48	48	82	.683	30	30	1,531
	B-900	716	.433	413	413	358	.346	258	258	5,308
	B-900-M	492	.457	269	269	246	.365	168	168	5,216
	B-901	1,004	.358	701	701	502	.286	438	438	6,101
	B-902	2,208	.228	2,424	2,208	1,104	.182	1,515	1,104	7,064
72"	B-906	137	1.230	33	33	68	.984	21	21	1,063
	B-900	597	.624	287	287	298	.499	179	179	4,244
	B-900-M	410	.658	187	187	205	.526	117	117	4,113
	B-901	837	.515	487	487	418	.412	304	304	5,387
	B-902	1,840	.328	1,683	1,683	920	.262	1,052	920	6,773
84"	B-906	117	1.674	24	24	59	1.339	15	15	781
	B-900	511	.849	211	211	256	.679	132	132	3,136
	B-900-M	351	.895	137	137	176	.716	86	86	3,022
	B-901	717	.701	358	358	359	.561	224	224	4,543
	B-902	1,577	.446	1,237	1,237	789	.357	773	773	6,429
96"	B-906	103	2.187	19	19	51	1.749	12	12	598
	B-900	448	1.109	161	161	224	.887	101	101	2,401
	B-900-M	308	1.169	105	105	154	.935	66	66	2,314
	B-901	628	.916	274	274	314	.733	171	171	3,575
	B-902	1,380	.583	947	947	690	.466	592	592	6,032
108"	B-906	91	2.768	15	15	46	2.214	9	9	473
	B-900	398	1.403	128	128	199	1.123	80	80	1,897
	B-900-M	273	1.480	83	83	137	1.184	52	52	1,828
	B-901	558	1.160	216	216	279	.928	135	135	2,825
	B-902	1,227	.738	748	748	613	.590	468	468	5,582
120"	B-906	82	3.417	12	12	41	2.733	8	8	383
	B-900	358	1.732	103	103	179	1.386	65	65	1,537
	B-900-M	246	1.827	67	67	123	1.461	42	42	1,481
	B-901	502	1.432	175	175	251	1.145	110	110	2,288
	B-902	1,104	.911	606	606	552	.729	379	379	5,080

For channel with holes in bottom, multiply load by .95. For channel with holes in bottom and sides, multiply load by .90. For extruded aluminum channel, multiply load by .33.
Column loads calculated in accordance with ANSI Light Gauge Cold-Formed Steel Design Manual, Section 3.6.

Technical information

Beam formula

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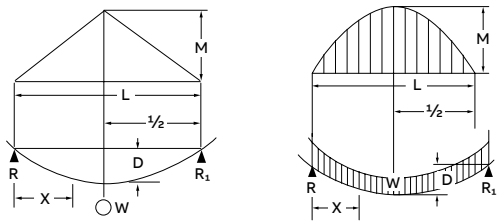
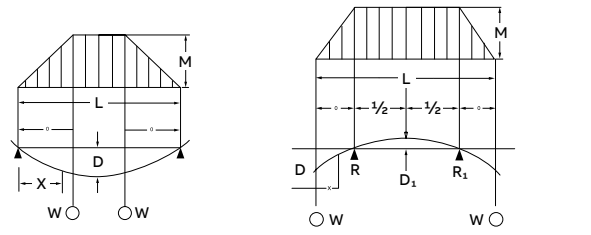
Beam formula
For calculating deflection and maximum safe load (Beams of uniform cross section):

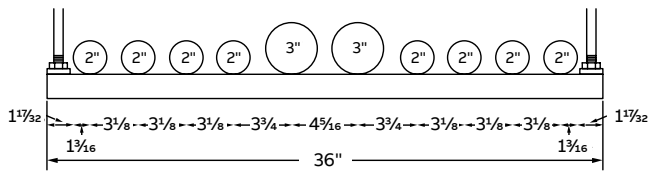
I = Moment of inertia, in position of load, in $(in)^4$.
S = Section modulus – in position of load(l/n), in $(in)^3$.
f = Bending stress in extreme fiber, in $(lbs/in)^2$.
E = Modulus of elasticity, in $(lbs/in)^2$.
L = Length of section, in inches.
W = Superimposed loads supported by beam, in (lbs).
W Max. = Maximum safe load at point given,in (lbs).
M = Maximum bending moment, in (lbs/in).
D, D1 = Deflections at points given, in inches.
D Max. = Maximum deflection at point given, in inches.

Steel and aluminum - Modulus of elasticity (E)
Steel: 29,500,000 $(lbs/in)^2$ / Aluminum: 10,000,000 $(lbs/in)^2$



Steel and aluminum - Maximum fiber stress (f)
Steel: 30,000 $(lbs/in)^2$ / Aluminum: 10,000 $(lbs/in)^2$





01

Conclusion
Referring to the load span tables on pages 00-00 for B-905 channel, a 36-inch span has a uniformly distributed load rating of 1,133 lbs., which is greater than the 390 lb. load calculated above, and is therefore satisfactory.

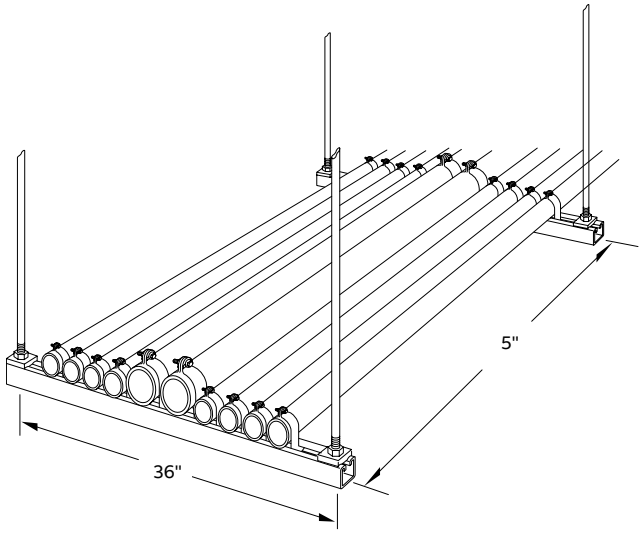
On longer spans or spans with greater loads, use B-901, B-900-2A or B-905-2A channel or provide an intermediate support.

Note on conduit support (see Figure 02)
The National Electrical Code® states the rigid metal conduit, intermediate metal conduit, and electrical metallic tubing shall be supported at least every 10 ft. See Article 344, Section 344.30 for exceptions for rigid metal conduit.

Problem (see Figure 01)
Design trapeze to support 8 – 2" rigid steel conduits and 2 – 3" rigid steel conduits on a No. B-905 channel span with hangers spaced 5 ft apart.

Weight per Hanger Equals
2" rigid steel conduit with heaviest conductor combination = 6.625 (lbs/ft).
3" rigid steel conduit with heaviest conductor combination = 13.415 (lbs/ft).

8 x 6.625 x 5 = 265 lbs = weight of 2" conduits per hanger
2 x 13.415 x 5 = 134 lbs = weight of 3" conduits per hanger
Total = 399 lbs = weight of conduits per hanger



02

Technical information

Conduit spacings

Conduit spacings - Spacings in inches between centers of conduits

Size (in)	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
½	1 3/16	–	–	–	–	–	–	–	–	–	–	–	–
	1 3/8	–	–	–	–	–	–	–	–	–	–	–	–
¾	1 5/16	1 7/16	–	–	–	–	–	–	–	–	–	–	–
	1½	1 5/8	–	–	–	–	–	–	–	–	–	–	–
1	1½	1 5/8	1¾	–	–	–	–	–	–	–	–	–	–
	1¾	1 7/8	2	–	–	–	–	–	–	–	–	–	–
1¼	1¾	1 7/8	2	2¼	–	–	–	–	–	–	–	–	–
	2	2 1/8	2¼	2½	–	–	–	–	–	–	–	–	–
1½	1 15/16	2 1/16	2 3/16	2 7/16	2 9/16	–	–	–	–	–	–	–	–
	2 1/8	2¼	2 3/8	2 5/8	2¾	–	–	–	–	–	–	–	–
2	2 3/16	2 5/16	2½	2¾	2 7/8	3 1/8	–	–	–	–	–	–	–
	2 3/8	2½	2¾	3	3 1/8	3 3/8	–	–	–	–	–	–	–
2½	2 7/16	2 9/16	2¾	3	3 1/8	3 3/8	3 5/8	–	–	–	–	–	–
	2 5/8	2¾	3	3¼	3 3/8	3 5/8	4	–	–	–	–	–	–
3	2 13/16	2 15/16	3 1/16	3 5/16	3 7/16	3¾	4	4 5/16	–	–	–	–	–
	3	3 1/8	3 3/8	3 5/8	3¾	4	4 3/8	4¾	–	–	–	–	–
3½	3 1/8	3¼	3 3/8	3 5/8	3¾	4 1/16	4 5/16	4 5/8	4 15/16	–	–	–	–
	3 3/8	3½	3 5/8	3 7/8	4	4 3/8	4 5/8	5	5 3/8	–	–	–	–
4	3 7/16	3 9/16	3 11/16	3 15/16	4 1/16	4 3/8	4 5/8	4 15/16	5¼	5 9/16	–	–	–
	3¾	3 7/8	4	4¼	4 3/8	4¾	5	5 3/8	5 5/8	6	–	–	–
4½	3¾	3 7/8	4	4¼	4 3/8	4 5/8	4 7/8	5¼	5 9/16	5 7/8	6 1/8	–	–
	4	4 1/8	4¼	4½	4¾	5	5¼	5 5/8	6	6¼	6½	–	–
5	4 1/8	4¼	4 3/8	4 5/8	4¾	5	5¼	5 9/16	5 7/8	6 3/16	6½	6 13/16	–
	4 3/8	4½	4 5/8	4 7/8	5	5 3/8	5 5/8	6	6¼	6 5/8	7	7¼	–
6	4¾	4 7/8	5	5¼	5 3/8	5 5/8	5 7/8	6 3/16	6½	6 13/16	7 1/8	7 7/16	8 1/8
	5	5 1/8	5¼	5½	5 5/8	6	6¼	6 5/8	7	7¼	7 5/8	8	8 5/8

The light face figures are the minimum dimensions to provide clearance between locknuts.
The more liberal spacings printed in bold face type should be used whenever possible.

Technical information

Pipe data

Pipe data – Rigid conduit

Trade size (in)	Rigid conduit – Aluminum and steel							
	Nominal outside diameter (in/ul-6)		Outside diameter of coupling (in/ul-6)		Weight of conduit (lbs/ft)		Max. Weight of conduit and conductor (lbs/ft) Not lead covered	
	Steel	Aluminum	Steel	Aluminum	Steel	Aluminum	Steel	Aluminum
½	.840	.840	1.010	1.078	.790	.274	1.040	.524
¾	1.050	1.050	1.250	1.328	1.050	.364	1.760	1.074
1	1.315	1.315	1.525	1.563	1.530	.530	2.695	1.695
1¼	1.660	1.660	1.869	1.953	2.010	.696	3.975	2.661
1½	1.900	1.900	2.155	2.219	2.490	.822	5.000	3.332
2	2.375	2.375	2.650	2.750	3.320	1.157	6.625	4.462
2½	2.875	2.875	3.250	3.281	5.270	1.825	9.460	6.015
3	3.500	3.500	3.870	3.812	6.830	2.389	13.415	8.974
3½	4.000	4.000	4.500	4.438	8.310	2.877	16.690	11.257
4	4.500	4.500	4.875	5.000	9.720	3.400	20.410	14.090
5	5.563	5.563	6.000	6.219	13.140	4.654	29.350	20.864
6	6.625	6.625	7.200	7.313	17.450	6.120	41.910	30.580

Pipe data – Intermediate metal conduit (IMC) / Thinwall conduit (EMT)

Trade size (in)	Intermediate metal conduit (IMC)				Thinwall Conduit (EMT) Per UL-797		
	Nominal outside diameter (in/UL)	Outside diameter of coupling (in/UL)	Weight of conduit (lbs/ft)	Max. weight of conduit and conductor (lbs/ft)	Nominal outside diameter (in)	Weight of EMT (lbs/ft)	Max. Weight of EMT and conductor (lbs/ft)
½	.815	1.010	.6	.850	.706	.285	.538
¾	1.029	1.250	.8	1.530	.922	.435	1.160
1	1.290	1.525	1.1	2.325	1.163	.640	1.825
1¼	1.638	1.869	1.5	3.465	1.510	.950	2.950
1½	1.883	2.155	1.8	4.330	1.740	1.100	3.674
2	2.360	2.650	2.4	5.725	2.197	1.400	4.436
2½	2.857	3.250	4.2	8.470	2.875	2.050	6.400
3	3.476	3.870	5.2	11.845	3.500	2.500	9.262
3½	3.971	4.500	6.1	14.500	4.000	3.400	12.100
4	4.466	4.875	6.8	17.510	4.500	3.700	15.355

Technical information

Suggested Kindorf® specifications

Product selection guide

Column height (ft)	Type of channel	Max column loading	Number of tiers or braces per column				
			1	2	3	4	5
1	B-900	8,625	2,590				
	B-900-2A	17,400	4,450				
	B-906	4,170	1,280				
	B-906-2A	8,570	2,160				
2	B-900	7,900	2,520	2,000			
	B-900-2A	16,500	4,400	3,650			
	B-906	3,450	1,200	980			
	B-906-2A	7,840	2,100	1,720			
3	B-900	6,960	2,420	1,960	1,780		
	B-900-2A	15,000	4,300	3,520	2,960		
	B-906	2,250	1,015	950	795		
	B-906-2A	6,680	2,020	1,700	1,435		
4	B-900	5,970	2,280	1,910	1,640	1,360	
	B-900-2A	13,095	4,100	3,480	2,930	2,520	
	B-906	1,270	755	895	775	670	
	B-906-2A	4,980	1,830	1,660	1,420	1,230	
5	B-900	5,055	2,140	1,850	1,560	1,340	1,180
	B-900-2A	11,490	3,950	3,420	2,900	2,500	2,210
	B-906	–	–	830	745	650	575
	B-906-2A	3,340	1,550	1,610	1,400	1,215	1,075

Column height (ft)	Type of channel	Max column loading	Number of tiers or braces per column								
			1	2	3	4	5	6	7	8	9	10
6	B-900-2A	9,990	3,750	3,340	2,870	2,480	2,190	1,960				
	B-906	–	–	700	710	635	565	505				
	B-906-2A	2,170	1,240	1,550	1,370	1,205	1,065	955				
7	B-900	3,645	1,840	1,720	1,490	1,310	1,140	1,025	925			
	B-900-2A	8,715	3,550	3,240	2,820	2,470	2,170	1,945	1,760			
	B-906	–	–	520	635	610	550	495	450			
	B-906-2A	–	–	1,450	1,330	1,180	1,050	945	860			
8	B-900	3,045	1,670	1,650	1,460	1,290	1,130	1,015	920	835		
	B-900-2A	7,395	3,180	3,140	2,780	2,450	2,160	1,930	1,750	1,600		
	B-906	–	–	470	605	590	535	490	445	410		
	B-906-2A	–	–	1,330	1,290	1,160	1,040	935	850	780		
9	B-900	2,580	1,520	1,570	1,430	1,260	1,120	1,000	905	825	760	
	B-900-2A	6,190	3,030	3,040	2,730	2,420	2,140	1,920	1,745	1,595	1,465	
	B-906	–	–	130	535	555	525	485	435	400	370	
	B-906-2A	–	–	1,200	1,250	1,150	1,020	930	840	775	715	
10	B-900	2,100	1,340	1,500	1,380	1,230	1,110	990	900	820	755	700
	B-900-2A	5,580	2,900	2,940	2,665	2,380	2,135	1,910	1,730	1,580	1,460	1,350
	B-906	–	–	–	470	520	500	465	430	395	365	340
	B-906-2A	–	–	1,160	1,190	1,120	1,010	915	835	770	710	660

This table recognizes eccentricity on the column caused by usual connections.

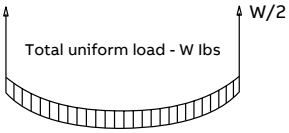
Technical information

Examples for using the continuous run load chart for channel

Selection of hanger rods

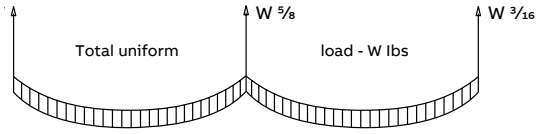
Use H-193-3/8 or 'R' series hanger rod	If the total uniform load is	Use H-193-1/2 or 'R' series hanger rod	If the total uniform load is between
2 Supports	1220 lbs or less	2 Supports	1220 lbs and 2260 lbs
3 Supports	975 lbs or less	3 Supports	975 lbs and 1810 lbs
4 Supports	1665 lbs or less	4 Supports	1665 lbs and 3080 lbs

Load distribution on hanger rods
2 Supports



Example – If the total uniformly distributed load W is 1,000 lbs., each hanger must be capable of supporting half of the load or 500 lbs. Therefore, H-193-3/8 or c 'R' series hanger rod would be sufficient to support this load.

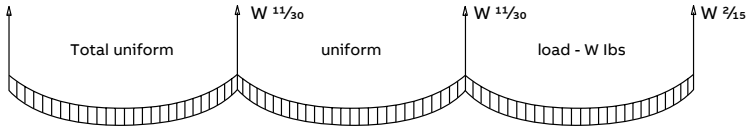
3 Supports



Total Uniform Load W lbs
Maximum Safe Load per hanger rod = H-193-3/8 or 'R' Series – 610 lbs
H-193-1/2 or 'R' Series – 1130 lbs

Example – If the total uniformly distributed load W is 1,000 lbs., the load is distributed to each support in the following manner: 187d lbs. to each end support and 625 lbs. to the center support. In this case, the maximum load to be supported is 625 lbs., which exceeds the recommended safe load of 610 lbs. for H-193-3/8 hanger rod., therefore H-193-1/2, or d 'R' series supports should be used.

4 Supports



Example – If the total uniformly distributed load W is 1,000 lbs., the load is distributed to each support in the following manner: 133 lbs. to each end support and 367 lbs. to each inner support. Therefore, H-193-3/8, or c 'R' series hanger rod would be sufficient to support this load.

Example No. 1
A total load of 500 lbs. is to be supported in an evenly distributed manner over a distance of 28 feet with the maximum deflection being not greater than 1/240 of the span between the supports.

Which Kindorf® channel should be used and how many supports are needed? On the chart, find the point of intersection for a total load of 500 lbs and a total run of 28 feet.

Pick the next graph line vertically above this point. This B-900 or G-975 with 4 supports (4B) evenly spaced. By reading horizontally to the left from this point, it can be seen that up to 565 lbs. can be supported on B-900, (G-975) under these conditions and still maintain a deflection of 1/240 of the span.

Example No. 2
Four foot fixtures weighing 30 lbs. each are to be attached to a channel suspended from a ceiling in a continuous 20-foot run and maintain a deflection of less than 1/240 of the span between the supports.

Which Kindorf channel should be used and how many supports are needed?

$$\text{Number of fixtures} = \frac{20\ \text{ft}}{4\ \text{ft / fixture}} = 5\ \text{fixtures}$$

$$\text{Total Load} = 5\ \text{fixtures} \times \frac{30\ \text{lbs}}{\text{fixture}} = 150\ \text{lbs}$$

On the chart, find the point of intersection for a total load of 150 lbs. and a total run of 20 feet. Pick the next graph line vertically above this point. This is B-900-M (G-975-M) with 3 supports (3A) – one support on each end and one in the center of the run.

Example No. 3
A 20-foot run of B-901 or G-965 is supported by 3 hangers, one on each end and one in the center. How much evenly distributed weight can this system support and maintain a maximum deflection of 1/240 of the span between the supports?

On the chart, find the point of the intersection for a total run of 20 feet and the graph line for B-901 (G-965) with 3 supports (3C).

From this point, read horizontally to the left to find the total uniform load of 690 lbs on the vertical scale.

Technical information

Kindorf® Channel bars – Load deflection charts

Concentrated center loads

Cat. No.	Beam span (in)	Load at 25,000 psi stress (lbs)	Deflection at 25,000 psi stress (lbs)	Load at max. deflection of 1/240 span (lbs)
6013	12	55	.038	55
6014		34	.048	34
6029		180	.023	180
6029-H		175	.024	175
6013	24	27	.153	18
6014		17	.192	9
6029		89	.093	89
6029-H		87	.095	87
6013	36	18	.345	8
6014		11	.433	4
6029		59	.208	42
6029-H		57	.213	40
6013	48	13	.615	4
6014		8	.773	2
6029		43	.367	23
6029-H		42	.375	22
6013	60	11	.963	2
6014		6	1.216	1
6029		34	.550	14
6029-H		33	.581	13

Loads for lengths greater than 60" spans are available on request.

Uniformly distributed loads

Cat. No.	Beam span (in)	Load at 25,000 psi stress (lbs)	Deflection at 25,000 psi stress (lbs)	Load at max. deflection of 1/240 span (lbs)
6013	12	110	.049	110
6014		68	.060	57
6029		361	.029	361
6029-H		350	.030	350
6013	24	55	.194	28
6014		34	.238	14
6029		180	.117	154
6029-H		174	.119	146
6013	36	36	.437	12
6014		22	.536	6
6029		119	.263	67
6029-H		115	.268	64
6013	48	27	.776	6
6014		16	.953	3
6029		88	.467	37
6029-H		86	.477	35
6013	60	21	1.213	4
6014		13	1.490	1
6029		70	.729	22
6029-H		68	.746	21

Loads are rounded off to the nearest pound in all cases.

Technical information

To select proper channel

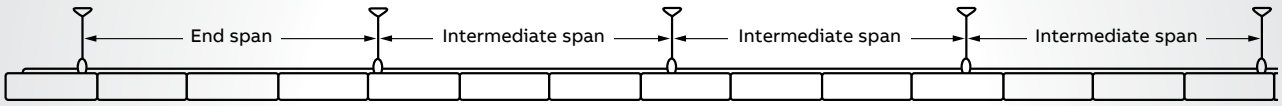


Figure 1 - Long continuous run

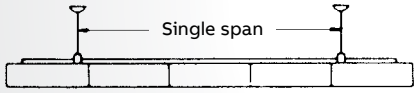


Figure 2 - Single span

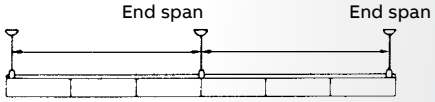


Figure 3 - Double span

The hanger spacing is often determined by the type of building construction. The deflection then will determine the proper channel since this deflection should not exceed 1/240 of the span.

To estimate the deflection at the center of an intermediate span in long continuous runs (Figure 1), multiply the weight of a single fixture times the applicable deflection constant (from table).

This deflection also applies to the end span in Figure 1 and the single span in Figure 2 if the dimension “C” is between ¼ and ⅓ of the length of the span.

If a cantilever does not exist as in the double span (Figure 3), the deflection of end spans (Figure 3) will be doubled.

Deflection constants for continuous run, 4 ft fixtures*

Span (ft)	B-906 G-956	B-900-M G-975-M	G-953	B-900 G-975	B-901 G-950, G-965	B-900-2A	B-902 G-955
6	.004	.000	.000	.000	.000	.000	.000
8	.009	.002	.001	.000	.000	.000	.000
10	–	.005	.004	.003	.001	.000	.000
12	–	.010	.007	.006	.004	.001	.001
14	–	–	–	.012	.007	.002	.002
16	–	–	–	.020	.011	.004	.004
18	–	–	–	–	.018	.007	.006
20	–	–	–	–	–	.010	.009

* For 8-foot fixtures reduce the deflection constant by 50%. This table is for normal weight fixtures - the constant “.000” infers negligible deflection.
A long, continuous run of 30 lb 4 ft fixtures on G-975 channel is supported on 12' centers.
The deflection at the center of an intermediate span will be the deflection constant (.006) times the fixture weight (30 lbs) or .18 inches.

Technical information

Suggested Kindorf® Specifications

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Suggested Kindorf® specifications

I. For purposes of designating type and quality for work in this section, drawings and specifications are based upon products of standard Kindorf® product drawings. Whenever substitute products are to be considered, supporting technical literature, samples, drawings, and certified performance data must be submitted in order to make a valid comparison of products involved.

II. Materials

Steel channel sections shall be rolled from AISI 1008 commercial grade steel and be in conformance with ASTM A569-72. Aluminum channel sections shall be extruded from 6063-T6 aluminum alloy and be in conformance with ASTM-B221-80.

III. Construction

A. *Channel and accessories for support systems.*
The cross sectional width dimension of the channel shall be a minimum of 1½". The depth will be as required to satisfy the load requirements. Channel with 1½" depth or greater shall be rolled from Manufacturing Std. 12 gauge steel. Channel smaller than 11/2" may be Manufacturing Std. 14 gauge.

Attachment holes, when required, shall be factory punched on hole centers equal to the channel cross sectional width dimension and shall be a maximum of 9/16" in diameter.

Channel attachment nuts shall be designed to prelocate in the channel and provide a bearing surface on the turned down lips while making positive contact with the side walls of the channel.

Straps for the support of conduit shall be designed such that the attachment nut is captivated on the shoulder of the strap when tightened, and the attachment bolt will allow tightening by either a slot-head screwdriver or wrench.

All nuts, bolts, straps, threaded rod and edges of punched holes shall be protected with the same finish as the channel as described in the FINISH section of this specification.

B. *Channel and accessories for surface raceway systems.*
Fluorescent fixtures, as designated on the drawings and according to the fixture schedule, shall be supported and supplied through a combination raceway and support system.

The cross sectional width dimension of the channel shall be a minimum of 1½". The depth will be as required to satisfy the load and wire carrying requirements.

The supporting channel shall have ½" diameter knockouts on 6" centers to accommodate ½" conduit fittings, and be listed by Underwriters' Laboratories Inc. as complying with Std. UL-5 for use as surface raceway and support for electric discharge type lighting fixture. The channel must also provide for ground continuity.

The combination raceway and support system shall be complete with channel joiners, end caps, closure strips, hangers, wiring entrance and all necessary fittings for electrical and mechanical connections.

When splicing or joining raceway channel at 90 degree angles, the joiners shall be designed such that they are concealed and fastened to the inside surface of the channel. Joiners shall be listed by Underwriters' Laboratories Inc. and allow wires to be directly laid in place.

All channel and fittings, including threaded components, shall be protected against corrosion as outlined in the finish section of this specification. Installation of the system shall be in accordance with the National Electrical Code®, NFPA 70 and ANSI C1.

Technical information

Suggested Kindorf® Specifications

IV. Galv-Krom® Trivalent finish

The finish on steel components shall consist of a combination of .0005 inch electrogalvanizing on steel in accordance with ASTM B633-78 Type LS coating and a gold Trivalent barrier formed on the zinc. This coating shall be applied after factory fabrication of the material.

When tested in accordance with ASTM B117-73 procedure, there shall be no sign of red rust after 1,000 hours of testing. Certified test results to support this must be submitted upon request.

Warning: Load tables, charts and design criteria provided in this catalog are intended as guides only. Selection of proper product, installation intervals, erection and placement are the responsibility of the user. Kindorf® products are intended to be used for the support and bracing of fixtures, cable, pipe and conduit. Improper use or installation may result in injury to persons or damage of property.

Material and finish specifications are subject to change without notice.

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