

Fittings and Brackets

Fittings and Brackets — Series 200



Material

Superstrut® fittings and brackets are manufactured from hot rolled carbon steel.

Dimensions

The following standard dimensions apply to all fittings except as indicated on the individual drawings.

- Hole spacing: $\frac{13}{16}$ " from end of fittings
- Hole spacing: $1\frac{1}{8}$ " centers
- Hole size: $\frac{9}{16}$ " diameter
- Material: $1\frac{1}{8}$ " wide
- Material: $\frac{1}{4}$ " thickness

Application Instructions

Parts drawings illustrate a typical use for the fitting, and in many cases other uses for the part are appropriate.

Design Data

Ratings vary when used with 12 or 14 gauge channel and are shown for each channel material.

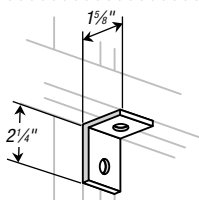
GoldGalv® hardware finish is standard for all Superstrut® products. This is a multi-process finish of electro-plated zinc, followed by gold-colored trivalent chromium to give excellent corrosion resistance and a superior paint base. See **pages B-106–B-107** for complete description of the GoldGalv® hardware finish. GoldGalv® hardware will be furnished if no other finish is specified.

Nuts and Bolts Required

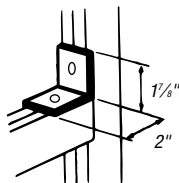
Unless otherwise noted, nuts and bolts for use with fittings and brackets should be ordered separately.

The standard bolt for the $\frac{9}{16}$ " hole is a $\frac{1}{2}$ " hex head cap screw $1\frac{5}{16}$ " long. The $1\frac{5}{16}$ " length may be used with all series channel.

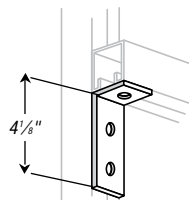
Standard Finish – GoldGalv®, unless otherwise stated.



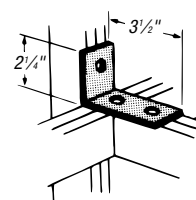
CAT. NO. AB201



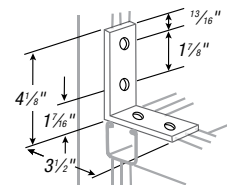
CAT. NO. AB202



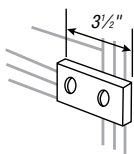
CAT. NO. AB203



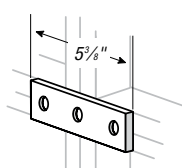
CAT. NO. AB204



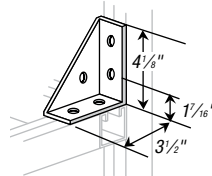
CAT. NO. AB205



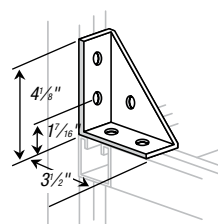
CAT. NO. AB206



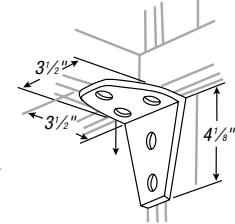
CAT. NO. AB207



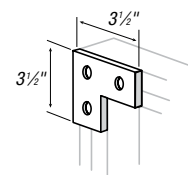
CAT. NO. AB213



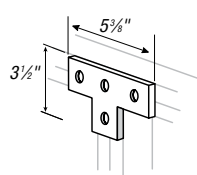
CAT. NO. AB214



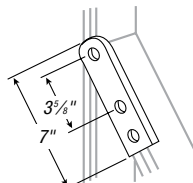
CAT. NO. AB216



CAT. NO. AB219



CAT. NO. AB220



CAT. NO. AB240

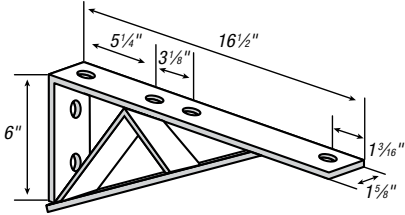
Standard Dimensions

- Hole Spacing: $\frac{13}{16}$ " From End
- Hole Spacing: $1\frac{1}{8}$ " Centers
- Hole Size: $\frac{9}{16}$ " Diameter
- Material: $1\frac{1}{8}$ " Width
- Material: $\frac{1}{4}$ " Thick

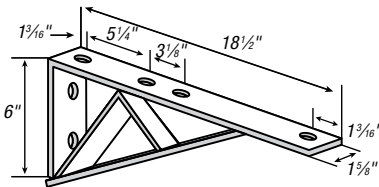
Standard Finish – GoldGalv®, unless otherwise stated.
Add EG suffix for SilverGalv® Finish

Fittings and Brackets

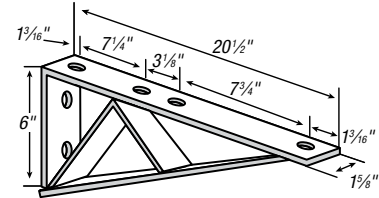
Brackets



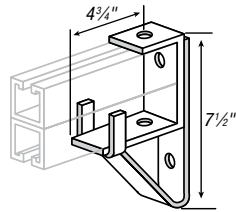
S222
Design Uniform Load/lbs.
A-1,200 1,000
A-1,400 750



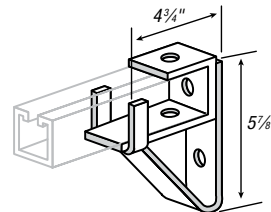
S226
Design Uniform Load/lbs.
A-1,200 1,000
A-1,400 750



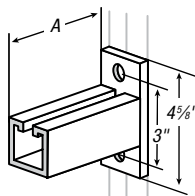
S236
Design Uniform Load/lbs.
A-1,200 800
A-1,400 650



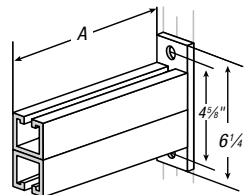
S248
Design Moment
(channel upright as shown)
When supported by
A-1,200 10,800 inch lbs.
A-1,400 7,550 inch lbs.
Applies to fitting only, not to the arm.
For
A-1,200
A-1,400



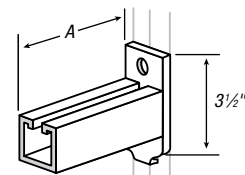
S247
Design Moment
(channel upright as shown)
When supported by
A-1,200 5,250 inch lbs.
A-1,400 3,650 inch lbs.
Applies to fitting only, not to the arm.
For
A-1,200 B-1,202
A-1,400 B-1,402



S-250
May be installed inverted with no change in load ratings. Strut section made from half slot channel.
Sizes: 6", 12", 18" & 24"



S-251
Strut section made from half slot channel.
Sizes: 12", 18", 24", 30" & 36"



S-256
When installed in inverted position reduce load rating 40%. Strut section made from half slot channel.
Sizes: 6", 12", 18" & 24"

CAT. NO.	A (IN.)	DESIGN LOAD LBS.	STD. CTN.
S250 6	6	1,500	1
S-250-12	12	800	1
S-250-18	18	550	1
S-250-24	24	400	1

CAT. NO.	A (IN.)	DESIGN LOAD LBS.	STD. CTN.
S-251-12	12	1,650	1
S-251-18	18	1,050	1
S-251-24	24	800	1
S-251-30	30	650	1
S-251-36	36	500	1

CAT. NO.	A (IN.)	DESIGN LOAD LBS.	STD. CTN.
S256 6	6	1,000	1
S-256-12	12	500	1
S-256-18	18	300	1
S-256-24	24	250	1

Standard Finish GoldGalv®, unless otherwise stated.
Add EG suffix for SilverGalv® Finish

Overview

Finishes (continued)

GoldGalv®

The standard GoldGalv® finish is made up of a multi-step electrogalvanizing and zinc trivalent chromium process. The trivalent chromium finish is applied over the zinc, producing a chemically bonded non-porous barrier for protection from moisture and air. The .5 mil electro-plated zinc and gold trivalent chromium finish provides all of the features and protection of hexavalent chromium without the use of the chemical.

SilverGalv® (Suffix EG)

Often referred to as “zinc plated” or “electroplated zinc,” the steel and .5 mils of zinc are bonded by an electrolysis process. This is the identical process used in the Superstrut Goldgalv® finish without the numerous benefits of the gold-colored trivalent chromium conversion coat (see GoldGalv® finish for more information). Electrogalvanizing is most commonly applied to small fittings, hardware and threaded products.

Green or White Urethane Powder Coated (Suffix GR or WH)

Urethane powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powder-form 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.

Pregalvanized (Suffix PG)

A zinc coating is applied by hot-dipping the steel coil at the mill prior to fabrication. Once the material is worked by roll-forming, cutting or punching, minimal protection is provided for raw edges. This weakness is typical with pre-coated material and affects the channel section around holes, extreme ends and the edges of the “U” shape lips. Superstrut pregalvanized material is in conformance with ASTM A-525/G-90 specification standards, representing 0.90 ounces of zinc per square foot of steel. This finish is often referred to as “hot-dipped mill galvanized” or “mill galvanized.”

Hot-Dipped Galvanized (Suffix HDG)

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 pregalvanized material. Hot-dipped galvanizing is not recommended for threaded products, because the thickness of the zinc coating will often disrupt the threads. Superstrut hot-dipped galvanized is in conformance with ASTM Specifications A-123 (formerly A-386) and A-153. Superstrut 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.”

PVC Coated (Suffix PVC)

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 temperature. 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. Thomas & Betts cannot be held responsible for field-altered PVC coated products.

Copper Plated (“T” inserted as the second digit of the part number; Example: CTL-710-2)

Plain steel proceeds through a series of rinse tanks to clean the material surface. Once cleaned, the fabricated part is etched by dipping into an acid pickle bath to prepare the surface for adhesion. Copper is electrically applied by submerging in a copper bath. To seal the finish, the product continues to a sealer tank and is then dried by forced hot air.

Black (Suffix B)

A black finish is raw steel with only a light oil finish as supplied by the steel manufacturer. There is no protection against red rust.

Stainless Steel (Suffix SS)

Superstrut channel is supplied in type 304 stainless steel when required. Type 316 stainless steel may be available upon request.

Aluminum (Suffix AL)

Superstrut channel and hardware are available in aluminum.

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.

Superstrut® 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.

