

Finishes and Materials

Finishes on Steel

Bare (Suffix BC)

Pregalvanized (Suffix PGC)

A zinc coating is applied to 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 precoated 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 oz. of zinc per square foot of steel. This finish is often referred to as “mill galvanized.”

Electrogalvanized (Suffix EGC)

Often referred to as “zinc plated” or “electroplated zinc,” the steel and 0.5 mils of zinc are bonded by an electrolysis process. Electrogalvanizing is most commonly applied to small fittings, hardware, and threaded products.

GoldGalv® (No Suffix)

Gold coloured zinc dichromate is applied over the zinc, producing a chemically bonded non porous barrier for protection from moisture and air. This extends the protective life of the zinc, and provides an excellent base for paint, if desired. The GoldGalv® hardware finish also provides a low electrical resistance when grounding of the system is required. Superstrut® channel and fittings are plated after fabrication, so there are no unprotected edges from cutting or punching. Where field cutting is necessary or scratches occur due to construction handling, you still have the sacrificial protection of the plated zinc to minimize the corrosion of raw edges and prevent spreading.

Hot-Dipped Galvanized (Suffix HDGC)

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, considering the zinc coating thickness 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 oz. 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”.

Epoxy Powder Coated — Green, Grey or White (Suffix GR, GY or WH)

Epoxy powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powder-form epoxy, it proceeds through a 400°F (204°C) baking process for ten minutes, creating a chemical bond. This results in a minimum of 1.5 mil thickness of epoxy coating providing excellent resistance to chipping or peeling.

Special Materials

Aluminum (Suffix ALC)

Superstrut® channel is available in aluminum. Fittings in HDG finish or fiberglass material are suggested for fastening products.

Stainless Steel (Suffix SS)

Superstrut® channel is supplied in Type 316 (T316L) stainless steel. All fittings and accessories are in 316SS (SS6). Contact your Regional Sales Office for availability.

Thomas & Betts reserves the right to change material and finish specifications without notice, to improve its products.

Bare (suffix BC) is available upon request.

Channels and Concrete Inserts

Channel Selection Chart

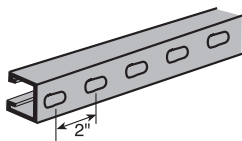
CHANNEL	HOLE CONFIGURATIONS					LENGTH	FINISH ON STEEL					SPECIAL MATERIALS					
	Series	HS	S	SW	P		KO	ft.	BC	PG(C)	EG(C)	GoldGalv®	HDG(C)	GR,GY,WH	PV(C)	AL(C)	T316L
A1200						10 or 20											
A1400						10 or 20											
AR1600						10 or 20											
B1200						10 or 20											
B1400						10 or 20											
BR1600						10 or 20											
C1200						10 or 20											
D1200						10 or 20											
E1200						10 or 20											
H1200						10 or 20											

Legend

EXAMPLES	HOLE CONFIGURATION		FINISH ON STEEL		SPECIAL MATERIALS	
A120010PG Plain channel, 10 ft., pre-galvanized finish	Suffix		Suffix		Suffix	
	blank	Plain, no holes	BC	Bare	AL	Aluminum
	HS	Half slot	PGC	Pre-galvanized	SS6 (C)	Stainless Steel Type 316
	S	Slotted	EGC	Electrogalvanized	T316L	Stainless Steel Type 316L
B1400P10 Punched channel, 10 ft., GoldGalv® finish	SW	Slotted wide	Blank	GoldGalv®		
	P	Punched	HDGC	Hot dipped galvanized		
E1200HS20HDG Half slot channel, 20 ft. hot dipped galvanized	KO	Knockout	GR,GY,WH	Epoxy paint in green (GR), grey (GY), or white (WH)		
		Standard offering		A minimum order quantity may apply		

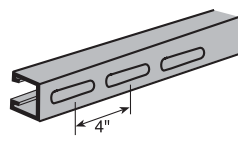
Hole Configuration

Half Slot Channel



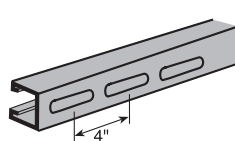
Slots: 9/16 in. X 1-1/8 in.

Slotted Channel



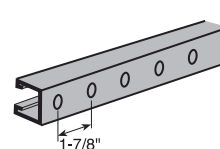
Slots: 7/16 in. X 3 in.

SW "Slotted Wide" Channel



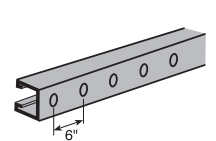
Slots: 9/16 in. X 3 in.

Punched Channel



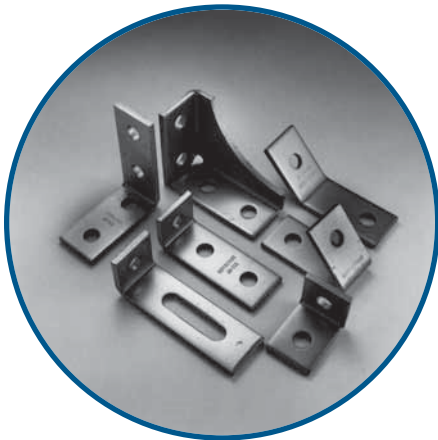
Holes: 9/16 in.

Channel with Knockouts



KO: 1/2 in.

Fittings and Brackets



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	13/16 in. from end of fittings
Hole spacing	1-7/8 in. centers
Hole size	9/16 in. diameter
Material	1-5/8 in. wide
Material	1/4 in. thick

Application Instructions

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

Design Data

Load ratings vary depending fittings and brackets are used with 12, *14 or 16 gauge channel. Ratings are shown for each channel material. (See page A57 for Engineering Data and Specifications).

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 9/16 in. hole is a 1/2 in. hex head cap screw 1 in. long. The 1 in. length may be used with all Series channel.

Design Load

For more information on design load, see page A57 Engineering Data and Specifications.

Finishes and Special Materials

Standard finishes are Hot Dipped Galvanized (HDGC) and GoldGalv® (no suffix). Fittings are also available in ElectroGalvanized (EG) and Stainless Steel 316 (SS6C). Contact your Regional Sales Office for availability and minimum quantities.

Aluminum channel

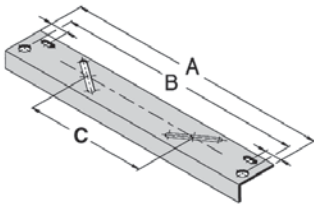
For Aluminum channel, we suggest fittings in HDG (C) or SS6 (C).

Fittings and Brackets

Brackets

S202

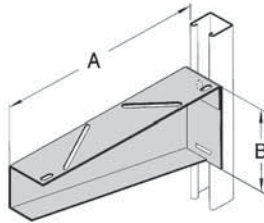
- *Finishes**
- HDG



Cat. No.	A (in.)	B (in.)	C (in.)	Wt./C lb.
S202-6*	6	5	—	75
S202-9*	9	8	2	100
S202-15*	15	14	18	175
S202-21*	21	20	14	250
S202-27*	27	26	20	325
S202-33*	33	32	26	400

S203

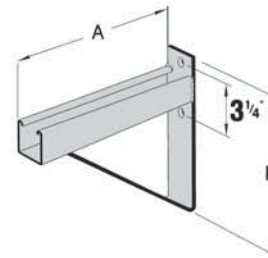
- *Finishes**
- HDG



Cat. No.	A (in.)	B (in.)	Design Load/lb.	Wt./C lb.
S203-8*	8-1/2	4-1/16	1200	180
S203-14*	14-1/2	5-3/8		325
S203-20*	20-1/2	6-11/16		525
S203-26*	26-1/2	8		675
S203-32*	32-1/2	8		840
S203-38*	38-1/2	8		1050

S249

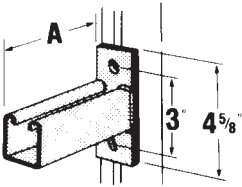
- *Finishes**
- HDG
 - SS6C



Cat. No.	A (in.)	B (in.)	Design Load/lb.	Wt./C lb.
S249-8*	8-1/2	8	1500	320
S249-14*	14-1/2	9		520
S249-20*	20-1/2	9		660
S249-26*	26-1/2	11-1/2		870
S249-32*	32-1/2	11-1/2		1030
S249-38*	38-1/2	11-1/2		1230

S250

- *Finishes**
- HDG
 - SS6C

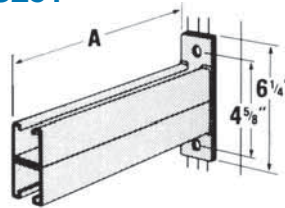


Cat. No.	A (in.)	Design Load/lb.	Wt./C lb.
S250-6*	6	1500	150
S250-8*	8-1/2	1500	150
S250-12*	12	800	250
S250-14*	14-1/2	800	250
S250-18*	18	550	350
S250-20*	20-1/2	550	350
S250-24*	24	400	450
S250-26*	26-1/2	400	450

May be installed inverted with no change in load ratings.

S251

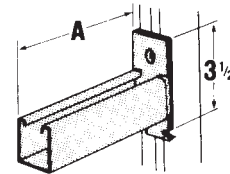
- *Finishes**
- HDG
 - SS6C



Cat. No.	A (in.)	Design Load/lb.	Wt./C lb.
S251-12*	12	1650	514
S251-14*	14-1/2	1650	514
S251-18*	18	1050	714
S251-20*	20-1/2	1050	714
S251-24*	24	800	914
S251-26*	26-1/2	800	914
S251-30*	30	650	1114
S251-32*	32-1/2	650	1114
S251-36*	36	500	1314
S251-38*	38-1/2	500	1314

S256

- *Finishes**
- HDG
 - SS6C

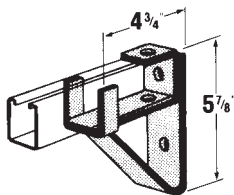


Cat. No.	A (in.)	Design Load/lb.	Wt./C lb.
S256-6*	6	1000	151
S256-8*	8-1/2	1000	151
S256-12*	12	500	251
S256-14*	14-1/2	500	251
S256-18*	18	300	351
S256-20*	20-1/2	300	351
S256-24*	24	250	451
S256-26*	26-1/2	250	451

When installed in inverted position reduce load rating 40%.

S247

- S247HDG
S247
S247SS6

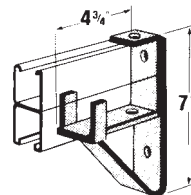


Design Moment
(channel upright as shown)
When Supported By
A-1200 5250 inch lb.
A-1400 3650 inch lb.

Applies to fitting only, not to the arm.

S248

- S248HDGC
S248



Design Moment
(channel upright as shown)
When Supported By
A-1202 10 800 inch lb.
A-1402 7550 inch lb.

Applies to fitting only, not to the arm.

Standard Dimensions

Hole Spacing
Hole Spacing
Hole Size
Material
Material

13/16 in. From End
1-7/8 in. Centers
9/16 in. Diam.
1-5/8 in. Width
1/4 in. Thick

Materials

HDG(C)
EG(C)
(No suffix)
SS6(C)

Hot-Dipped Galvanized
ElectroGalvanized
GoldGalv®
Stainless Steel 316