



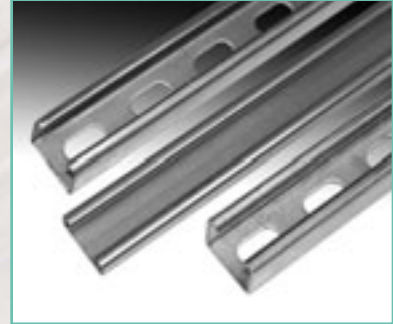
## The Power to Build!

The present line of Power-Strut continuous slot metal framing is the result of over one half century of experience in metal framing.

This complete line includes channels, fittings and accessories for any framing or support solution... large or small, heavy or light.

Power-Strut is proud of the exacting standards of research, design, engineering and manufacturing that go into production of the Power-Strut system.

Maximum recommended load ratings for channels have been established through testing and are based on allowable stresses applicable to the Power-Strut Material Specification. Electrical Power-Strut products are listed by the Underwriters' Laboratories, Inc. (U.L.) and certified by the Canadian Standards Association (CSA.)



## The Power-Strut Connection, Easy as 1 - 2 - 3...

1. Insert the clamping nut anywhere along the continuous slot channel. A 90° clockwise turn positions the grooves and teeth in the nut with the inserted edges of the channel.

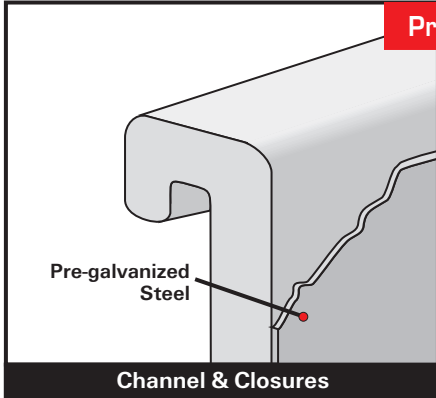


2. The Power-Strut fitting provides the connection of channels.



3. Tighten the bolt(s) to secure the connection.

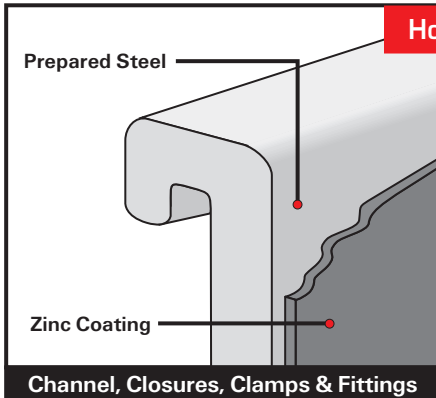




## Pregalvanized (PG)

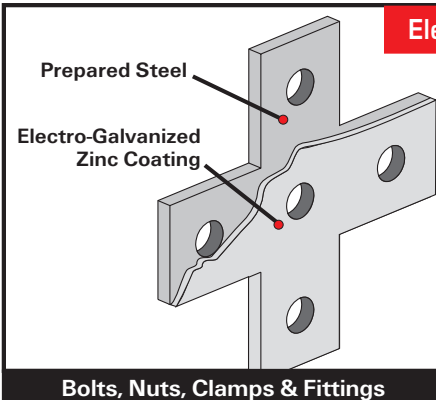
Material (steel strip) is coated with zinc by hot-dip process prior to roll-forming or press operations.

The zinc coating conforms to ASTM A653, Grade 90 General Requirement for Steel Sheet, Zinc-Coated (Galvanized) by Hot Dip Process.



## Hot-Dipped Galvanized (HG)

Material is coated with zinc after being roll-formed or after all manufacturing operations are completed, conforming to ASTM specification No. A123 or A153.

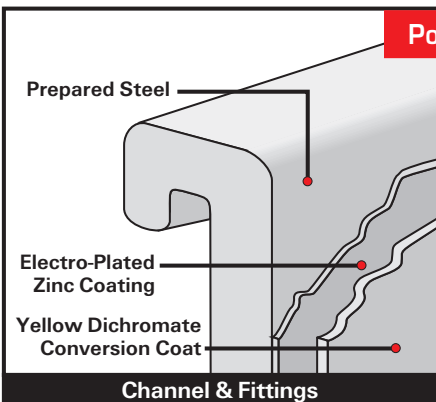


## Electro-Galvanized (EG)

Fittings and hardware are electrolytically coated with zinc to commercial standards (ASTM-B633 Type III C1).

SC1 (mild) has a Zinc coating of 0.2 and is recommended for dry indoor use. SC1 is the standard finish thickness.

SC3 (Severe) has a Zinc coating of 0.5 mill and is the standard finish thickness only on UL Listed raceway products.



## Power-Gold (ZD)

A Electro-galvanized zinc plate is applied with a cohesive molecular bond to the steel base metal, in compliance with the ASTM B633 standard. Yellow Dichromate is applied over the zinc and results in a gold appearance which acts as a nonporous barrier sealant.

SC1 (mild) has a Zinc coating of 0.2 and is recommended for dry indoor use. SC1 is the standard finish thickness

SC3 (Severe) has a Zinc coating of 0.5 mill and is the standard finish thickness only on UL Listed raceway products.

## ZINC COATING

Power-Strut products are available in four types of zinc coatings:

- Electroplated (EG)
- Pregalvanized (PG)
- Hot-Dipped Galvanized (HG)
- Yellow Dichromate (ZD)

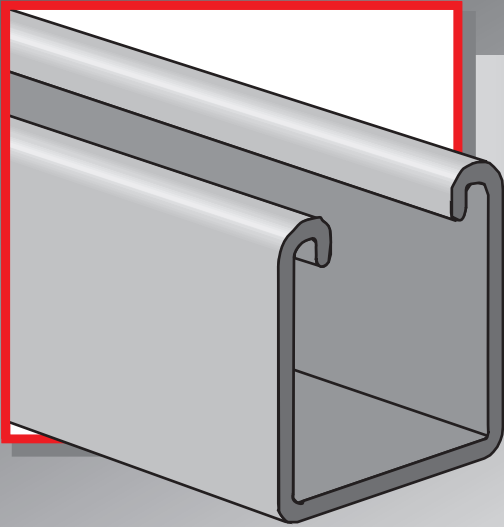
Zinc coatings offer two types of protection:

1. **Barrier:** The zinc coating protects the steel substrate from direct contact with the environment.
2. **Sacrificial:** The zinc coating will protect scratches, cut edges, etc. through an anodic sacrificial process.

The service life of zinc coating is directly related to the zinc coating thickness as shown below.

### COMPARISON OF ZINC GALVANIZED FINISHES

Finish	Zinc Thickness
Hot-Dipped Galvanized	2.6 MIL
Pregalvanized	0.75 MIL
Electro-Galvanized (SC1)	0.2 MIL
Electro-Galvanized (SC3)	0.5 MIL
Power-Gold (SC1)	0.2 MIL
Power-Gold (SC3)	0.5 MIL



## CHANNEL

*Power-Strut channel sections are produced by multiple sets of forming rolls which cold-work strip steel into the channel configuration. This type of roll forming produces a uniform channel section held to the specifications of MFMA-4.*

### **MATERIALS:**

Plain and painted green channels are formed from structural quality strip steel which conforms to the requirements of ASTM A-1011 SS Grade 33. Pre-galvanized channel conforms to the requirements of ASTM A-653 Grade 33.

### **STANDARD LENGTHS:**

Stock lengths are 10 and 20 feet. Special lengths are available upon request.

### **STANDARD FINISHES:**

Standard Power-Strut channel is available in plain, painted green, zinc dichromate or pre-galvanized finishes.

### **ORDERING INFORMATION:**

When ordering, add the length or size and finish to the part number. See page 8 - 9 for finish abbreviations and an example.

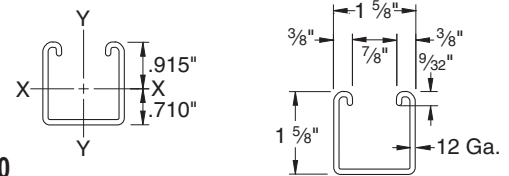
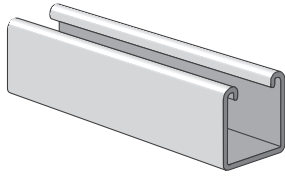
Type of Load	Safety Factor to Yield Strength	Safety Factor to Ultimate Strength
Beam Loads	1.67	2.0
Column Load	1.80	2.2

# CHANNEL

Finish: Plain, Painted Green, or Pregalvanized Order By: No., Length and Finish



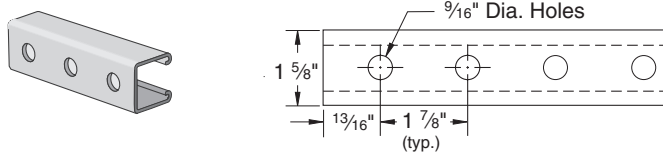
## PS 200 – Steel Channel (1<sup>5</sup>/<sub>8</sub>" x 1<sup>5</sup>/<sub>8</sub>" x 12 ga.)



ELEMENTS OF SECTION – PS 200

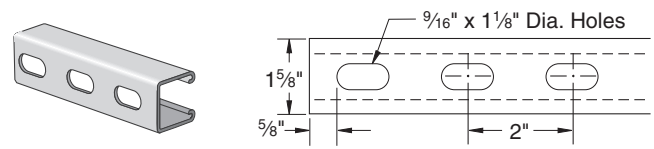
Weight (lbs./100 ft.)	Area of Section (Inch <sup>2</sup> )	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)	Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)
189	0.555	0.185	0.202	0.577	0.236	0.290	0.651

### PS 200 H - Channel with Holes



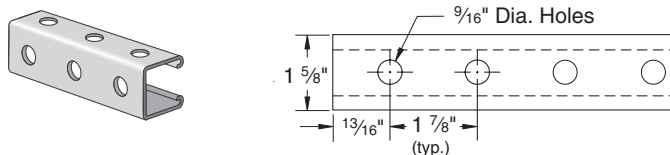
Weight: 186 lbs./100 ft.

### PS 200 EH – Channel with Elongated Holes



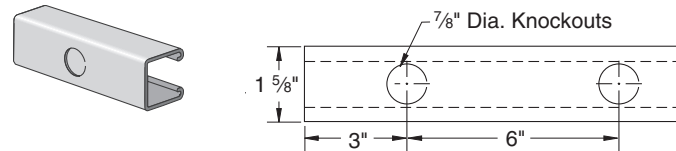
Weight: 185 lbs./100 ft.

### PS 200 H3 - Channel with Holes



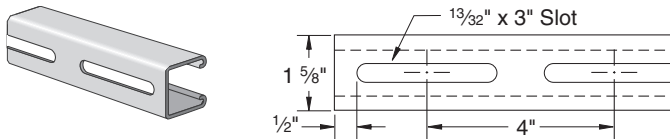
Weight: 175 lbs./100 ft.

### PS 200 K06 – Channel with Knockouts



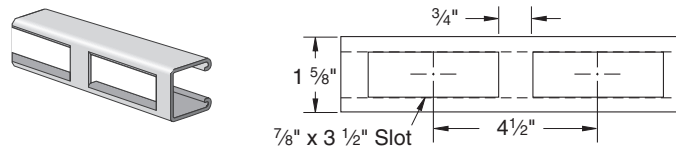
Weight: 189 lbs./100 ft.

### PS 200 S - Channel with Slots



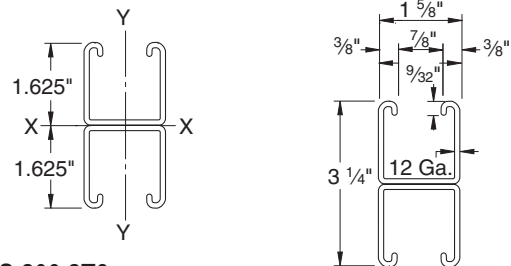
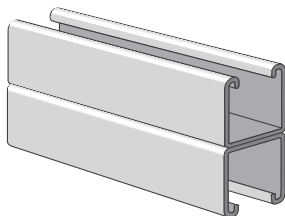
Weight: 185 lbs./100 ft.

### PS 200 SB – Channel with Slotted Back



Weight: 173 lbs./100 ft.

## PS 200 2T3 – Steel Channel (1<sup>5</sup>/<sub>8</sub>" x 3<sup>1</sup>/<sub>4</sub>" x 12 ga.)



ELEMENTS OF SECTION – PS 200 2T3

Weight (lbs./100 ft.)	Area of Section (Inch <sup>2</sup> )	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)	Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)
378	1.111	0.928	0.571	0.914	0.471	0.580	0.651