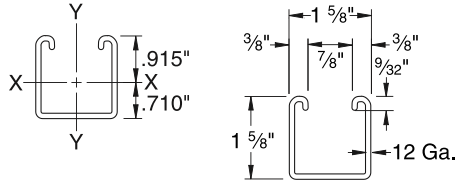
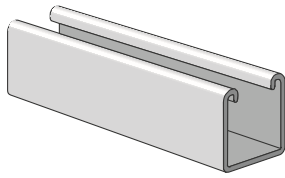


## PS 200 – Steel Channel (1<sup>5</sup>/<sub>8</sub>" x 1<sup>5</sup>/<sub>8</sub>" x 12 ga.)



### 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

#### 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 FINISHES:

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

#### STANDARD LENGTHS:

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

#### ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. AL(alum.), EG(elec. galv.), GR (green), HG(Hot-Dip Galv.), PG(PreGalv.), ZD(Yellow Dichromate)

Project: \_\_\_\_\_

Approval Stamp:

Architect / Engineer: \_\_\_\_\_

Date: \_\_\_\_\_ Phone: \_\_\_\_\_

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Notes 1: \_\_\_\_\_

Notes 2: \_\_\_\_\_

## PS 200 & PS 200 2T3 – Load Data

### BEAM LOADING – PS 200

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,690	0.06	1,690	1,690	1,690
36	1,130	0.13	1,130	1,130	900
48	850	0.22	850	760	500
60	680	0.35	650	480	320
72	560	0.50	450	340	220
84	480	0.68	330	250	160
96	420	0.89	250	190	130
108	380	1.14	200	150	100
120	340	1.40	160	120	80
144	280	2.00	110	80	60
168	240	2.72	80	60	40
192	210	3.55	60	50	NR
216	190	4.58	50	40	NR
240	170	5.62	40	NR	NR

\* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-200-EH 15%      PS-200-S 15%

PS-200-H 10%      PS-200-K06 5%

PS-200-SB 30%

For Extruded Aluminum Channels, reduce beam load values 38%.

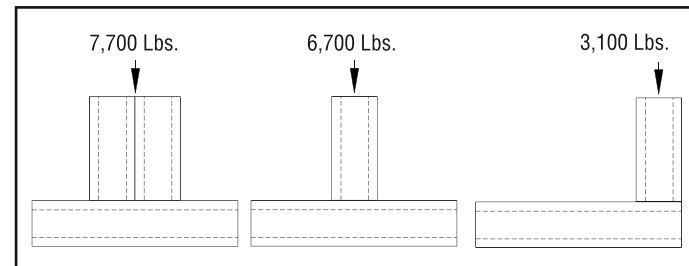
### COLUMN LOADING – PS 200

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K = 1.0 (lbs)	K = 1.2 (lbs)
24	3,550	10,740	9,890	8,770	7,740
36	3,190	8,910	7,740	6,390	5,310
48	2,770	7,260	6,010	4,690	3,800
60	2,380	5,910	4,690	3,630	2,960
72	2,080	4,840	3,800	2,960	2,400
84	1,860	4,040	3,200	2,480	1,980
96	1,670	3,480	2,750	2,110	1,660
108	1,510	3,050	2,400	1,810	**
120	1,380	2,700	2,110	**	**
144	1,150	2,180	1,660	**	**

\*\*  $KL > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

### PS200 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when 1/2" PS NS channel nuts are used.

Pull Out Strength – 2,000 lbs. per bolt when 1/2" PS NS channel nuts are used.

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