



METAL FRAMING CHANNEL

Cold Formed Strut

19449 Progress Dr. • Strongsville • OH • 44149 • PH: 440-878-1199

ES200 STANDARD, ES200EH SLOTTED

1-5/8" x 1-5/8"

12 Gauge

Part No: ES200 **Weight:** 189lbs /100 Ft.

Part No: ES200EH **Weight:** 185lbs /100 Ft.

ORDER BY: Part Number, Finish, Length

Material: ASTM A-653 LOW CARBON STEEL

Finish: PL - Plain

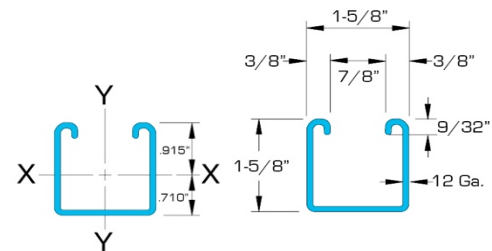
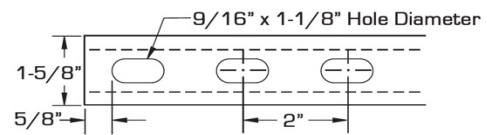
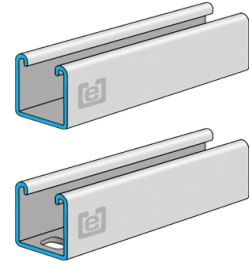
PG90 - Pre-Galvanized Grade 90

PG60 - Pre-Galvanized Grade 60

HG - Hot Dipped Galvanized

Length : 10'

(feet) 20'



ELEMENTS OF SECTION - ES200 & ES200EH

Area of Section	X-X Axis			Y-Y Axis		
	Moment of Inertia (Inch ⁴)	Section Modulus (Inch ³)	Radius of Gyration (Inch)	Moment of Inertia (Inch ⁴)	Section Modulus (Inch ³)	Radius of Gyration (Inch)
0.555	0.185	0.202	0.577	0.236	0.29	0.651

BEAM LOADING ES200 & ES200EH

Span (inch)	Lateral Bracing Load Reduction Factors	Maximum Allowable Uniform Load (lbs)	Deflection at Uniform Load (lbs)	Uniform Loading Deflection		
				Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1.00	1,690	0.06	1,690	1,690	1,690
36	0.94	1,130	0.13	1,130	1,130	900
48	0.88	850	0.22	850	760	500
60	0.82	680	0.35	650	480	320
72	0.78	560	0.50	450	340	220
84	0.75	480	0.68	330	250	160
96	0.71	420	0.89	250	190	130
108	0.69	380	1.14	200	150	100
120	0.66	340	1.40	160	120	80
144	0.61	280	2.00	110	80	60
168	0.55	240	2.72	80	60	40
192	0.51	210	3.55	60	50	NR
216	0.47	190	4.58	50	40	NR
240	0.44	170	5.62	40	NR	NR

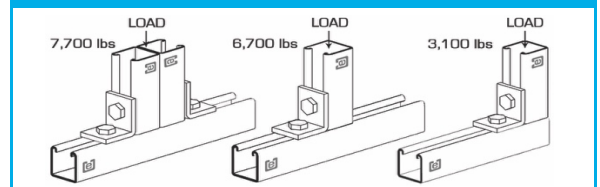
COLUMN LOADING ES200 & ES200EH

Unbraced Height (inches)	Maximum 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_r > 200

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

BEARING LOADS ES200



Resistance to Slip: 1,500 lbs. per bolt when 1/2" ES NS channel nuts are used. Pull Out Strength: 2,000 lbs. per bolt when 1/2" ES NS channel nuts are used.

*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 located in the blue column in the chart above.

For Pierced Channels, reduce beam load values as follows: ES200EH 15%

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