



METAL FRAMING CHANNEL

Cold Formed Strut

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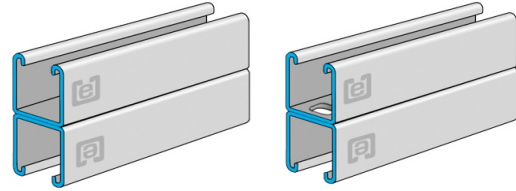
ES2102T3 STANDARD, ES2102T3EH SLOTTED

1-5/8" x 3-1/4"

14 Gauge

Part No.: ES2102T3 Weight: 284lbs /100 Ft.

Part No.: ES2102T3EH Weight: 274lbs /100 Ft.



ORDER BY: Part Number, Finish, Length

Material: ASTM A-653 LOW CARBON STEEL

Finish: PL - Plain

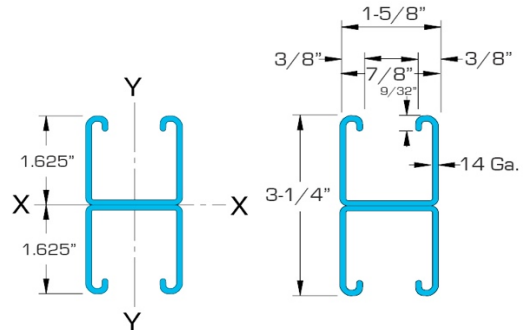
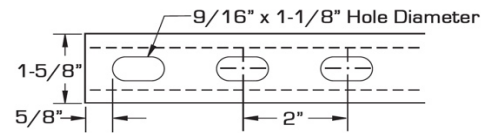
PG90 - Pre-Galvanized Grade 90

PG60 - Pre-Galvanized Grade 60

HG - Hot Dipped Galvanized

Length : 10'

(feet) 20'



ELEMENTS OF SECTION - ES2102T3 & ES2102T3EH						
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)
0.835	0.733	0.451	0.937	0.353	0.434	0.65

BEAM LOADING ES2102T3 & ES2102T3EH						
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	2,180 *	0.02	2,180 *	2,180 *	2,180 *
36	1.00	2,180 *	0.06	2,180 *	2,180 *	2,180 *
48	0.98	1,890	0.13	1,890	1,890	1,890
60	0.93	1,510	0.20	1,510	1,510	1,280
72	0.87	1,260	0.28	1,260	1,260	890
84	0.82	1,080	0.39	1,080	980	650
96	0.76	950	0.51	950	750	500
108	0.70	840	0.64	790	590	400
120	0.65	760	0.79	640	480	320
144	0.54	630	1.13	440	330	220
168	0.45	540	1.54	330	250	160
192	0.39	470	2.00	250	190	130
216	0.34	420	2.55	200	150	100
240	0.31	380	3.16	160	120	80

COLUMN LOADING ES2102T3 & ES2102T3EH					
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	5,010	18,250	17,700	16,880	16,030
36	4,860	16,990	16,030	14,770	13,620
48	4,700	15,610	14,380	12,930	11,750
60	4,480	14,280	12,930	11,490	9,290
72	4,210	13,100	11,750	9,290	6,700
84	3,880	12,090	10,220	7,090	4,930
96	3,480	11,170	8,390	5,430	3,770
108	3,060	9,640	6,700	4,290	2,980
120	2,680	8,170	5,430	3,480	**
144	2,090	5,710	3,770	**	**

** KL r > 200

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

*Load limited by spot weld shear

† Bearing load may govern capacity.

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

This load table is based on a solid channel section.

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.