



# METAL FRAMING CHANNEL

## Cold Formed Strut

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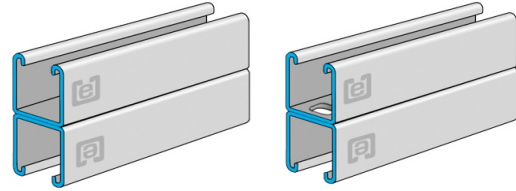
### ES4002T3 STANDARD, ES4002T3EH SLOTTED

1-5/8" x 2"

12 Gauge

Part No: ES4002T3 Weight: 288lbs /100 Ft.

Part No: ES4002T3EH Weight: 272lbs /100 Ft.



**ORDER BY:** Part Number, Finish, Length

**Material:** ASTM A-653 LOW CARBON STEEL

**Finish:** PL - Plain

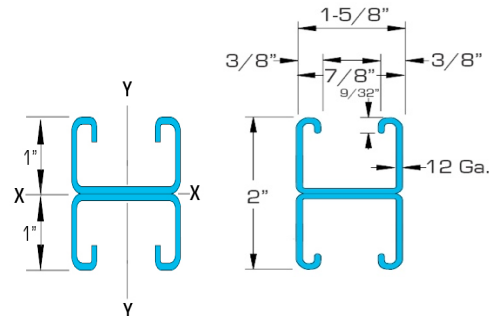
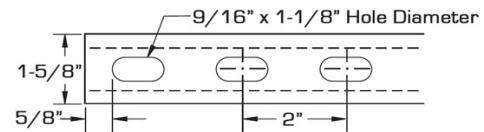
PG90 - Pre-Galvanized Grade 90

PG60 - Pre-Galvanized Grade 60

HG - Hot Dipped Galvanized

**Length :** 10'

(feet) 20'



ELEMENTS OF SECTION - ES4002T3 & ES4002T3EH						
Area of Section	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)
0.849	0.255	0.255	0.548	0.322	0.396	0.616

BEAM LOADING ES4002T3 & ES4002T3EH						
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	2,140 *	0.05	2,140 *	2,140 *	2,140 *
36	1.00	1,420	0.11	1,420	1,420	1,240
48	1.00	1,070	0.20	1,070	1,040	700
60	1.00	850	0.32	850	670	450
72	0.97	710	0.46	620	460	310
84	0.95	610	0.63	450	340	230
96	0.92	530	0.81	350	260	170
108	0.90	470	1.03	280	210	140
120	0.87	430	1.29	220	170	110
144	0.82	360	1.86	150	120	80
168	0.77	310	2.54	110	90	60
192	0.72	270	3.31	90	70	NR
216	0.67	240	4.19	70	NR	NR
240	0.62	210	5.03	60	NR	NR

COLUMN LOADING ES4002T3 & ES4002T3EH					
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	4,720	18,310	17,840	17,300	16,760
36	4,640	17,360	16,760	15,260	13,610
48	4,470	16,280	14,720	12,460	10,170
60	4,230	14,590	12,460	9,610	6,980
72	3,930	12,750	10,170	6,980	4,840
84	3,520	10,880	7,990	5,130	3,560
96	3,070	9,050	6,130	3,920	**
108	2,690	7,340	4,840	3,100	**
120	2,360	5,940	3,920	**	**

\*\* 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.