

METAL FRAMING CHANNEL

Cold Formed Strut

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

ES1502T3 STANDARD, ES1502T3EH SLOTTED

1-5/8" x 4-7/8" 12 Gauge

Part No: ES1502T3 **Wieght:** 494lbs /100 Ft. **Part No:** ES1502T3EH **Weight:** 484lbs /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 - ES1502T3 & ES1502T3EH							
	X-X Axis			Y-Y Axis			
Area of	Moment of	Section	Radius of	Moment of	Section	Radius of	
Section	Inertia	Modulus	Gyration	Inertia	Modulus	Gyration	
	(Inch ⁴)	(Inch ³)	(Inch)	(Inch ⁴)	(Inch ³)	(Inch)	
1.452	2.805	1.151	1.390	0.669	0.823	0.679	

BEAM LOADING ES1502T3 & ES1502T3EH						
Span (inch)	Lateral Bracing Load	Maximum Allowable Uniform	Deflection at Uniform Load (lbs)	Uniform Loading Deflection		
	Reduction			Span/180	Span/240	Span/360
	Factors	Load (lbs)		(lbs)	(lbs)	(lbs)
24	1.00	5,220 *	0.01	5,220 *	5,220 *	5,220 *
36	1.00	5,220 *	0.04	5,220 *	5,220 *	5,220 *
48	0.98	4,820	0.08	4,820	4,820	4,820
60	0.93	3,860	0.13	3,860	3,860	3,860
72	0.87	3,220	0.19	3,220	3,220	3,220
84	0.81	2,760	0.26	2,760	2,760	2,500
96	0.76	2,410	0.34	2,410	2,410	1,920
108	0.70	2,140	0.42	2,140	2,140	1,510
120	0.64	1,930	0.52	1,930	1,840	1,230
144	0.53	1,610	0.76	1,610	1,280	850
168	0.45	1,380	1.03	1,250	940	630
192	0.39	1,210	1.35	960	720	480
216	0.34	1,070	1.7	760	570	380
240	0.3	960	2.09	610	460	310

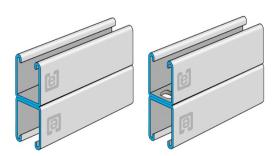
^{*}Load limited by spot weld shear.

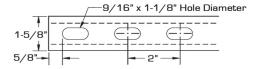
For concentrated load at center of span, divide uniform load by 2 and multiply

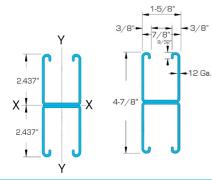
corresponding corresponding deflection by 0.8.

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.







COLUMN LOADING ES1502T3 & ES1502T3EH						
Unbraced Height (inches)	Maximum Allowable	Maximum Column Load Applied at C. G.				
	Load at Slot	K=0.65	K=0.80	K=1.0	K=1.2	
	Face (lbs)	(lbs)	(lbs)	(lbs)	(lbs)	
24	8,580	31,810	30,880	29,520	28,100	
36	8,350	29,700	28,100	26,000	24,070	
48	8,080	27,390	25,330	22,910	20,940	
60	7,720	25,170	22,910	20,510	17,170	
72	7,270	23,190	20,940	17,170	12,700	
84	6,780	21,510	18,740	13,430	9,330	
96	6,130	20,110	15,630	10,290	7,150	
108	5,450	17,750	12,700	8,130	5,650	
120	4,800	15,260	10,290	6,590	**	
144	3,760	10,830	7,150	**	**	
168	2,970	7,950	5,250	**	**	

** KL r>200

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