



OEG BUILDING MATERIALS - METAL FRAMING MANUFACTURERS

6001 BORDENTOWN AVE, SAYREVILLE, NJ 08872

P 732.667.3636 | WWW.OEGUSA.COM | ORDERS@OEGUSA.COM

PRODUCT

Strut Channel - Back to Back

MEMBER#

158SC12-B2B

GAUGE

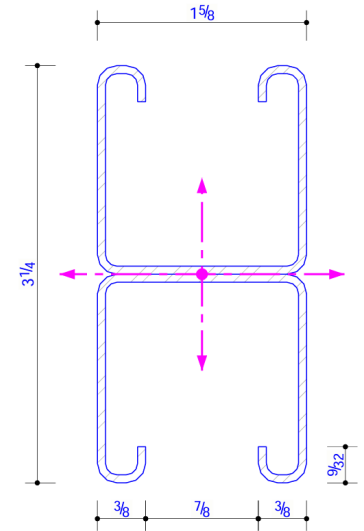
12

PHYSICAL PROPERTIES

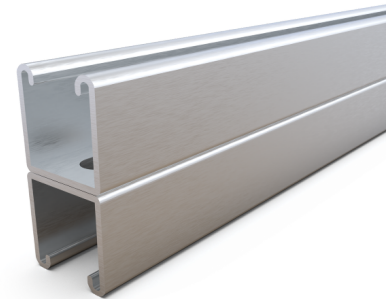
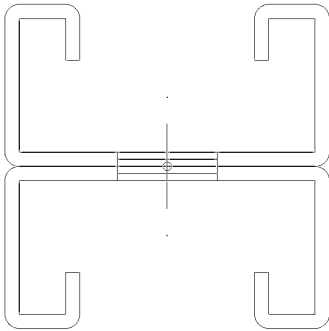
Web Depth	1.625
Flange	1.625
Return	0.375
Weight (plf)	3.7665
Area (in ²)	1.1078

GROSS PROPERTIES

Net Area (at 0.56" Hole) (in ²)	1.0061
Moment of Intertia Iy (in ⁴)	0.4746
Section Modulus Sy (in ³)	0.58413
Radius of Gyration ry (in)	0.6545
Moment of Intertia Ix (in ⁴)	0.9628
Section Modulus Sx (top) (in ³)	0.59249
Radius of Gyration rx (in)	0.9782



1 15/8" x 3 1/4" STRUT CHANNEL
CROSS SECTION



DISCLAIMER:

All data, detail and specifications included in herein are intended as a general guide for using OEG Building Materials products. These products should not be used in design or construction without evaluation by a qualified engineer or architect to determine their suitability for a specific use. OEG Building Materials assumes no liability for failure resulting from use or misapplication of computation, details or specifications contained herein. OEG Building Material assumes no liability for damages resulting from improper application or insulation of these products.



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BEAM LOADING

Span (in)	Max. Allow Uniform (fully braced) plf	Max. Allow. Uniform Load (plf)	Deflection at max load (in)	Max Uniform Load at Deflection (plf)			Max Allowable Moment at Span (lb-ft)
				L/180	L/240	L/360	
24	3841	3842	0.10	1239.60	1239.60	850.04	620
36	1707	1708	0.22	503.73	377.79	251.86	620
48	960	902	0.39	212.51	159.38	106.25	620
60	615	539	0.59	108.80	81.60	54.40	604
72	427	347	0.83	62.97	47.22	31.48	585
84	314	235	1.09	39.65	29.74	19.83	566
96	240	165	1.37	26.56	19.92	13.28	547
108	190	118	1.68	18.66	13.99	9.33	529
120	154	86	2.00	13.60	10.20	6.80	510
240	38	10	5.14	1.70	1.28	0.85	328

NOTES:

- Complies with AISI S240-20.
- Steel Material is A1003 Grade 50.
- Effective Properties incorporate.
- Strength increase from Cold Forming.
- Safety Factor for Beams is 1.67.
- Safety Factor for Columns is 1.80.

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COLUMN LOADING

Span (in)	Max Column Load at Center of Gravity (lb)			
	K=0.65	K=0.80	K=1.0	K=1.2
24	27,147	26,201	24,899	23,640
36	25,061	23,640	21,946	20,540
48	23,045	21,445	19,606	16,386
60	21,324	19,606	15,587	11,776
72	19,944	16,386	11,776	8,189
84	17,392	13,255	8,664	6,017
96	14,798	10,365	6,633	4,607
108	12,322	8,189	5,241	3,640
120	10,048	6,633	4,245	2,948
144	6,978	4,607	2,948	2,047
240	2,512	KL/r>200	KL/r>200	KL/r>200

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