



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#

314SC12-B2B

GAUGE

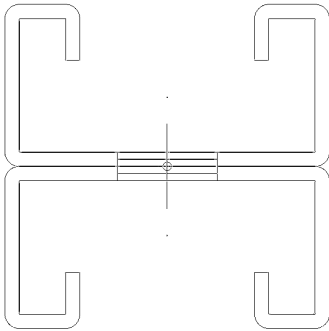
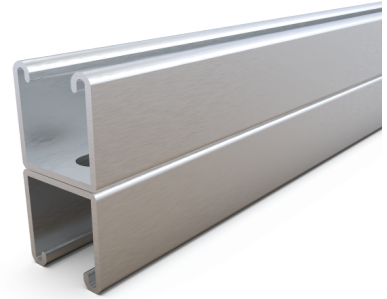
12

PHYSICAL PROPERTIES

Web Depth	1.625
Flange	3-1/4
Return	0.375
Weight (plf)	6.014
Area (in ²)	1.7688

GROSS PROPERTIES

Net Area (at 0.56" Hole) (in ²)	1.6671
Moment of Intertia Iy (in ⁴)	0.8565
Section Modulus Sy (in ³)	1.0542
Radius of Gyration ry (in)	0.7168
Moment of Intertia Ix (in ⁴)	6.292
Section Modulus Sx (top) (in ³)	1.936
Radius of Gyration rx (in)	1.9427



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	9006	9006.0	0.02	9005.80	9005.80	9005.80	4503
36	4003	4003.0	0.04	4002.58	4002.58	4002.58	4503
48	2251	2260.0	0.07	2251.45	2251.45	2251.45	4521
60	1441	1441.0	0.11	1440.93	1440.93	1440.93	4503
72	1001	915.0	0.16	1000.64	1000.64	1000.64	4118
84	735	563.0	0.21	735.17	735.17	735.17	3448
96	563	355.0	0.28	562.86	562.86	537.08	2838
108	445	238.0	0.35	444.73	444.73	377.21	2408
120	360	167.0	0.44	360.23	360.23	274.98	2090
240	90	18.0	1.75	68.75	51.56	34.37	911

NOTES:

- Complies with AISI S100-2016.
- 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	39,167	39,167	39,167	37,433
36	39,167	37,433	33,330	29,419
48	36,062	31,993	27,018	22,813
60	31,663	27,018	21,892	17,975
72	27,600	22,813	17,975	14,863
84	24,037	19,426	15,273	11,298
96	21,022	16,742	12,456	8,650
108	18,504	14,863	9,841	6,834
120	16,468	12,456	7,972	KL/r>200
144	13,103	8,650	KL/r>200	KL/r>200
240	KL/r>200	KL/r>200	KL/r>200	KL/r>200

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