

OEG BUILDING MATERIALS - METAL FRAMING MANUFACTURERS 6001 BORDENTOWN AVE, SAYREVILLE, NJ 08872 P 732.667.3636 I WWW.OEGUSA.COM I ORDERS@OEGUSA.COM

PRODUCT	MEMBER#	GAUGE	
Strut Channel	1316SC12	12	

0.1708

0.6489

0.02674

0.06322

0.06864

0.2848

PHYSICAL PROPERTIES

Section Modulus Sy (in ^2)

Moment of Intertia Ix (in ^3)

Section Modulus Sx (top) (in ^2)

Section Modulus Sx (bot) (in ^2)

Radius of Gyration ry (in)

Radius of Gyration rx (in)

Web Depth	1.625
Flange	13/16
Return	0.375
Weight (plf)	1.314
Area (in^2)	0.3865
Coating	G60
GROSS PROPERTIES	
Net Area (at 0.56" Hole) (in ^2)	0.3296
Moment of Intertia IV (in ^3)	0.1388



COATING G60





DISCAIMER:

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BEAM LOADING

Span (in)	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	
18	728.9	0.11	692.5	519.4	346.3	205
24	410.0	0.19	292.2	219.1	146.1	205
36	176.9	0.41	86.6	64.9	43.3	199
48	96.0	0.70	36.5	27.4	18.3	192
60	59.8	1.07	18.7	14.0	9.3	187
72	40.7	1.50	10.8	8.1	5.4	183
84	29.1	1.99	6.8	5.1	3.4	178
96	21.8	2.54	4.6	3.4	2.3	174
108	16.8	3.14	3.2	2.4	1.6	170
120	13.2	3.77	2.3	1.8	1.2	165

NOTES:

- Complies with AISI S100-2016.
- Steel Materal 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		
18	10,273	9,610	8,782	8,053		
24	9,324	8,527	7,623	6,881		
36	7,726	6,881	5,982	5,233		
48	6,558	5,721	4,779	871		
60	5,657	4,779	KL/r>200	KL/r>200		
72	4,890	KL/r>200	KL/r>200	KL/r>200		
84	4,190	KL/r>200	KL/r>200	KL/r>200		
96	KL/r>200	KL/r>200	KL/r>200	KL/r>200		
108	KL/r>200	KL/r>200	KL/r>200	KL/r>200		
120	KL/r>200	KL/r>200	KL/r>200	KL/r>200		
144	KL/r>200	KL/r>200	KL/r>200	KL/r>200		

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