

Marino\WARE® Product Submittal Data

PRODUCT NAME: 250S137-43

MARINO\WARE PART # 212SC18

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	2-1/2"	Yield Strength Fy (KSI)	33
B. Flange (in)	1-3/8"	Tensile Strength Fu (KSI)	45
C. Lip (in)	3/8"	Design Thickness (in)	0.0451
Mils	43	Minimum Thickness (in)	0.0428
Available Finish	G90	Gauge	18

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.255
Weight of Member: (lb/ft)	0.87
Moment of Inertia: Ix (in ⁴)	0.261
Section Modulus: Sx (in ³)	0.208
Radius of Gyration: Rx (in)	1.010
Gross Moment of Inertia: Iy (in ⁴)	0.067
Gross Radius of Gyration: Ry (in)	0.511

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	0.26
Section Modulus: Sxe (in ³)	0.21
Allowable Local Bending Moment: Mal (in-k)	4.53*
Allowable Distortional Bending Moment: Mad (in-k)	4.02
Allowable strong axis shear away from punch: Vag (lb)	1265
Allowable strong axis shear at punch: Vanet (lb)	394

* Allowable Moment includes cold work of forming

TORSIONAL SECTION PROPERTIES

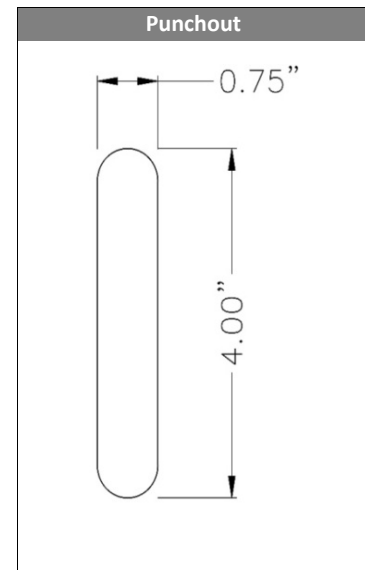
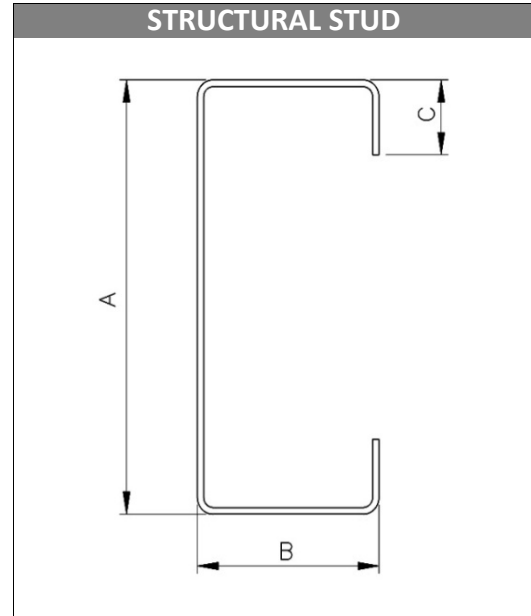
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.173
Torsional Warping Constant: Cw (in ⁶)	0.096
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.129
Shear Center to Mid-Plane of the Web: m (in)	0.670
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.599
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.501

CODES & STANDARDS

- AISI S100, S240 & ICC ES ESR-4062
- ASTM A 1003, A 653, & C 955
- IBC 2012, 2015, 2018, 2021 & FBC 2020, 2023

GREEN INFO

- LEED credits available
- Contact Technical Services for more information.



For more information, please contact Marino\WARE Technical Services at 866-545-1545.

This technical information reflects the most current information available and supersedes any and all publications, effective 7/5/2023
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