

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400S137-68

MARINO\WARE PART # 400SC14

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	Yield Strength Fy (KSI)	50
B. Flange (in)	1-3/8"	Tensile Strength Fu (KSI)	65
C. Lip (in)	3/8"	Design Thickness (in)	0.0713
Mils	68	Minimum Thickness (in)	0.0677
Available Finish	G90	Gauge	14

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.497
Weight of Member: (lb/ft)	1.69
Moment of Inertia: Ix (in ⁴)	1.165
Section Modulus: Sx (in ³)	0.582
Radius of Gyration: Rx (in)	1.531
Gross Moment of Inertia: Iy (in ⁴)	0.112
Gross Radius of Gyration: Ry (in)	0.475

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	1.17
Section Modulus: Sxe (in ³)	0.56
Allowable Local Bending Moment: Mal (in-k)	16.70
Allowable Distortional Bending Moment: Mad (in-k)	16.50
Allowable strong axis shear away from punch: Vag (lb)	4871
Allowable strong axis shear at punch: Vanet (lb)	1356

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	0.842
Torsional Warping Constant: Cw (in ⁶)	0.375
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.922
Shear Center to Mid-Plane of the Web: m (in)	0.574
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.849
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.751

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.

