

Marino\WARE® Product Submittal Data

PRODUCT NAME: 250S137-68

MARINO\WARE PART # 212SC14

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	2-1/2"	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	G60	Gauge	14

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.390
Weight of Member: (lb/ft)	1.33
Moment of Inertia: Ix (in ⁴)	0.386
Section Modulus: Sx (in ³)	0.309
Radius of Gyration: Rx (in)	0.994
Gross Moment of Inertia: Iy (in ⁴)	0.095
Gross Radius of Gyration: Ry (in)	0.495

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	0.39
Section Modulus: Sxe (in ³)	0.31
Allowable Local Bending Moment: Mal (in-k)	10.65*
Allowable Distortional Bending Moment: Mad (in-k)	9.13
Allowable strong axis shear away from punch: Vag (lb)	2866
Allowable strong axis shear at punch: Vanet (lb)	519

* Allowable Bending Moment includes cold work of forming

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	0.661
Torsional Warping Constant: Cw (in ⁶)	0.138
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.096
Shear Center to Mid-Plane of the Web: m (in)	0.653
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.561
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.507

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.

