

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1200S350-68

MARINO\WARE PART # 120SW14

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	12"	Yield Strength Fy (KSI)	50
B. Flange (in)	3-1/2"	Tensile Strength Fu (KSI)	65
C. Lip (in)	1"	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)	1.46
Weight of Member: (lb/ft)	4.966
Moment of Inertia: Ix (in ⁴)	31.002
Section Modulus: Sx (in ³)	5.167
Radius of Gyration: Rx (in)	4.609
Gross Moment of Inertia: Iy (in ⁴)	2.306
Gross Radius of Gyration: Ry (in)	1.257

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	30.331
Section Modulus: Sxe (in ³)	4.062
Allowable Local Bending Moment: Mal (in-k)	121.61
Allowable Distortional Bending Moment: Mad (in-k)	101.00
Allowable strong axis shear away from punch: Vag (lb)	2770
Allowable strong axis shear at punch: Vanet (lb)	2770

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	2.473
Torsional Warping Constant: Cw (in ⁶)	67.251
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.346
Shear Center to Mid-Plane of the Web: m (in)	1.469
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.322
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.806

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.

