

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1000S350-68

MARINO\WARE PART # 100SW14

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	10"	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	G60	Gauge	14

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.32
Weight of Member: (lb/ft)	4.481
Moment of Inertia: I_x (in ⁴)	20.208
Section Modulus: S_x (in ³)	4.042
Radius of Gyration: R_x (in)	3.917
Gross Moment of Inertia: I_y (in ⁴)	2.185
Gross Radius of Gyration: R_y (in)	1.288

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	19.745
Section Modulus: S_{xe} (in ³)	3.418
Allowable Local Bending Moment: M_{al} (in-k)	102.33
Allowable Distortional Bending Moment: M_{ad} (in-k)	83.70
Allowable strong axis shear away from punch: V_{ag} (lb)	3345
Allowable strong axis shear at punch: V_{anet} (lb)	3345

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	2.232
Torsional Warping Constant: C_w (in ⁶)	45.277
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.529
Shear Center to Mid-Plane of the Web: m (in)	1.557
Radius of Gyration on the Centroid Principal axis: R_o (in)	4.837
Torsional Flexural Constant: β 1-(x_o/R_o)²	0.727

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.

