

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1400S350-68

MARINO\WARE PART # 140SW14

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	14"	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)	1.60
Weight of Member: (lb/ft)	5.452
Moment of Inertia: I_x (in ⁴)	44.718
Section Modulus: S_x (in ³)	6.388
Radius of Gyration: R_x (in)	5.283
Gross Moment of Inertia: I_y (in ⁴)	2.406
Gross Radius of Gyration: R_y (in)	1.225

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	42.938
Section Modulus: S_{xe} (in ³)	4.710
Allowable Local Bending Moment: M_{al} (in-k)	141.01
Allowable Distortional Bending Moment: M_{ad} (in-k)	119.00
Allowable strong axis shear away from punch: V_{ag} (lb)	2364
Allowable strong axis shear at punch: V_{anet} (lb)	2364

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	2.715
Torsional Warping Constant: C_w (in ⁶)	94.534
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.190
Shear Center to Mid-Plane of the Web: m (in)	1.391
Radius of Gyration on the Centroid Principal axis: R_o (in)	5.849
Torsional Flexural Constant: β 1-(x_o/R_o)²	0.860

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.

