

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1400S350-118

MARINO\WARE PART # 140SW10

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)	0.1242
Mils	118	Minimum Thickness (in)	0.1180
Available Finish	G90	Gauge	10

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	2.74
Weight of Member: (lb/ft)	9.330
Moment of Inertia: I_x (in ⁴)	75.217
Section Modulus: S_x (in ³)	10.745
Radius of Gyration: R_x (in)	5.238
Gross Moment of Inertia: I_y (in ⁴)	3.903
Gross Radius of Gyration: R_y (in)	1.193

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	75.197
Section Modulus: S_{xe} (in ³)	10.259
Allowable Local Bending Moment: M_{al} (in-k)	340*
Allowable Distortional Bending Moment: M_{ad} (in-k)	257.00
Allowable strong axis shear away from punch: V_{ag} (lb)	12743
Allowable strong axis shear at punch: V_{anet} (lb)	11285

* Allowable Bending Moment includes cold work of forming

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	14.098
Torsional Warping Constant: C_w (in ⁶)	155.39
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.130
Shear Center to Mid-Plane of the Web: m (in)	1.360
Radius of Gyration on the Centroid Principal axis: R_o (in)	5.779
Torsional Flexural Constant: β 1-(x _o /R _o) ²	0.864

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.

