

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1000S350-118

MARINO\WARE PART # 100SW10

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)	0.1242
Mils	118	Minimum Thickness (in)	0.1180
Available Finish	G60	Gauge	10

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	2.25
Weight of Member: (lb/ft)	7.639
Moment of Inertia: I_x (in ⁴)	33.777
Section Modulus: S_x (in ³)	6.755
Radius of Gyration: R_x (in)	3.879
Gross Moment of Inertia: I_y (in ⁴)	3.543
Gross Radius of Gyration: R_y (in)	1.256

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	33.770
Section Modulus: S_{xe} (in ³)	6.426
Allowable Local Bending Moment: M_{al} (in-k)	213*
Allowable Distortional Bending Moment: M_{ad} (in-k)	176.00
Allowable strong axis shear away from punch: V_{ag} (lb)	16235
Allowable strong axis shear at punch: V_{anet} (lb)	9536

* Allowable Bending Moment includes cold work of forming

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	11.544
Torsional Warping Constant: C_w (in ⁶)	74.030
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.465
Shear Center to Mid-Plane of the Web: m (in)	1.524
Radius of Gyration on the Centroid Principal axis: R_o (in)	4.764
Torsional Flexural Constant: β 1-(x _o /R _o) ²	0.732

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.

