

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1600S350-118

MARINO\WARE PART # 160SW10

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	16"	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)	2.99
Weight of Member: (lb/ft)	10.175
Moment of Inertia: Ix (in ⁴)	103.92
Section Modulus: Sx (in ³)	12.990
Radius of Gyration: Rx (in)	5.895
Gross Moment of Inertia: Iy (in ⁴)	4.039
Gross Radius of Gyration: Ry (in)	1.162

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	101.987
Section Modulus: Sxe (in ³)	11.304
Allowable Local Bending Moment: Mal (in-k)	338.45
Allowable Distortional Bending Moment: Mad (in-k)	296.00
Allowable strong axis shear away from punch: Vag (lb)	11086
Allowable strong axis shear at punch: Vanet (lb)	11086

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	15.375
Torsional Warping Constant: Cw (in ⁶)	209.69
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.998
Shear Center to Mid-Plane of the Web: m (in)	1.291
Radius of Gyration on the Centroid Principal axis: Ro (in)	6.332
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.900

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.

