

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1000S350-97

MARINO\WARE PART # 100SW12

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)	0.1017
Mils	97	Minimum Thickness (in)	0.0966
Available Finish	G90	Gauge	12

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.86
Weight of Member: (lb/ft)	6.313
Moment of Inertia: Ix (in ⁴)	28.152
Section Modulus: Sx (in ³)	5.630
Radius of Gyration: Rx (in)	3.895
Gross Moment of Inertia: Iy (in ⁴)	2.992
Gross Radius of Gyration: Ry (in)	1.270

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	28.146
Section Modulus: Sxe (in ³)	5.118
Allowable Local Bending Moment: Mal (in-k)	153.24
Allowable Distortional Bending Moment: Mad (in-k)	136.00
Allowable strong axis shear away from punch: Vag (lb)	9862
Allowable strong axis shear at punch: Vanet (lb)	7175

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	6.397
Torsional Warping Constant: Cw (in ⁶)	62.280
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.492
Shear Center to Mid-Plane of the Web: m (in)	1.538
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.795
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.730

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.

