

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1400S300-118

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 140SX10

PROPERTIES:

A. Web (in)	14"	Yield Strength Fy (KSI)	50
B. Flange (in)	3"	Tensile Strength Fu (KSI)	65
C. Lip (in)	5/8"	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)	2.52
Weight of Member: (lb/ft)	8.590
Moment of Inertia: Ix (in ⁴)	65.671
Section Modulus: Sx (in ³)	9.382
Radius of Gyration: Rx (in)	5.100
Gross Moment of Inertia: Iy (in ⁴)	2.175
Gross Radius of Gyration: Ry (in)	0.928

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	65.272
Section Modulus: Sxe (in ³)	8.426
Allowable Local Bending Moment: Mal (in-k)	252.29
Allowable Distortional Bending Moment: Mad (in-k)	213.00
Allowable strong axis shear away from punch: Vag (lb)	12743
Allowable strong axis shear at punch: Vanet (lb)	11285

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	12.981
Torsional Warping Constant: Cw (in ⁶)	85.812
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.544
Shear Center to Mid-Plane of the Web: m (in)	1.008
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.409
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.919

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.

