

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400S300-118

MARINO\WARE PART # 400SX10

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	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)	1.28
Weight of Member: (lb/ft)	4.36
Moment of Inertia: Ix (in ⁴)	3.47
Section Modulus: Sx (in ³)	1.73
Radius of Gyration: Rx (in)	1.64
Gross Moment of Inertia: Iy (in ⁴)	1.47
Gross Radius of Gyration: Ry (in)	1.07

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	3.47
Section Modulus: Sxe (in ³)	1.63
Allowable Local Bending Moment: Mal (in-k)	55.0*
Allowable Distortional Bending Moment: Mad (in-k)	49.4
Allowable strong axis shear away from punch: Vag (lb)	7869
Allowable strong axis shear at punch: Vanet (lb)	1102

* Allowable Bending Moment includes cold work of forming

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	6.59
Torsional Warping Constant: Cw (in ⁶)	5.40
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.51
Shear Center to Mid-Plane of the Web: m (in)	1.45
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.18
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.380

CODES & STANDARDS

- AISI S100, S240
- 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.

