

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1000T125-118

MARINO\WARE PART # 100ST10

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	10"	Yield Strength Fy (KSI)	50
B. Flange (in)	1-1/4"	Tensile Strength Fu (KSI)	65
Mils	118	Design Thickness (in)	0.1242
Available Finish	G60	Minimum Thickness (in)	0.1180
		Gauge	10

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.549
Weight of Member: (lb/ft)	5.27
Moment of Inertia: I_x (in ⁴)	18.471
Section Modulus: S_x (in ³)	3.540
Radius of Gyration: R_x (in)	3.45
Gross Moment of Inertia: I_y (in ⁴)	0.119
Gross Radius of Gyration: R_y (in)	0.277

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	18.471
Section Modulus: S_x (in ³)	3.536
Allowable Bending Moment: M_a (in-k)	105.86
Allowable strong axis shear away from punch: V_{ag} (lb)	16235

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	7.966
Torsional Warping Constant: C_w (in ⁶)	2.558
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.357
Shear Center to Mid-Plane of the Web: m (in)	0.243
Radius of Gyration on the Centroid Principal axis: R_o (in)	3.48
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.990

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.

