

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1200T125-97

MARINO\WARE PART # 120ST12

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	12"	Yield Strength Fy (KSI)	50
B. Flange (in)	1-1/4"	Tensile Strength Fu (KSI)	65
Mils	97	Design Thickness (in)	0.1017
Available Finish	G90	Minimum Thickness (in)	0.0966
		Gauge	12

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.472
Weight of Member: (lb/ft)	5.01
Moment of Inertia: I_x (in ⁴)	24.078
Section Modulus: S_x (in ³)	3.897
Radius of Gyration: R_x (in)	4.044
Gross Moment of Inertia: I_y (in ⁴)	0.102
Gross Radius of Gyration: R_y (in)	0.263

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	23.751
Section Modulus: S_x (in ³)	3.442
Allowable Bending Moment: M_a (in-k)	103.06
Allowable strong axis shear away from punch: V_{ag} (lb)	7902

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	5.076
Torsional Warping Constant: C_w (in ⁶)	3.171
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.322
Shear Center to Mid-Plane of the Web: m (in)	0.222
Radius of Gyration on the Centroid Principal axis: R_o (in)	4.065
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.994

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.

