

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400T125-33

MARINO\WARE PART # 400ST20

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	Yield Strength Fy (KSI)	33
B. Flange (in)	1-1/4"	Tensile Strength Fu (KSI)	45
Mils	33	Design Thickness (in)	0.0346
Available Finish	G90	Minimum Thickness (in)	0.0329
		Gauge	20 STR

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.225
Weight of Member: (lb/ft)	0.76
Moment of Inertia: I_x (in ⁴)	0.549
Section Modulus: S_x (in ³)	0.265
Radius of Gyration: R_x (in)	1.563
Gross Moment of Inertia: I_y (in ⁴)	0.031
Gross Radius of Gyration: R_y (in)	0.371

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	0.484
Section Modulus: S_x (in ³)	0.201
Allowable Bending Moment: M_a (in-k)	3.970
Allowable strong axis shear away from punch: V_{ag} (lb)	940

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.090
Torsional Warping Constant: C_w (in ⁶)	0.095
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.630
Shear Center to Mid-Plane of the Web: m (in)	0.396
Radius of Gyration on the Centroid Principal axis: R_o (in)	1.725
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.867

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.

