

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400T125-54

MARINO\WARE PART # 400ST16

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	Yield Strength Fy (KSI)	50
B. Flange (in)	1-1/4"	Tensile Strength Fu (KSI)	65
Mils	54	Design Thickness (in)	0.0566
Available Finish	G90	Minimum Thickness (in)	0.0538
		Gauge	16

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.367
Weight of Member: (lb/ft)	1.25
Moment of Inertia: I_x (in ⁴)	0.904
Section Modulus: S_x (in ³)	0.431
Radius of Gyration: R_x (in)	1.569
Gross Moment of Inertia: I_y (in ⁴)	0.049
Gross Radius of Gyration: R_y (in)	0.366

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	0.849
Section Modulus: S_x (in ³)	0.359
Allowable Bending Moment: M_a (in-k)	10.740
Allowable strong axis shear away from punch: V_{ag} (lb)	3372

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.392
Torsional Warping Constant: C_w (in ⁶)	0.154
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.621
Shear Center to Mid-Plane of the Web: m (in)	0.390
Radius of Gyration on the Centroid Principal axis: R_o (in)	1.727
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.871

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.

