

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400T200-54

MARINO\WARE PART # 400T2216

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	Yield Strength Fy (KSI)	50
B. Flange (in)	2"	Tensile Strength Fu (KSI)	65
Mils	54	Design Thickness (in)	0.0566
Available Finish	G60	Minimum Thickness (in)	0.0538
		Gauge	16

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.452
Weight of Member: (lb/ft)	1.54
Moment of Inertia: I_x (in ⁴)	1.2686
Section Modulus: S_x (in ³)	0.604
Radius of Gyration: R_x (in)	1.675
Gross Moment of Inertia: I_y (in ⁴)	0.182
Gross Radius of Gyration: R_y (in)	0.635

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	1.037
Section Modulus: S_x (in ³)	0.397
Allowable Bending Moment: M_a (in-k)	11.880
Allowable strong axis shear away from punch: V_{ag} (lb)	3372

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.483
Torsional Warping Constant: C_w (in ⁶)	0.551
Shear Center to Centroid on Principal X-axis: X_o (in)	-1.217
Shear Center to Mid-Plane of the Web: m (in)	0.730
Radius of Gyration on the Centroid Principal axis: R_o (in)	2.165
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.684

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.

