

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1200T200-54

MARINO\WARE PART # 120T216

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	12"	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)	0.905
Weight of Member: (lb/ft)	3.08
Moment of Inertia: I_x (in ⁴)	16.464
Section Modulus: S_x (in ³)	2.699
Radius of Gyration: R_x (in)	4.265
Gross Moment of Inertia: I_y (in ⁴)	0.236
Gross Radius of Gyration: R_y (in)	0.510

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	12.962
Section Modulus: S_x (in ³)	1.350
Allowable Bending Moment: M_a (in-k)	40.410
Allowable strong axis shear away from punch: V_{ag} (lb)	1354

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.966
Torsional Warping Constant: C_w (in ⁶)	6.714
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.730
Shear Center to Mid-Plane of the Web: m (in)	0.487
Radius of Gyration on the Centroid Principal axis: R_o (in)	4.357
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.972

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.

Note: Web depth to thickness ratio (h/t) exceeds 200. Web stiffeners required at all support points and concentrated loads.

