

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400T200-43

MARINO\WARE PART # 400T218

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	4"	Yield Strength Fy (KSI)	33
B. Flange (in)	2"	Tensile Strength Fu (KSI)	45
Mils	43	Design Thickness (in)	0.0451
Available Finish	G90	Minimum Thickness (in)	0.0428
		Gauge	18

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.360
Weight of Member: (lb/ft)	1.23
Moment of Inertia: I_x (in ⁴)	1.002
Section Modulus: S_x (in ³)	0.482
Radius of Gyration: R_x (in)	1.668
Gross Moment of Inertia: I_y (in ⁴)	0.146
Gross Radius of Gyration: R_y (in)	0.637

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	0.811
Section Modulus: S_x (in ³)	0.311
Allowable Bending Moment: M_a (in-k)	6.140
Allowable strong axis shear away from punch: V_{ag} (lb)	1739

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.244
Torsional Warping Constant: C_w (in ⁶)	0.436
Shear Center to Centroid on Principal X-axis: X_o (in)	-1.224
Shear Center to Mid-Plane of the Web: m (in)	0.734
Radius of Gyration on the Centroid Principal axis: R_o (in)	2.164
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.680

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.

