

Marino\WARE® Product Submittal Data

PRODUCT NAME: 250T200-43

MARINO\WARE PART # 212T218

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	2-1/2"	Yield Strength Fy (KSI)	33
B. Flange (in)	2"	Tensile Strength Fu (KSI)	45
Mils	43	Design Thickness (in)	0.0451
Available Finish	G60	Minimum Thickness (in)	0.0428
		Gauge	18

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.293
Weight of Member: (lb/ft)	1.00
Moment of Inertia: I_x (in ⁴)	0.366
Section Modulus: S_x (in ³)	0.275
Radius of Gyration: R_x (in)	1.118
Gross Moment of Inertia: I_y (in ⁴)	0.126
Gross Radius of Gyration: R_y (in)	0.657

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	0.288
Section Modulus: S_x (in ³)	0.163
Allowable Bending Moment: M_a (in-k)	3.210
Allowable strong axis shear away from punch: V_{ag} (lb)	1356

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.198
Torsional Warping Constant: C_w (in ⁶)	0.153
Shear Center to Centroid on Principal X-axis: X_o (in)	-1.413
Shear Center to Mid-Plane of the Web: m (in)	0.810
Radius of Gyration on the Centroid Principal axis: R_o (in)	1.918
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.457

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.

