

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1000T200-43

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 100T218

PROPERTIES:

A. Web (in)	10"	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)	0.631
Weight of Member: (lb/ft)	2.15
Moment of Inertia: I_x (in ⁴)	8.361
Section Modulus: S_x (in ³)	1.646
Radius of Gyration: R_x (in)	3.640
Gross Moment of Inertia: I_y (in ⁴)	0.183
Gross Radius of Gyration: R_y (in)	0.539

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	6.722
Section Modulus: S_x (in ³)	0.861
Allowable Bending Moment: M_a (in-k)	17.010
Allowable strong axis shear away from punch: V_{ag} (lb)	822

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.428
Torsional Warping Constant: C_w (in ⁶)	3.540
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.813
Shear Center to Mid-Plane of the Web: m (in)	0.534
Radius of Gyration on the Centroid Principal axis: R_o (in)	3.769
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.953

CODES & STANDARDS

- AISI S100-12 & ICC ES ESR-4062
- Meets IBC 2012, 2015 & FBC 2014
- Framing meets ASTM A 1003, A 653, C 645 & C 955

GREEN INFO

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information.

