

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800T200-43

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 800T218

PROPERTIES:

A. Web (in)	8"	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)	0.541
Weight of Member: (lb/ft)	1.84
Moment of Inertia: I_x (in ⁴)	4.887
Section Modulus: S_x (in ³)	1.197
Radius of Gyration: R_x (in)	3.006
Gross Moment of Inertia: I_y (in ⁴)	0.175
Gross Radius of Gyration: R_y (in)	0.569

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	4.043
Section Modulus: S_x (in ³)	0.676
Allowable Bending Moment: M_a (in-k)	13.350
Allowable strong axis shear away from punch: V_{ag} (lb)	1030

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.367
Torsional Warping Constant: C_w (in ⁶)	2.124
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.913
Shear Center to Mid-Plane of the Web: m (in)	0.587
Radius of Gyration on the Centroid Principal axis: R_o (in)	3.193
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.918

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.

