

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800T200-33

MARINO\WARE PART # 800T220

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	8"	Yield Strength Fy (KSI)	33
B. Flange (in)	2"	Tensile Strength Fu (KSI)	45
Mils	33	Design Thickness (in)	0.0346
Available Finish	G90	Minimum Thickness (in)	0.0329
		Gauge	20 STR

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.415
Weight of Member: (lb/ft)	1.41
Moment of Inertia: I_x (in ⁴)	3.749
Section Modulus: S_x (in ³)	0.921
Radius of Gyration: R_x (in)	3.01
Gross Moment of Inertia: I_y (in ⁴)	0.135
Gross Radius of Gyration: R_y (in)	0.571

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	2.733
Section Modulus: S_x (in ³)	0.424
Allowable Bending Moment: M_a (in-k)	8.37
Allowable strong axis shear away from punch: V_{ag} (lb)	465

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.166
Torsional Warping Constant: C_w (in ⁶)	1.638
Shear Center to Centroid on Principal X-axis: X_o (in)	0.917
Shear Center to Mid-Plane of the Web: m (in)	0.589
Radius of Gyration on the Centroid Principal axis: R_o (in)	3.19
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.918

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.

