

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800T125-33

MARINO\WARE PART # 800ST20

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	8"	Yield Strength Fy (KSI)	33
B. Flange (in)	1-1/4"	Tensile Strength Fu (KSI)	45
Mils	33	Design Thickness (in)	0.0346
Available Finish	G60	Minimum Thickness (in)	0.0329
		Gauge	20 STR

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.363
Weight of Member: (lb/ft)	1.24
Moment of Inertia: I_x (in ⁴)	2.895
Section Modulus: S_x (in ³)	0.711
Radius of Gyration: R_x (in)	2.824
Gross Moment of Inertia: I_y (in ⁴)	0.036
Gross Radius of Gyration: R_y (in)	0.313

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_x (in ⁴)	2.441
Section Modulus: S_x (in ³)	0.407
Allowable Bending Moment: M_a (in-k)	8.030
Allowable strong axis shear away from punch: V_{ag} (lb)	465

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	0.145
Torsional Warping Constant: C_w (in ⁶)	0.456
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.439
Shear Center to Mid-Plane of the Web: m (in)	0.294
Radius of Gyration on the Centroid Principal axis: R_o (in)	2.875
Torsional Flexural Constant: β [1-(x _o /R _o) ²]	0.977

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.

