

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400T125-33

MARINO\WARE PART # 400ST20

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

| | | | |
|-------------------------|--------|----------------------------------|--------|
| A. Web (in) | 4" | 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) | 0.225 |
| Weight of Member: (lb/ft) | 0.76 |
| Moment of Inertia: I_x (in ⁴) | 0.549 |
| Section Modulus: S_x (in ³) | 0.265 |
| Radius of Gyration: R_x (in) | 1.563 |
| Gross Moment of Inertia: I_y (in ⁴) | 0.031 |
| Gross Radius of Gyration: R_y (in) | 0.371 |

EFFECTIVE SECTION PROPERTIES

| | |
|---|-------|
| Moment of Inertia-Deflection: I_x (in ⁴) | 0.484 |
| Section Modulus: S_x (in ³) | 0.201 |
| Allowable Bending Moment: M_a (in-k) | 3.970 |
| Allowable strong axis shear away from punch: V_{ag} (lb) | 940 |

TORSIONAL SECTION PROPERTIES

| | |
|---|--------|
| St. Venant Torsional Constant: J_{x1000} (in ⁴) | 0.090 |
| Torsional Warping Constant: C_w (in ⁶) | 0.095 |
| Shear Center to Centroid on Principal X-axis: X_o (in) | -0.630 |
| Shear Center to Mid-Plane of the Web: m (in) | 0.396 |
| Radius of Gyration on the Centroid Principal axis: R_o (in) | 1.725 |
| Torsional Flexural Constant: β [1-(x _o /R _o) ²] | 0.867 |

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.

