

# Marino\WARE® Product Submittal Data

**PRODUCT NAME:** 250T200-68

**MARINO\WARE PART #** 212T214

05.40.00 Cold-Formed Metal Framing

## PROPERTIES:

|                         |        |                                  |        |
|-------------------------|--------|----------------------------------|--------|
| <b>A. Web (in)</b>      | 2-1/2" | <b>Yield Strength Fy (KSI)</b>   | 50     |
| <b>B. Flange (in)</b>   | 2"     | <b>Tensile Strength Fu (KSI)</b> | 65     |
| <b>Mils</b>             | 68     | <b>Design Thickness (in)</b>     | 0.0713 |
| <b>Available Finish</b> | G60    | <b>Minimum Thickness (in)</b>    | 0.0677 |
|                         |        | <b>Gauge</b>                     | 14     |

## SECTION PROPERTIES

### GROSS SECTION PROPERTIES

|  |       |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )                | 0.462 |
| Weight of Member: (lb/ft)  | 1.57  |
| Moment of Inertia: <b>I<sub>x</sub></b> (in <sup>4</sup> )       | 0.600 |
| Section Modulus: <b>S<sub>x</sub></b> (in <sup>3</sup> )         | 0.437 |
| Radius of Gyration: <b>R<sub>x</sub></b> (in)                    | 1.139 |
| Gross Moment of Inertia: <b>I<sub>y</sub></b> (in <sup>4</sup> ) | 0.196 |
| Gross Radius of Gyration: <b>R<sub>y</sub></b> (in)              | 0.652 |

### EFFECTIVE SECTION PROPERTIES

|   |       |
|---|-------|
| Moment of Inertia-Deflection: <b>I<sub>x</sub></b> (in <sup>4</sup> )   | 0.517 |
| Section Modulus: <b>S<sub>x</sub></b> (in <sup>3</sup> )                | 0.296 |
| Allowable Bending Moment: <b>M<sub>a</sub></b> (in-k)                   | 8.860 |
| Allowable strong axis shear away from punch: <b>V<sub>ag</sub></b> (lb) | 3199  |

### TORSIONAL SECTION PROPERTIES

|   |        |
|---|--------|
| St. Venant Torsional Constant: <b>J<sub>x1000</sub></b> (in <sup>4</sup> )                | 0.783  |
| Torsional Warping Constant: <b>C<sub>w</sub></b> (in <sup>6</sup> )                       | 0.251  |
| Shear Center to Centroid on Principal X-axis: <b>X<sub>o</sub></b> (in)                   | -1.396 |
| Shear Center to Mid-Plane of the Web: <b>m</b> (in)                                       | 0.800  |
| Radius of Gyration on the Centroid Principal axis: <b>R<sub>o</sub></b> (in)              | 1.916  |
| Torsional Flexural Constant: <b>β</b> [1-(x <sub>o</sub> /R <sub>o</sub> ) <sup>2</sup> ] | 0.469  |

## 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.

