

# Marino\WARE® Product Submittal Data

**PRODUCT NAME:** 1200JR200-97

**05.42.00 Cold-Formed Metal Joist Framing**

**MARINO\WARE PART #** 120RJ12

## PROPERTIES:

<b>A. Web (in)</b>	12"	<b>Yield Strength Fy (KSI)</b>	50
<b>B. Flange (in)</b>	2"	<b>Tensile Strength Fu (KSI)</b>	65
<b>C. Lip (in)</b>	0.75"	<b>Design Thickness (in)</b>	0.1017
<b>Mils</b>	97	<b>Minimum Thickness (in)</b>	0.0966
<b>Available Finish</b>	G60, G90	<b>Gauge</b>	12

## SECTION PROPERTIES

### GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	4.38
Cross Sectional Area: <b>A</b> (in <sup>2</sup> )	0.871
Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )	26.9
Section Modulus: <b>Sx</b> (in <sup>3</sup> )	4.49
Radius of Gyration: <b>Rx</b> (in)	5.56
Gross Moment of Inertia: <b>Iy</b> (in <sup>4</sup> )	0.432
Gross Radius of Gyration: <b>Ry</b> (in)	0.704

### EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: <b>Ixe</b> (in <sup>4</sup> )	26.9
Section Modulus: <b>Sxe</b> (in <sup>3</sup> )	4.49
Allowable Bending Moment: <b>Ma</b> (in-k)	127
Allowable Shear Force: <b>Va</b> (k)	3.15

### TORSIONAL SECTION PROPERTIES

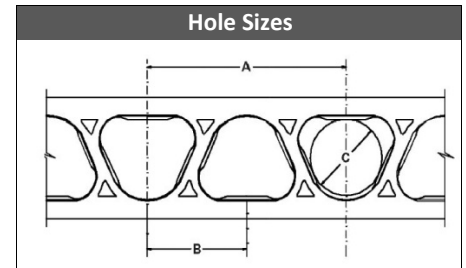
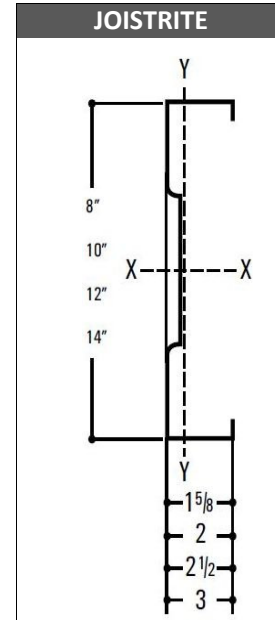
St. Venant Torsional Constant: <b>Jx1000</b> (in <sup>4</sup> )	3.00
Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )	17.5
Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)	5.84

## CODES & STANDARDS

- AISI S100, S240 & ICC ES ESR-1741
- ASTM A 1003, A 653, & C 955
- IBC 2012, 2015, 2018, 2021, 2024
- FBC 2023 & 2022 NYC Building Code
- Tested to ASTM E 119, & E 492/E 989
- UL Fire Test Data: G560, G563, G564, G577, G588, G594, G597, H503, L567, L580, P546
- Intertek (Warnock Hersey) Fire Data: WHI 3099463, WHI 3101528

## GREEN INFO

- LEED credits available
- Contact Technical Services for more information



Section	A (in)	B (in)	C
8"	14	7	5.5
10"	28	14	7.2
12"	35	17.5	9.2
14"	35	17.5	9.2