

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400SR162-54

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 400RS16

PROPERTIES:

A. Web (in)	4.00"	Yield Strength F_y (KSI)	50
B. Flange (in)	1.625"	Tensile Strength F_u (KSI)	65
C. Lip (in)	0.5"	Design Thickness (in)	0.0566
Mils	54	Minimum Thickness (in)	0.0538
Available Finish	CP60, CP90	Gauge	16

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.35
Cross Sectional Area: A (in ²)	0.378
Moment of Inertia: I_x (in ⁴)	1.098
Section Modulus: S_x (in ³)	0.549
Radius of Gyration: R_x (in)	1.70
Gross Moment of Inertia: I_y (in ⁴)	0.132
Gross Radius of Gyration: R_y (in)	0.590

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xed} (in ⁴)	1.10
Section Modulus: S_{xe} (in ³)	0.532
Allowable Bending Moment: Ma (in-k)	15.9
Allowable Shear Force: Va (K)	0.791

TORSIONAL SECTION PROPERTIES

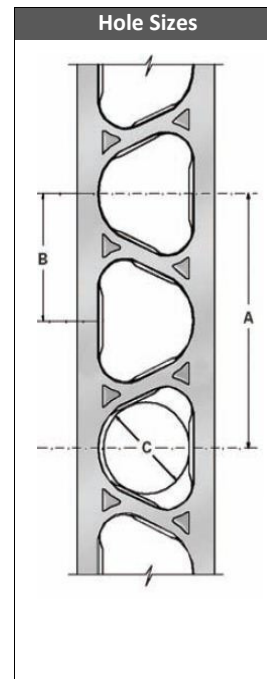
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.404
Torsional Warping Constant: C_w (in ⁶)	0.5461
Distance From Shear Center To Centroid Principle x-axis x_o (in.)	-1.37
Distance From Shear Center to Mid-Plane of Web m (in.)	0.770
Radius of Gyration on the Centroid Principal axis: r_o (in.)	2.26
$1 - (x_o/r_o)^2 = \beta$	0.634
Critical Unbraced Length, lateral torsional buckling excluded L_u (in.)	32.2

CODES & STANDARDS

- Meets ASTM A 1003, A 653, C955 & AISI S240
- Coating meets ASTM C 955 / AISI S240
- Meets IBC 2021, 2018
- IAPMO ES ER-0781

GREEN INFO

- LEED v4 credits available
- Contact Technical Services for more information



Section	A (in)	B (in)	C
3-5/8"	7.0	3.5	1-3/4
4"	7.0	3.5	1-3/4
6"	8.1	4.0	2-7/8



For more information, please contact Marino\WARE Technical Services at 866-545-1545.

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