

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800SR162-54

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	8	Yield Strength F_y (KSI)	50
B. Flange (in)	1-5/8	Tensile Strength F_u (KSI)	65
C. Lip (in)	0.50"	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)	1.68
Cross Sectional Area: A (in ²)	0.415
Moment of Inertia: I_x (in ⁴)	5.40
Section Modulus: S_x (in ³)	1.35
Radius of Gyration: R_x (in)	3.60
Gross Moment of Inertia: I_y (in ⁴)	0.135
Gross Radius of Gyration: R_y (in)	0.571

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xed} (in ⁴)	5.40
Section Modulus: S_{xe} (in ³)	1.31
Allowable Bending Moment: Ma (in-k)	39.1
Allowable Shear Force: Va (K)	0.791

TORSIONAL SECTION PROPERTIES

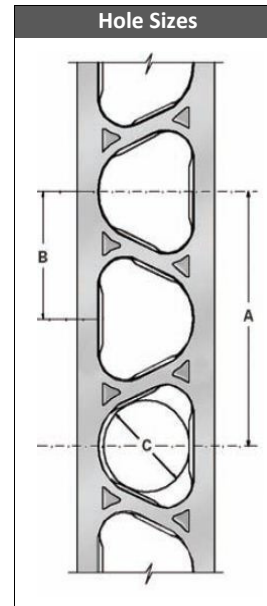
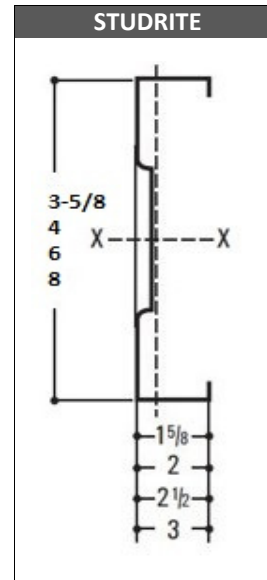
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.444
Torsional Warping Constant: C_w (in ⁶)	2.28
Distance From Shear Center To Centroid Principle x-axis x_o (in.)	-1.26
Distance From Shear Center to Mid-Plane of Web m (in.)	0.669
Radius of Gyration on the Centroid Principal axis: r_o (in.)	3.86
$1 - (x_o/r_o)^2 = \beta$	0.894
Critical Unbraced Length, lateral torsional buckling excluded L_u (in.)	29.4

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 ¹	A (in)	B (in)	C (in)
EC	8"	8.1	4.0	2-7/8
SP	8"	14.0	7.0	5-1/2

Note ¹: EC = East Chicago plant, SP= South Plainfield.
Check with plant for confirmation of hole size



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

This technical information reflects the most current information available and supersedes any and all publications, effective 7/1/2021
©Copyright 2021 by Ware Industries, Inc. All rights reserved