

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800SR250-54

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	8	Yield Strength F_y (KSI)	50
B. Flange (in)	2-1/2	Tensile Strength F_u (KSI)	65
C. Lip (in)	0.625"	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)	2.07
Cross Sectional Area: A (in ²)	0.529
Moment of Inertia: I_x (in ⁴)	7.12
Section Modulus: S_x (in ³)	1.78
Radius of Gyration: R_x (in)	3.67
Gross Moment of Inertia: I_y (in ⁴)	0.426
Gross Radius of Gyration: R_y (in)	0.897

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xed} (in ⁴)	6.83
Section Modulus: S_{xe} (in ³)	1.47
Allowable Bending Moment: Ma (in-k)	43.9
Allowable Shear Force: Va (K)	0.791

TORSIONAL SECTION PROPERTIES

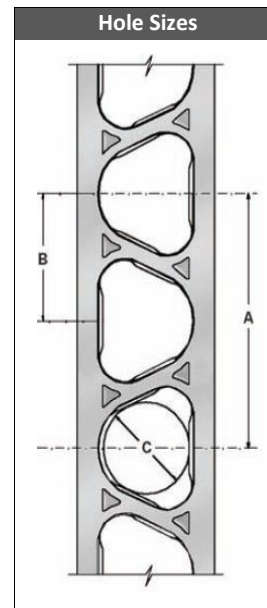
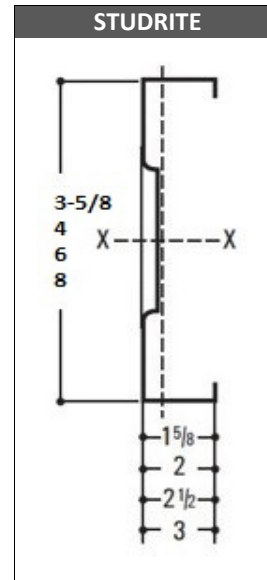
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.565
Torsional Warping Constant: C_w (in ⁶)	7.07
Distance From Shear Center To Centroid Principle x-axis x_o (in.)	-2.12
Distance From Shear Center to Mid-Plane of Web m (in.)	1.13
Radius of Gyration on the Centroid Principal axis: r_o (in.)	4.33
$1 - (x_o/r_o)^2 = \beta$	0.761
Critical Unbraced Length, lateral torsional buckling excluded L_u (in.)	45.3

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
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