

Marino\WARE® Product Submittal Data

PRODUCT NAME: 400SR250-33

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 400RE20

PROPERTIES:

A. Web (in)	4.00"	Yield Strength Fy (KSI)	33
B. Flange (in)	2.5"	Tensile Strength Fu (KSI)	45
C. Lip (in)	0.625"	Design Thickness (in)	0.0346
Mils	33	Minimum Thickness (in)	0.0329
Available Finish	CP60, CP90	Gauge	20 STR

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.08
Cross Sectional Area: A (in ²)	0.305
Moment of Inertia: Ix (in ⁴)	0.948
Section Modulus: Sx (in ³)	0.474
Radius of Gyration: Rx (in)	1.76
Gross Moment of Inertia: Iy (in ⁴)	0.262
Gross Radius of Gyration: Ry (in)	0.927

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixed (in ⁴)	0.894
Section Modulus: Sxe (in ³)	0.388
Allowable Bending Moment: Ma (in-k)	7.67
Allowable Shear Force: Va (K)	0.216

TORSIONAL SECTION PROPERTIES

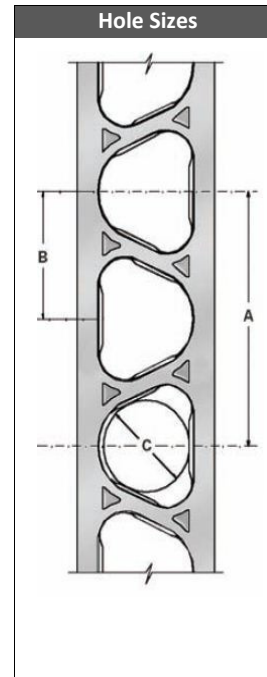
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.122
Torsional Warping Constant: Cw (in ⁶)	1.14
Distance From Shear Center To Centroid Principle x-axis x_o (in.)	-2.31
Distance From Shear Center to Mid-Plane of Web m (in.)	1.28
Radius of Gyration on the Centroid Principal axis: r_o (in.)	3.05
$1 - (x_o/r_o)^2 = \beta$	0.426
Critical Unbraced Length, lateral torsional buckling excluded L_u (in.)	60.8

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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