

Marino\WARE® Product Submittal Data

PRODUCT NAME: 800S350-54

MARINO\WARE PART # 800SW16

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	8"	Yield Strength Fy (KSI)	50
B. Flange (in)	3-1/2"	Tensile Strength Fu (KSI)	65
C. Lip (in)	1"	Design Thickness (in)	0.0566
Mils	54	Minimum Thickness (in)	0.0538
Available Finish	G90	Gauge	16

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	0.938
Weight of Member: (lb/ft)	3.19
Moment of Inertia: I_x (in ⁴)	9.68
Section Modulus: S_x (in ³)	2.42
Radius of Gyration: R_x (in)	3.21
Gross Moment of Inertia: I_y (in ⁴)	1.65
Gross Radius of Gyration: R_y (in)	1.32

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	9.03
Section Modulus: S_{xe} (in ³)	1.87
Allowable Local Bending Moment: M_{al} (in-k)	55.9
Allowable Distortional Bending Moment: M_{ad} (in-k)	48.0
Allowable strong axis shear away from punch: V_{ag} (lb)	2087
Allowable strong axis shear at punch: V_{anet} (lb)	2087

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	1.00
Torsional Warping Constant: C_w (in ⁶)	22.9
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.77
Shear Center to Mid-Plane of the Web: m (in)	1.67
Radius of Gyration on the Centroid Principal axis: R_o (in)	4.44
Torsional Flexural Constant: β 1-(x _o /R _o) ²	0.612

CODES & STANDARDS

- AISI S100 & S240
- ASTM A 1003, A 653, & C 955
- IBC 2012, 2015, 2018, 2021 & FBC 2020, 2023

GREEN INFO

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

