

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1200S350-54

MARINO\WARE PART # 120SW16

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	12"	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)	1.17
Weight of Member: (lb/ft)	3.963
Moment of Inertia: Ix (in ⁴)	24.866
Section Modulus: Sx (in ³)	4.144
Radius of Gyration: Rx (in)	4.620
Gross Moment of Inertia: Iy (in ⁴)	1.866
Gross Radius of Gyration: Ry (in)	1.266

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	22.233
Section Modulus: Sxe (in ³)	2.788
Allowable Local Bending Moment: Mal (in-k)	83.47
Allowable Distortional Bending Moment: Mad (in-k)	73.30
Allowable strong axis shear away from punch: Vag (lb)	1377
Allowable strong axis shear at punch: Vanet (lb)	1377

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: Jx1000 (in ⁴)	1.244
Torsional Warping Constant: Cw (in ⁶)	54.279
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.363
Shear Center to Mid-Plane of the Web: m (in)	1.478
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.342
Torsional Flexural Constant: β 1-(xo/Ro) ²	0.804

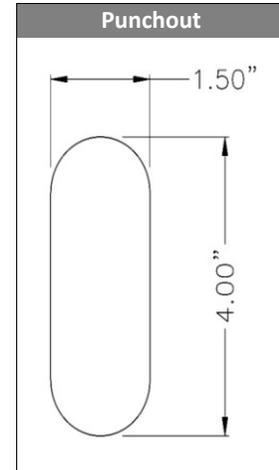
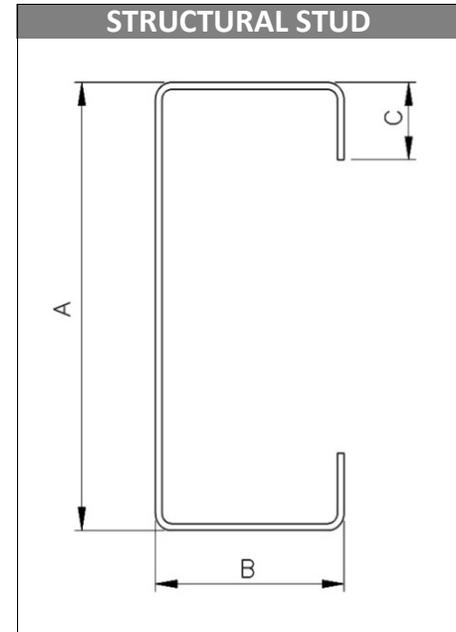
CODES & STANDARDS

- AISI S100, S240 & ICC ES ESR-4062
- 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.

Note: Web depth to thickness ratio (h/t) exceeds 200. Web stiffeners required at all support points and concentrated loads.



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 11/5/2023
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