

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1400S300-54

MARINO\WARE PART # 140SX16

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	14"	Yield Strength Fy (KSI)	50
B. Flange (in)	3"	Tensile Strength Fu (KSI)	65
C. Lip (in)	5/8"	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)	1.2214
Weight of Member: (lb/ft)	4.1561
Moment of Inertia: Ix (in ⁴)	33.0792
Section Modulus: Sx (in ³)	4.7256
Radius of Gyration: Rx (in)	5.2042
Gross Moment of Inertia: Iy (in ⁴)	1.3456
Gross Radius of Gyration: Ry (in)	5.2042

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	29.7874
Section Modulus: Sxe (in ³)	3.0534
Allowable Bending Moment: Ma (in-k)	91.418
Allowable strong axis shear away from punch: Vag (lb)	1177
Allowable strong axis shear at punch: Vanet (lb)	1177

TORSIONAL SECTION PROPERTIES

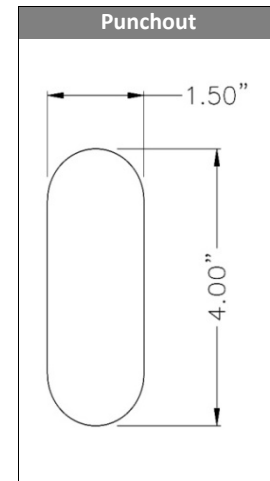
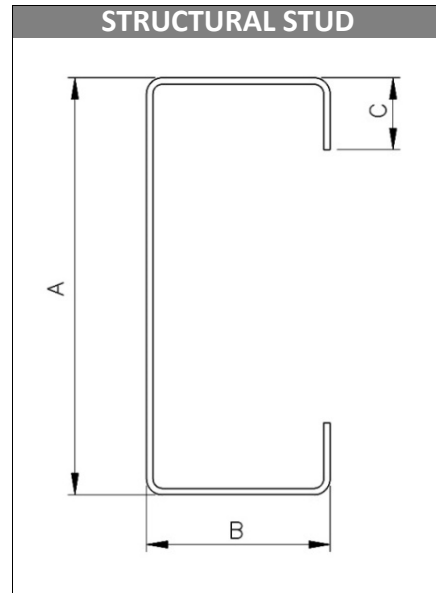
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.3043
Torsional Warping Constant: Cw (in ⁶)	53.5040
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.827
Shear Center to Mid-Plane of the Web: m (in)	1.174
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.615
Torsional Flexural Constant: β [1-(xo/Ro) ²]	0.894

CODES & STANDARDS

- AISI S100-12 & ICC ES ESR-4062
- Framing meets ASTM A 1003, A 653, & C 955
- Meets IBC 2015 & 2012, FBC 2014, CSSA code compliant

GREEN INFO

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information.



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

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