

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1600S300-97

MARINO\WARE PART # 160SX12

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	16"	Yield Strength Fy (KSI)	50
B. Flange (in)	3"	Tensile Strength Fu (KSI)	65
C. Lip (in)	5/8"	Design Thickness (in)	0.1017
Mils	97	Minimum Thickness (in)	0.0966
Available Finish	G90	Gauge	12

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	2.3639
Weight of Member: (lb/ft)	8.0439
Moment of Inertia: Ix (in ⁴)	79.844
Section Modulus: Sx (in ³)	9.9805
Radius of Gyration: Rx (in)	5.8117
Gross Moment of Inertia: Iy (in ⁴)	2.3342
Gross Radius of Gyration: Ry (in)	5.8117

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	76.7991
Section Modulus: Sxe (in ³)	8.4287
Allowable Bending Moment: Ma (in-k)	252.355
Allowable strong axis shear away from punch: Vag (lb)	6043
Allowable strong axis shear at punch: Vanet (lb)	6043

TORSIONAL SECTION PROPERTIES

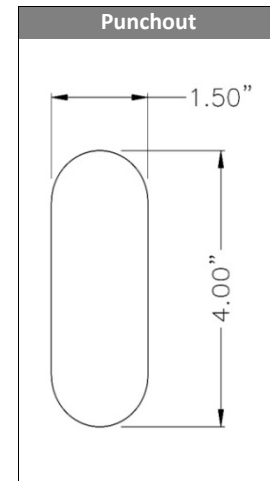
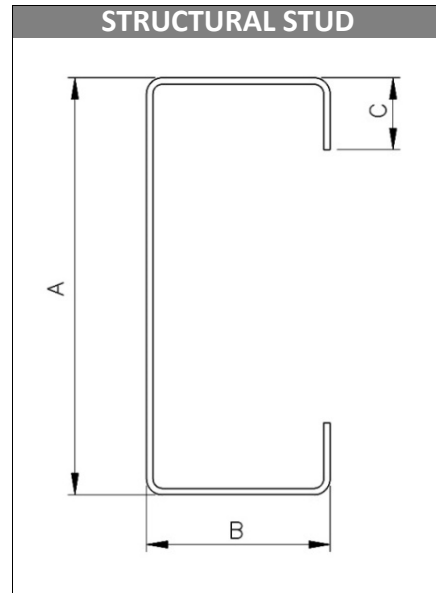
St. Venant Torsional Constant: Jx1000 (in ⁴)	8.1499
Torsional Warping Constant: Cw (in ⁶)	122.659
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.662
Shear Center to Mid-Plane of the Web: m (in)	1.086
Radius of Gyration on the Centroid Principal axis: Ro (in)	6.126
Torsional Flexural Constant: β [1-(xo/Ro) ²]	0.926

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.

This technical information reflects the most current information available and supersedes any and all publications, effective 1/5/2017
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