

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1600S200-68

05.40.00 Cold-Formed Metal Framing

MARINO\WARE PART # 160SJ14

PROPERTIES:

A. Web (in)	16"	Yield Strength Fy (KSI)	50
B. Flange (in)	2"	Tensile Strength Fu (KSI)	65
C. Lip (in)	5/8"	Design Thickness (in)	0.0713
Mils	68	Minimum Thickness (in)	0.0677
Available Finish	G90	Gauge	14

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.48
Weight of Member: (lb/ft)	5.027
Moment of Inertia: I_x (in ⁴)	45.307
Section Modulus: S_x (in ³)	5.663
Radius of Gyration: R_x (in)	5.538
Gross Moment of Inertia: I_y (in ⁴)	0.506
Gross Radius of Gyration: R_y (in)	0.585

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	40.059
Section Modulus: S_{xe} (in ³)	4.045
Allowable Local Bending Moment: M_{al} (in-k)	121.10
Allowable Distortional Bending Moment: M_{ad} (in-k)	93.40
Allowable strong axis shear away from punch: V_{ag} (lb)	2062
Allowable strong axis shear at punch: V_{anet} (lb)	2062

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	2.503
Torsional Warping Constant: C_w (in ⁶)	27.155
Shear Center to Centroid on Principal X-axis: X_o (in)	-0.862
Shear Center to Mid-Plane of the Web: m (in)	0.584
Radius of Gyration on the Centroid Principal axis: R_o (in)	5.635
Torsional Flexural Constant: β 1-(x_o/R_o)²	0.977

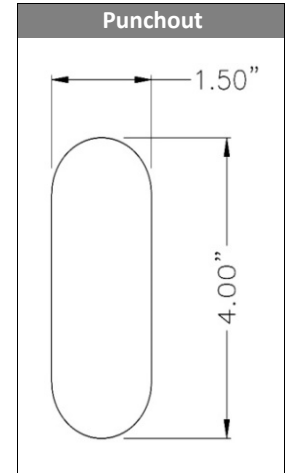
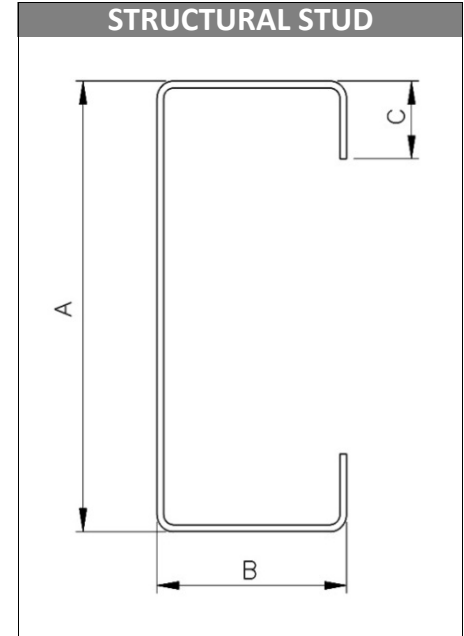
CODES & STANDARDS

- 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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