

Structural Stud (s)



MATERIAL

Web (in)	8
Flange (in)	3
Lip (in)	0.625
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	3.57
Cross Sectional Area: A (in ²)	1.050
Moment of Inertia: Ix (in ⁴)	10.384
Section Modulus: Sx (in ³)	2.596
Radius of Gyration: Rx (in)	3.145
Moment of Inertia: Iy (in ⁴)	1.179
Radius of Gyration: Ry (in)	1.060

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	10.125
Section Modulus: Sxe (in ³)	2.124
Local Buckling Allowable Moment: Mal (in-k)	63.58
Distortional Buckling Allowable Moment: Mad (in-k)	53.66
Allowable strong axis shear away from punch: Vag (lb)	4220
Allowable strong axis shear at punch: Vanet (lb)	3367
(check web crippling)	

TORSIONAL SECTION PROPERTIES

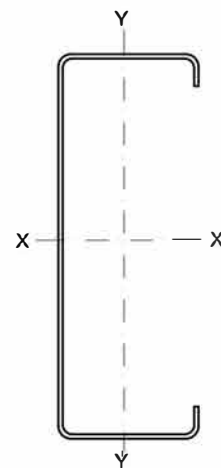
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.779
Torsional Warping Constant: Cw (in ⁶)	14.888
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.055
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.904

PRODUCT ID

800S 300-68 (8x3x14ga) (Grade 50)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data