Structural Stud (S)

MATERIAL	
Web (in)	8
Flange (in)	3½
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)	4.00
Cross Sectional Area: A (in^2)	1.174
Moment of Inertia: Ix (in^4)	12.048
Section Modulus: Sx (in^3)	3.012
Radius of Gyration: Rx (in)	3.203
Moment of Inertia: Iy (in^4)	2.034
Radius of Gyration: Ry (in)	1.316

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in^4)	9.258
Section Modulus: Sxe (in^3)	2.047
Local Buckling Allowable Moment: Mal (in-k)	61.28
Distortional Buckling Allowable Moment: Mad (in-k)	51.85
Allowable strong axis shear away from punch: Vag (lb)	4220
Allowable strong axis shear at punch: Vanet (lb)	3367
(check web crippling)	

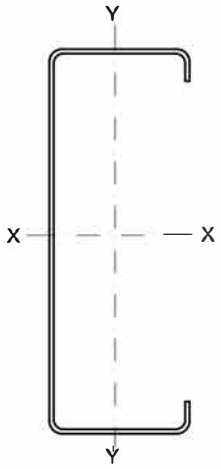
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	1.002
Torsional Warping Constant: Cw (in^6)	22.897
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.766
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.442

PRODUCT ID

800S 350-68 (8x3½x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual for complete design data

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