

Non-Structural Stud (s)



MATERIAL	
Web (in)	2½
Flange (in)	1¼
Lip (in)	0.188
Yield Strength Fy (KSI)	70
Tensile Strength Fu (KSI)	80
Design Thickness (in)	0.0188
Minimum Thickness (mil)	18
Gauge	20Eq
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.329
Cross Sectional Area: A (in²)	0.097
Moment of Inertia: Ix (in⁴)	0.099
Section Modulus: Sx (in³)	0.080
Radius of Gyration: Rx (in)	1.014
Moment of Inertia: Iy (in⁴)	0.019
Radius of Gyration: Ry (in)	0.502

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.071
Section Modulus: Sxe (in³)	0.046
Allowable Moment: Mal (in-k)	1.93
Allowable strong axis shear away from punch: Vag (lb)	258
Allowable strong axis shear at punch: Va net (lb) (check web crippling)	258

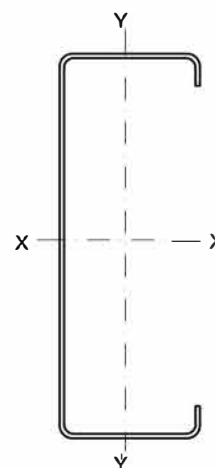
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.0114
Torsional Warping Constant: Cw (in⁶)	0.021
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.899
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.424

PRODUCT ID

250S 125-18 (2½x1¼x20gaEq)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S 100-16



See Hermes/Hephaistos Technical Manual
for complete design data