

Non-Structural Stud (s)



MATERIAL	
Web (in)	1½
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)	0.273
Cross Sectional Area: A (in ²)	0.080
Moment of Inertia: Ix (in ⁴)	0.038
Section Modulus: Sx (in ³)	0.046
Radius of Gyration: Rx (in)	0.686
Moment of Inertia: Iy (in ⁴)	0.016
Radius of Gyration: Ry (in)	0.447

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	0.028
Section Modulus: Sxe (in ³)	0.029
Allowable Moment: Mal (in-k)	1.20
Allowable strong axis shear away from punch: Vag (lb)	417
Allowable strong axis shear at punch: Va net (lb)	140
(check web crippling)	

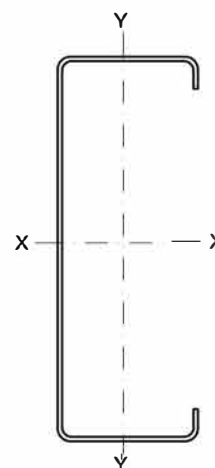
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.0095
Torsional Warping Constant: Cw (in ⁶)	0.008
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.125
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.312

PRODUCT ID

162 S 125-18 (1½x1¼x20gaEq)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data