

Non-Structural Stud (s)



MATERIAL	
Web (in)	5½
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)	0.520
Cross Sectional Area: A (in²)	0.153
Moment of Inertia: Ix (in⁴)	0.630
Section Modulus: Sx (in³)	0.229
Radius of Gyration: Rx (in)	2.029
Moment of Inertia: Iy (in⁴)	0.023
Radius of Gyration: Ry (in)	0.390

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.377
Section Modulus: Sxe (in³)	0.102
Allowable Moment: Mal (in-k)	3.58
Allowable strong axis shear away from punch: Vag (lb)	89
Allowable strong axis shear at punch: Va net (lb)	89
(check web crippling)	

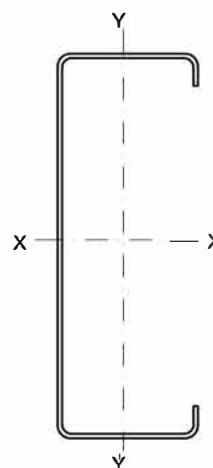
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.018
Torsional Warping Constant: Cw (in⁶)	0.130
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.643
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.164

PRODUCT ID

550S 125-18 (5½x1¼x20gaEq)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data