

Non-Structural Stud (s)



MATERIAL	
Web (in)	5½
Flange (in)	1¼
Lip (in)	0.188
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.046
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.95
Cross Sectional Area: A (in²)	0.279
Moment of Inertia: Ix (in⁴)	1.140
Section Modulus: Sx (in³)	0.415
Radius of Gyration: Rx (in)	2.020
Moment of Inertia: Iy (in⁴)	0.041
Radius of Gyration: Ry (in)	0.382

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.993
Section Modulus: Sxe (in³)	0.321
Local Buckling Allowable Moment: Mal (in-k)	6.35
Distortional Buckling Allowable Moment: Mad (in-k)	5.23
Allowable strong axis shear away from punch: Vag (lb)	698
Allowable strong axis shear at punch: Vanet (lb)	698

(check web crippling)

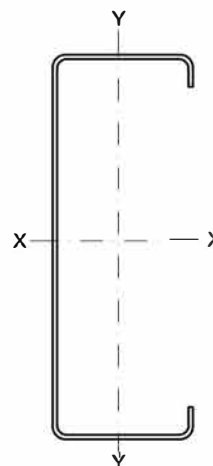
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.112
Torsional Warping Constant: Cw (in⁶)	0.246
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.636
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.152

PRODUCT ID

550S 125-33 (5½x1¼x20Sga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data