

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)	0.0312
Minimum Thickness (mil)	30
Gauge	20D
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.86
Cross Sectional Area: A (in²)	0.252
Moment of Inertia: Ix (in⁴)	1.032
Section Modulus: Sx (in³)	0.375
Radius of Gyration: Rx (in)	2.022
Moment of Inertia: Iy (in⁴)	0.037
Radius of Gyration: Ry (in)	0.384

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.870
Section Modulus: Sxe (in³)	0.275
Local Buckling Allowable Moment: Mal (in-k)	5.44
Distortional Buckling Allowable Moment: Mad (in-k)	4.49
Allowable strong axis shear away from punch: Vag (lb)	512
Allowable strong axis shear at punch: Vanet (lb)	512

(check web crippling)

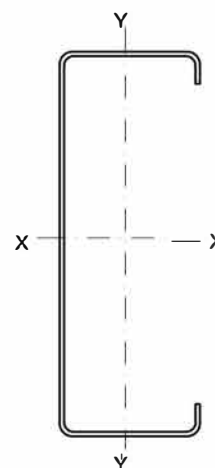
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.082
Torsional Warping Constant: Cw (in⁶)	0.224
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.639
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.155

PRODUCT ID

550S 125-30 (5½x1¼x20Dga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data