

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)	0.0283
Minimum Thickness (mil)	27
Gauge	22
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.78
Cross Sectional Area: A (in²)	0.229
Moment of Inertia: Ix (in⁴)	0.939
Section Modulus: Sx (in³)	0.341
Radius of Gyration: Rx (in)	2.023
Moment of Inertia: Iy (in⁴)	0.034
Radius of Gyration: Ry (in)	0.385

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.767
Section Modulus: Sxe (in³)	0.238
Local Buckling Allowable Moment: Mal (in-k)	4.70
Distortional Buckling Allowable Moment: Mad (in-k)	3.89
Allowable strong axis shear away from punch: Vag (lb)	382
Allowable strong axis shear at punch: Vanet (lb)	382

(check web crippling)

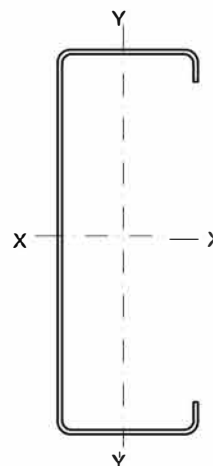
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.061
Torsional Warping Constant: Cw (in⁶)	0.205
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.642
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.158

PRODUCT ID

550S 125-27 (5½x1¼x22ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data