

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)	0.0188
Minimum Thickness (mil)	18
Gauge	25
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.52
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)	0.449
Section Modulus: Sxe (in³)	0.130
Local Buckling Allowable Moment: Mal (in-k)	2.14
Distortional Buckling Allowable Moment: Mad (in-k)	1.77
Allowable strong axis shear away from punch: Vag (lb)	112
Allowable strong axis shear at punch: Vanet (lb)	89

(check web crippling)

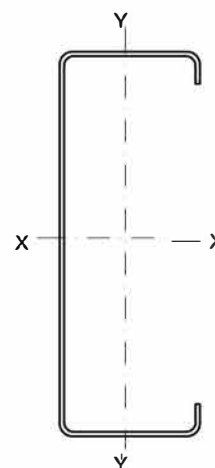
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.018
Torsional Warping Constant: Cw (in⁶)	0.141
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.651
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.166

PRODUCT ID

550S 125-18 (5½x1¼x25ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data