

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)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.23
Cross Sectional Area: A (in²)	0.362
Moment of Inertia: Ix (in⁴)	1.469
Section Modulus: Sx (in³)	0.534
Radius of Gyration: Rx (in)	2.013
Moment of Inertia: Iy (in⁴)	0.052
Radius of Gyration: Ry (in)	0.377

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.404
Section Modulus: Sxe (in³)	0.492
Local Buckling Allowable Moment: Mal (in-k)	9.72
Distortional Buckling Allowable Moment: Mad (in-k)	7.71
Allowable strong axis shear away from punch: Vag (lb)	1550
Allowable strong axis shear at punch: Vanet (lb)	1199

(check web crippling)

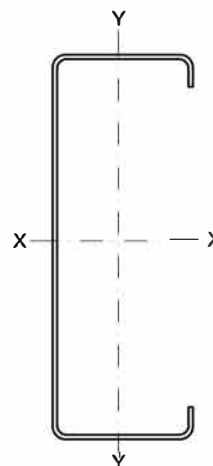
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.246
Torsional Warping Constant: Cw (in⁶)	0.309
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.626
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.142

PRODUCT ID

550S 125-43 (5½x1¼x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data