

Non-Structural Stud (s)



MATERIAL	
Web (in)	2½
Flange (in)	1¼
Lip (in)	0.188
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.95
Cross Sectional Area: A (in²)	0.280
Moment of Inertia: Ix (in⁴)	0.277
Section Modulus: Sx (in³)	0.222
Radius of Gyration: Rx (in)	0.994
Moment of Inertia: Iy (in⁴)	0.049
Radius of Gyration: Ry (in)	0.419

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.272
Section Modulus: Sxe (in³)	0.220
Local Buckling Allowable Moment: Mal (in-k)	4.27
Distortional Buckling Allowable Moment: Mad (in-k)	3.99
Allowable strong axis shear away from punch: Vag (lb)	1553
Allowable strong axis shear at punch: Vanet (lb)	373

(check web crippling)

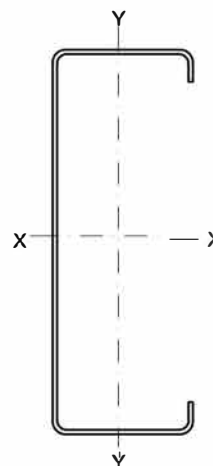
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.299
Torsional Warping Constant: Cw (in⁶)	0.060
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.859
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.379

PRODUCT ID

250S 125-54 (2½x1¼x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data