

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

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.77
Cross Sectional Area: A (in²)	0.227
Moment of Inertia: Ix (in⁴)	0.228
Section Modulus: Sx (in³)	0.182
Radius of Gyration: Rx (in)	1.002
Moment of Inertia: Iy (in⁴)	0.041
Radius of Gyration: Ry (in)	0.427

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.222
Section Modulus: Sxe (in³)	0.181
Local Buckling Allowable Moment: Mal (in-k)	3.47
Distortional Buckling Allowable Moment: Mad (in-k)	3.00
Allowable strong axis shear away from punch: Vag (lb)	1266
Allowable strong axis shear at punch: Vanet (lb)	394

(check web crippling)

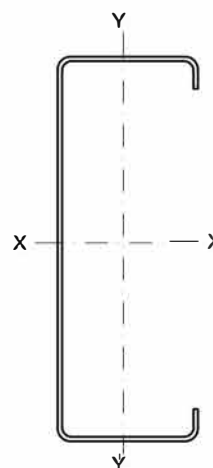
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.154
Torsional Warping Constant: Cw (in⁶)	0.050
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.874
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.396

PRODUCT ID

250S 125-43 (2½x1¼x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data