

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

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.33
Cross Sectional Area: A (in²)	0.097
Moment of Inertia: Ix (in⁴)	0.099
Section Modulus: Sx (in³)	0.079
Radius of Gyration: Rx (in)	1.014
Moment of Inertia: Iy (in⁴)	0.019
Radius of Gyration: Ry (in)	0.439

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.082
Section Modulus: Sxe (in³)	0.058
Local Buckling Allowable Moment: Mal (in-k)	1.14
Distortional Buckling Allowable Moment: Mad (in-k)	0.93
Allowable strong axis shear away from punch: Vag (lb)	258
Allowable strong axis shear at punch: Vanet (lb)	196

(check web crippling)

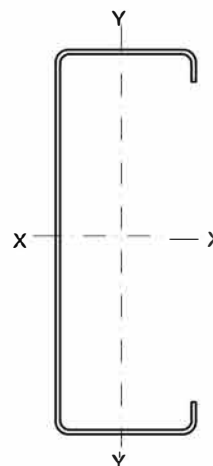
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.011
Torsional Warping Constant: Cw (in⁶)	0.023
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.904
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.428

PRODUCT ID

250S 125-18 (2½x1¼x25ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data