

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)	0.0283
Minimum Thickness (mil)	27
Gauge	22
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.49
Cross Sectional Area: A (in²)	0.144
Moment of Inertia: Ix (in⁴)	0.147
Section Modulus: Sx (in³)	0.118
Radius of Gyration: Rx (in)	1.009
Moment of Inertia: Iy (in⁴)	0.027
Radius of Gyration: Ry (in)	0.434

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.130
Section Modulus: Sxe (in³)	0.096
Local Buckling Allowable Moment: Mal (in-k)	1.89
Distortional Buckling Allowable Moment: Mad (in-k)	1.61
Allowable strong axis shear away from punch: Vag (lb)	685
Allowable strong axis shear at punch: Vanet (lb)	354

(check web crippling)

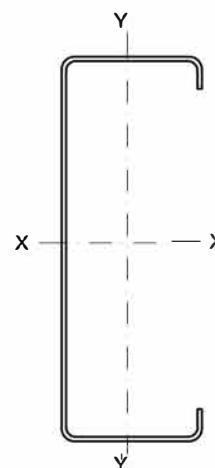
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.039
Torsional Warping Constant: Cw (in⁶)	0.034
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.893
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.416

PRODUCT ID

250S 125-27 (2½x1¼x22ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data