

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)	0.0346
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.60
Cross Sectional Area: A (in²)	0.176
Moment of Inertia: Ix (in⁴)	0.178
Section Modulus: Sx (in³)	0.142
Radius of Gyration: Rx (in)	1.007
Moment of Inertia: Iy (in⁴)	0.033
Radius of Gyration: Ry (in)	0.431

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.164
Section Modulus: Sxe (in³)	0.124
Local Buckling Allowable Moment: Mal (in-k)	2.45
Distortional Buckling Allowable Moment: Mad (in-k)	2.11
Allowable strong axis shear away from punch: Vag (lb)	975
Allowable strong axis shear at punch: Vanet (lb)	399

(check web crippling)

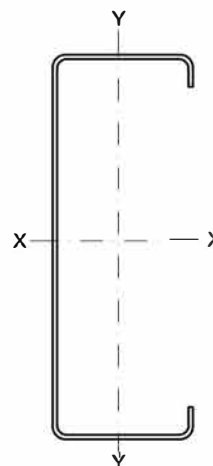
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.070
Torsional Warping Constant: Cw (in⁶)	0.040
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.896
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.409

PRODUCT ID

250S 125-33 (2½x1¼x20Sga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data