

Non-Structural Stud (s)



MATERIAL	
Web (in)	4
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)	0.64
Cross Sectional Area: A (in²)	0.187
Moment of Inertia: Ix (in⁴)	0.438
Section Modulus: Sx (in³)	0.219
Radius of Gyration: Rx (in)	1.531
Moment of Inertia: Iy (in⁴)	0.031
Radius of Gyration: Ry (in)	0.410

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.363
Section Modulus: Sxe (in³)	0.158
Local Buckling Allowable Moment: Mal (in-k)	3.12
Distortional Buckling Allowable Moment: Mad (in-k)	2.76
Allowable strong axis shear away from punch: Vag (lb)	533
Allowable strong axis shear at punch: Vanet (lb)	398

(check web crippling)

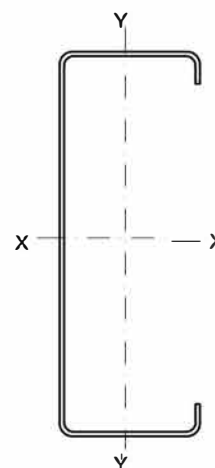
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.050
Torsional Warping Constant: Cw (in⁶)	0.098
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.745
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.761

PRODUCT ID

400S 125-27(4x1¼x22ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data