

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)	0.0312
Minimum Thickness (mil)	30
Gauge	20D
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.70
Cross Sectional Area: A (in²)	0.206
Moment of Inertia: Ix (in⁴)	0.481
Section Modulus: Sx (in³)	0.240
Radius of Gyration: Rx (in)	1.529
Moment of Inertia: Iy (in⁴)	0.034
Radius of Gyration: Ry (in)	0.409

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.411
Section Modulus: Sxe (in³)	0.182
Local Buckling Allowable Moment: Mal (in-k)	3.60
Distortional Buckling Allowable Moment: Mad (in-k)	3.16
Allowable strong axis shear away from punch: Vag (lb)	715
Allowable strong axis shear at punch: Vanet (lb)	484

(check web crippling)

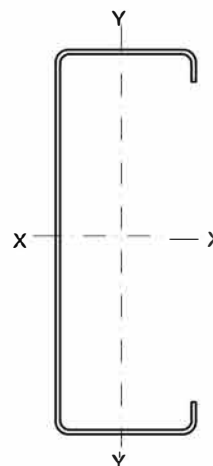
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.067
Torsional Warping Constant: Cw (in⁶)	0.108
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.742
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.748

PRODUCT ID

400S 125-30 (4x1¼x20Dga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data