

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)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

PRODUCT ID

400S 125-43 (4x1¼x18ga)

CODES & STANDARDS

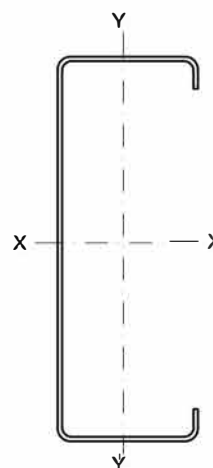
- ASTM A 1003, A 653, & C 955
- AISI S 100-16

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.00
Cross Sectional Area: A (in²)	0.295
Moment of Inertia: Ix (in⁴)	0.682
Section Modulus: Sx (in³)	0.341
Radius of Gyration: Rx (in)	1.522
Moment of Inertia: Iy (in⁴)	0.048
Radius of Gyration: Ry (in)	0.402

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.650
Section Modulus: Sxe (in³)	0.314
Local Buckling Allowable Moment: Mal (in-k)	6.20
Distortional Buckling Allowable Moment: Mad (in-k)	5.31
Allowable strong axis shear away from punch: Vag (lb)	1740
Allowable strong axis shear at punch: Vanet (lb)	810

(check web crippling)

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.200
Torsional Warping Constant: Cw (in⁶)	0.148
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.727
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.734



See Hermes/Hephaistos Technical Manual
for complete design data