

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

PRODUCT ID

400S 125-33 (4x1¼x20Sga)

CODES & STANDARDS

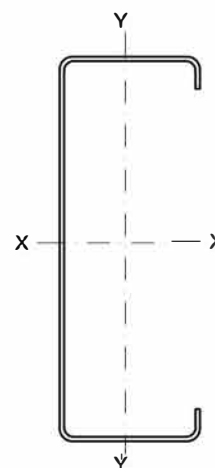
- ASTM A 1003, A 653, & C 955
- AISI S 100-16

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	0.77
Cross Sectional Area: A (in²)	0.228
Moment of Inertia: Ix (in⁴)	0.531
Section Modulus: Sx (in³)	0.265
Radius of Gyration: Rx (in)	1.527
Moment of Inertia: Iy (in⁴)	0.038
Radius of Gyration: Ry (in)	0.407

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	0.468
Section Modulus: Sxe (in³)	0.213
Local Buckling Allowable Moment: Mal (in-k)	4.20
Distortional Buckling Allowable Moment: Mad (in-k)	3.66
Allowable strong axis shear away from punch: Vag (lb)	976
Allowable strong axis shear at punch: Vanet (lb)	595

(check web crippling)

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.091
Torsional Warping Constant: Cw (in⁶)	0.188
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.738
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.745



See Hermes/Hephaistos Technical Manual
for complete design data