

Non-Structural Stud (s)



MATERIAL	
Web (in)	8
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	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.62
Cross Sectional Area: A (in²)	0.475
Moment of Inertia: Ix (in⁴)	3.723
Section Modulus: Sx (in³)	0.931
Radius of Gyration: Rx (in)	2.799
Moment of Inertia: Iy (in⁴)	0.056
Radius of Gyration: Ry (in)	0.342

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	3.337
Section Modulus: Sxe (in³)	0.750
Local Buckling Allowable Moment: Mal (in-k)	14.82
Distortional Buckling Allowable Moment: Mad (in-k)	11.36
Allowable strong axis shear away from punch: Vag (lb)	1051
Allowable strong axis shear at punch: Vanet (lb)	1051

(check web crippling)

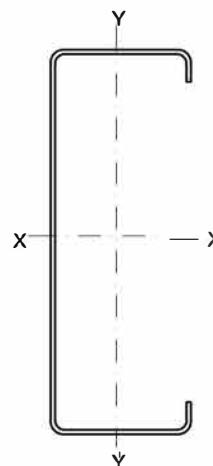
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.322
Torsional Warping Constant: Cw (in⁶)	0.735
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.510
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.866

PRODUCT ID

800S 125-43 (8x1¼x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data