

Structural Stud (s)



MATERIAL

Web (in)	2½
Flange (in)	1¾
Lip (in)	0.375
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.33
Cross Sectional Area: A (in²)	0.390
Moment of Inertia: Ix (in⁴)	0.386
Section Modulus: Sx (in³)	0.309
Radius of Gyration: Rx (in)	0.995
Moment of Inertia: Iy (in⁴)	0.096
Radius of Gyration: Ry (in)	0.495

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in⁴)	0.386
Section Modulus: Sxe (in³)	0.307
Local Buckling Allowable Moment: Mal (in-k)	10.62
Distortional Buckling Allowable Moment: Mad (in-k)	10.22
Allowable strong axis shear away from punch: Vag (lb)	2866
Allowable strong axis shear at punch: Vanet (lb)	519
check web crippling)	

TORSIONAL SECTION PROPERTIES

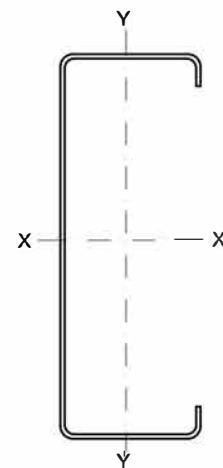
St. Venant Torsional Constant: Jx1000 (in⁴)	0.661
Torsional Warping Constant: Cw (in⁶)	0.138
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.096
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.561

PRODUCT ID

250S 137-68 (2½x1¾x14ga) (Grade 50)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data