

Structural Stud (s)



MATERIAL

Web (in)	3 $\frac{5}{8}$
Flange (in)	1 $\frac{3}{8}$
Lip (in)	0.375
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.29
Cross Sectional Area: A (in ²)	0.379
Moment of Inertia: Ix (in ⁴)	0.756
Section Modulus: Sx (in ³)	0.417
Radius of Gyration: Rx (in)	1.412
Moment of Inertia: Iy (in ⁴)	0.091
Radius of Gyration: Ry (in)	0.490

EFFECTIVE SECTION PROPERTIES

Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	0.756	0.756
Section Modulus: Sxe (in ³)	0.408	0.392
Local Buckling Allowable Moment: Mal (in-k)	8.87	11.73
Distortional Buckling Allowable Moment: Mad (in-k)	8.44	11.1
Allowable strong axis shear away from punch: Vag (lb)	2341	3372
Allowable strong axis shear at punch: Vanet (lb)	705	1016

(check web crippling)

TORSIONAL SECTION PROPERTIES

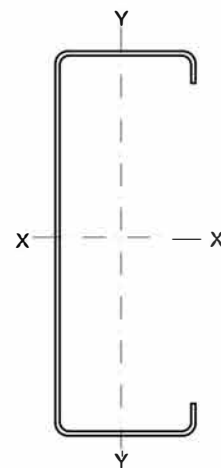
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.405
Torsional Warping Constant: Cw (in ⁶)	0.251
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.978
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.786

PRODUCT ID

362S 137-54(3 $\frac{5}{8}$ x1 $\frac{3}{8}$ x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data