

Structural Stud (s)



MATERIAL

Web (in)	3 ⁵ / ₈
Flange (in)	1 ⁵ / ₈
Lip (in)	0.500
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)	1.44
Cross Sectional Area: A (in ²)	0.422
Moment of Inertia: Ix (in ⁴)	0.873
Section Modulus: Sx (in ³)	0.482
Radius of Gyration: Rx (in)	1.438
Moment of Inertia: Iy (in ⁴)	0.154
Radius of Gyration: Ry (in)	0.605

EFFECTIVE SECTION PROPERTIES

Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	0.873	0.873
Section Modulus: Sxe (in ³)	0.473	0.454
Local Buckling Allowable Moment: Mal (in-k)	10.27	13.60
Distortional Buckling Allowable Moment: Mad (in-k)	9.94	12.90
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

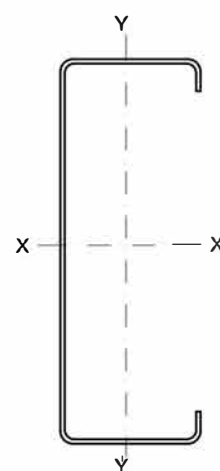
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.451
Torsional Warping Constant: Cw (in ⁶)	0.457
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.283
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.020

PRODUCT ID

362S 162-54 (3⁵/₈x1⁵/₈x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data