

Structural Stud (s)



MATERIAL	
Web (in)	6
Flange (in)	3½
Lip (in)	0.625
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)	2.81
Cross Sectional Area: A (in ²)	0.825
Moment of Inertia: Ix (in ⁴)	5.023
Section Modulus: Sx (in ³)	1.674
Radius of Gyration: Rx (in)	2.467
Moment of Inertia: Iy (in ⁴)	1.491
Radius of Gyration: Ry (in)	1.344

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	4.122	4.735
Section Modulus: Sxe (in ³)	1.245	1.316
Allowable Moment: Mal (in-k)	24.61	39.41
Distortional Buckling Allowable Moment: Mad (in-k)		35.4
Allowable strong axis shear away from punch: Vag (lb)	2448	2822
Allowable strong axis shear at punch: Vanet (lb)	2002	1947
(check web crippling)		

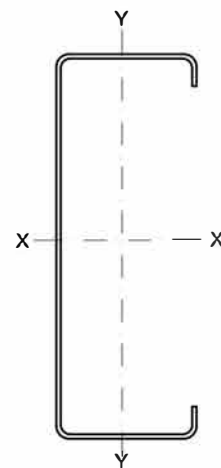
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.881
Torsional Warping Constant: Cw (in ⁶)	12.942
Shear Center to Centroid on Principal X-axis: Xo (in)	-3.037
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.137

PRODUCT ID

600S 350-54 (6x3½x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data