

Structural Stud (s)



MATERIAL

Web (in)	6
Flange (in)	3½
Lip (in)	0.625
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	4.93
Cross Sectional Area: A (in ²)	1.449
Moment of Inertia: Ix (in ⁴)	8.633
Section Modulus: Sx (in ³)	2.878
Radius of Gyration: Rx (in)	2.441
Moment of Inertia: Iy (in ⁴)	2.518
Radius of Gyration: Ry (in)	1.318

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	8.634
Section Modulus: Sxe (in ³)	2.585
Local Buckling Allowable Moment: Mal (in-k)	77.40
Distortional Buckling Allowable Moment: Mad (in-k)	76.46
Allowable strong axis shear away from punch: Vag (lb)	10472
Allowable strong axis shear at punch: Vanet (lb)	3805
(check web crippling)	

TORSIONAL SECTION PROPERTIES

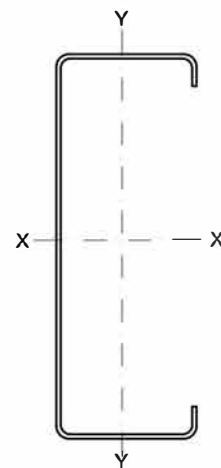
St. Venant Torsional Constant: Jx1000 (in ⁴)	4.994
Torsional Warping Constant: Cw (in ⁶)	21.811
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.979
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.071

PRODUCT ID

600S 350-97 (6x3½x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data