Structural Stud (S)

MATERIAL	
Web (in)	6
Flange (in)	1⅝
Lip (in)	0.500
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)	3.28
Cross Sectional Area: A (in^2)	0.966
Moment of Inertia: Ix (in^4)	4.799
Section Modulus: Sx (in^3)	1.600
Radius of Gyration: Rx (in)	2.229
Moment of Inertia: Iy (in^4)	0.283
Radius of Gyration: Ry (in)	0.542

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in^4)	4.800
Section Modulus: Sxe (in^3)	1.591
Local Buckling Allowable Moment: Mal (in-k)	56.42
Distortional Buckling Allowable Moment: Mad (in-k)	54.27
Allowable strong axis shear away from punch: Vag (lb)	10472
Allowable strong axis shear at punch: Vanet (lb)	3805
(check web crippling)	

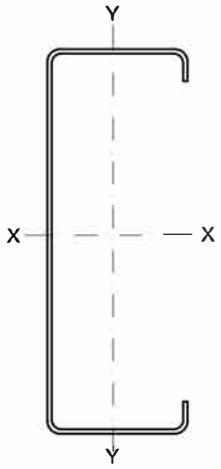
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	3.329
Torsional Warping Constant: Cw (in^6)	2.153
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.997
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.501

PRODUCT ID

600S 162-97 (6x1⅝x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual for complete design data

Phone: (718) 482-0800
Email: info@hermeshardware.com
Address: 24-02 37th Ave, LIC, NY 11101