Structural Stud (S)

MATERIAL	
Web (in)	6
Flange (in)	2½
Lip (in)	0.625
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.83
Cross Sectional Area: A (in^2)	0.537
Moment of Inertia: Ix (in^4)	3.083
Section Modulus: Sx (in^3)	1.028
Radius of Gyration: Rx (in)	2.396
Moment of Inertia: Iy (in^4)	0.458
Radius of Gyration: Ry (in)	0.923

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	**33**	**50**
Moment of Inertia-Deflection: Ixe (in^4)	3.083	**2.683**
Section Modulus: Sxe (in^3)	0.909	**0.820**
Local Buckling Allowable Moment: Mal (in-k)	17.97	**24.56**
Distortional Buckling Allowable Moment: Mad (in-k)	15.72	
Allowable strong axis shear away from punch: Vag (lb)	1415	**1857**
Allowable strong axis shear at punch: Vanet (lb)	1240	**1511**

(check web crippling)

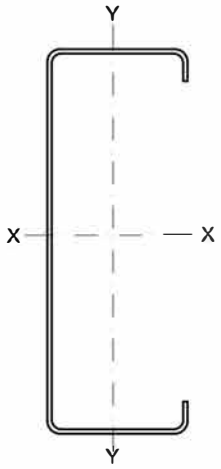
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	0.364
Torsional Warping Constant: Cw (in^6)	3.411
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.874
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.179

PRODUCT ID

600S 250-43 (6x2½x18ga)

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