

Structural Stud (s)



MATERIAL

Web (in)	6
Flange (in)	1 $\frac{5}{8}$
Lip (in)	0.500
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.0346
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.17
Cross Sectional Area: A (in ²)	0.344
Moment of Inertia: Ix (in ⁴)	1.793
Section Modulus: Sx (in ³)	0.598
Radius of Gyration: Rx (in)	2.282
Moment of Inertia: Iy (in ⁴)	0.116
Radius of Gyration: Ry (in)	0.581

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	1.793
Section Modulus: Sxe (in ³)	0.573
Local Buckling Allowable Moment: Mal (in-k)	11.33
Distortional Buckling Allowable Moment: Mad (in-k)	9.09
Allowable strong axis shear away from punch: Vag (lb)	638
Allowable strong axis shear at punch: Vanet (lb)	638
(check web crippling)	

TORSIONAL SECTION PROPERTIES

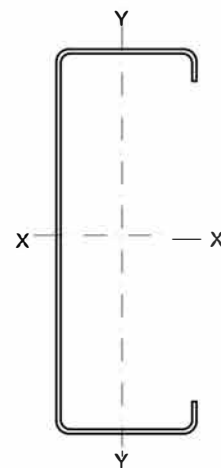
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.137
Torsional Warping Constant: Cw (in ⁶)	0.861
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.072
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.588

PRODUCT ID

600S 162-33 (6x1 $\frac{5}{8}$ x20Sga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data