C – Joists
with Small Punchout (J)

MATERIAL	
Web (in)	8
Flange (in)	1⅝
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)	1.41
Cross Sectional Area: A (in^2)	0.413
Moment of Inertia: Ix (in^4)	3.583
Section Modulus: Sx (in^3)	0.896
Radius of Gyration: Rx (in)	2.944
Moment of Inertia: Iy (in^4)	0.125
Radius of Gyration: Ry (in)	0.550

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in^4)	3.389
Section Modulus: Sxe (in^3)	**0.694**
Local Buckling Allowable Moment:Mal (in-k)	11.45
Distortional Buckling Allowable Moment: Mad (in-k)	10.15
Allowable strong axis shear away from punch: Vag (lb)	379
Allowable strong axis shear at punch: Vanet (lb)	379

(check web crippling)

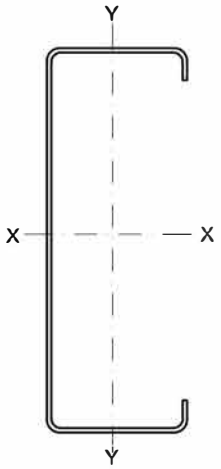
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	0.165
Torsional Warping Constant: Cw (in^6)	1.630
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.936
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.138

PRODUCT ID

800 J 162-33 (6x1⅝x20Sga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual for complete design data

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