

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	8
Flange (in)	3
Lip (in)	1
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.06
Cross Sectional Area: A (in ²)	1.192
Moment of Inertia: Ix (in ⁴)	17.513
Section Modulus: Sx (in ³)	3.503
Radius of Gyration: Rx (in)	3.833
Moment of Inertia: Iy (in ⁴)	1.258
Radius of Gyration: Ry (in)	1.027

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	15.128
Section Modulus: Sxe (in ³)	2.746
Local Buckling Allowable Moment: Mal (in-k)	82.23
Distortional Buckling Allowable Moment: Mad (in-k)	68.23
Allowable strong axis shear away from punch: Vag (lb)	3345
Allowable strong axis shear at punch: Vanet (lb)	3345

(check web crippling)

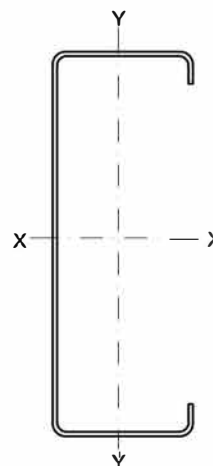
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.020
Torsional Warping Constant: Cw (in ⁶)	24.551
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.874
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.389

PRODUCT ID

1000 J 300-68 (10x3x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data