

C – Joists with Small Punchout (J)



MATERIAL	
Web (in)	16
Flange (in)	2
Lip (in)	0.625
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	5.03
Cross Sectional Area: A (in ²)	1.477
Moment of Inertia: Ix (in ⁴)	45.310
Section Modulus: Sx (in ³)	5.664
Radius of Gyration: Rx (in)	5.538
Moment of Inertia: Iy (in ⁴)	0.506
Radius of Gyration: Ry (in)	0.585

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	39.516	40.606
Section Modulus: Sxe (in ³)	4.531	3.965
Local Buckling Allowable Moment: Mal (in-k)	71.79	99.12
Distortional Buckling Allowable Moment: Mad (in-k)	61.10	77.88
Allowable strong axis shear away from punch: Vag (lb)	1,649	2062
Allowable strong axis shear at punch: Va net (lb)	1,649	1,649

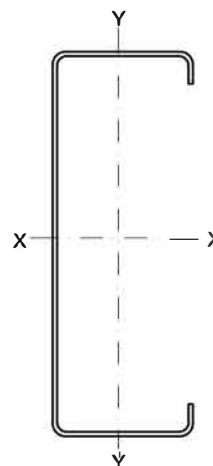
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.503
Torsional Warping Constant: Cw (in ⁶)	27.155
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.862
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.635

PRODUCT ID

1600 J 200-68 (16x2x14ga)

CODES & STANDARDS

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



(check web crippling)

See Hermes/Hephaistos Technical Manual
for complete design data