

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	14
Flange (in)	3½
Lip (in)	1
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)	5.45
Cross Sectional Area: A (in²)	1.602
Moment of Inertia: Ix (in⁴)	44.709
Section Modulus: Sx (in³)	6.387
Radius of Gyration: Rx (in)	5.283
Moment of Inertia: Iy (in⁴)	2.407
Radius of Gyration: Ry (in)	1.226

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in⁴)	41.798	37.145
Section Modulus: Sxe (in³)	5.669	4.617
Local Buckling Allowable Moment: Mal (in-k)	112.02	138.23
Distortional Buckling Allowable Moment: Mad (in-k)	92.4	119.17
Allowable strong axis shear away from punch: Vag (lb)	2,364	2,364
Allowable strong axis shear at punch: Va net (lb)	2,364	2,364

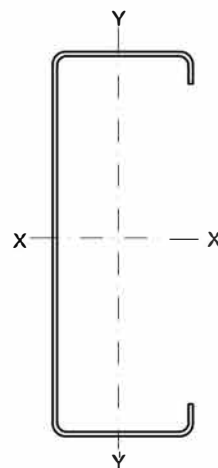
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	2.715
Torsional Warping Constant: Cw (in⁶)	91.814
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.184
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.850

PRODUCT ID

1400 J 350-68 (14x3½x14ga)

CODES & STANDARDS

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



(check web crippling)

See Hermes/Hephaistos Technical Manual
for complete design data