

C – Joists with Small Punchout (J)



MATERIAL	
Web (in)	14
Flange (in)	2
Lip (in)	0.625
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)	4.54
Cross Sectional Area: A (in ²)	1.335
Moment of Inertia: Ix (in ⁴)	32.297
Section Modulus: Sx (in ³)	4.614
Radius of Gyration: Rx (in)	4.919
Moment of Inertia: Iy (in ⁴)	0.494
Radius of Gyration: Ry (in)	0.608

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	29.856
Section Modulus: Sxe (in ³)	3.428
Local Buckling Allowable Moment: Mal (in-k)	102.64
Distortional Buckling Allowable Moment: Mad (in-k)	84.29
Allowable strong axis shear away from punch: Vag (lb)	2364
Allowable strong axis shear at punch: Vanet (lb)	2364

(check web crippling)

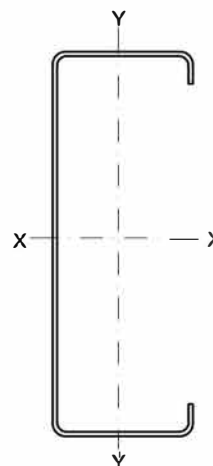
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.262
Torsional Warping Constant: Cw (in ⁶)	20.083
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.932
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.043

PRODUCT ID

1400 J 200-68 (14x2x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data