

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	14
Flange (in)	2½
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)	4.78
Cross Sectional Area: A (in ²)	1.406
Moment of Inertia: Ix (in ⁴)	35.755
Section Modulus: Sx (in ³)	5.108
Radius of Gyration: Rx (in)	5.043
Moment of Inertia: Iy (in ⁴)	0.865
Radius of Gyration: Ry (in)	0.784

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	33.627
Section Modulus: Sxe (in ³)	3.467
Local Buckling Allowable Moment: Mal (in-k)	103.80
Distortional Buckling Allowable Moment: Mad (in-k)	91.04
Allowable strong axis shear away from punch: Vag (lb)	2364
Allowable strong axis shear at punch: Vanet (lb)	2364

(check web crippling)

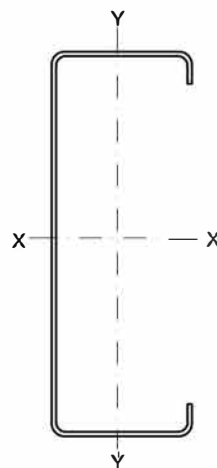
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.383
Torsional Warping Constant: Cw (in ⁶)	34.118
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.257
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.256

PRODUCT ID

1400 J 250-68 (14x2½x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data