

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)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.35
Cross Sectional Area: A (in²)	1.278
Moment of Inertia: Ix (in⁴)	35.831
Section Modulus: Sx (in³)	5.119
Radius of Gyration: Rx (in)	5.295
Moment of Inertia: Iy (in⁴)	1.948
Radius of Gyration: Ry (in)	1.235

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in⁴)	30.046	27.019
Section Modulus: Sxe (in³)	3.750	3.147
Local Buckling Allowable Moment: Mal (in-k)	61.88	78.67
Distortional Buckling Allowable Moment: Mad (in-k)	55.92	71.61
Allowable strong axis shear away from punch: Vag (lb)	941	941
Allowable strong axis shear at punch: Va net (lb)	941	941

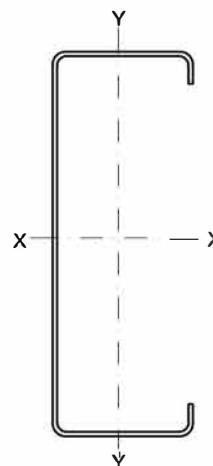
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	1.365
Torsional Warping Constant: Cw (in⁶)	74.539
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.201
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.866

PRODUCT ID

1400 J 350-54 (14x3½x16ga)

CODES & STANDARDS

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



(check web crippling)

See Hermes/Hephaistos Technical Manual
for complete design data