

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)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	6.40
Cross Sectional Area: A (in ²)	1.881
Moment of Inertia: Ix (in ⁴)	44.870
Section Modulus: Sx (in ³)	6.410
Radius of Gyration: Rx (in)	4.884
Moment of Inertia: Iy (in ⁴)	0.655
Radius of Gyration: Ry (in)	0.590

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	43.652
Section Modulus: Sxe (in ³)	5.522
Local Buckling Allowable Moment: Mal (in-k)	165.31
Distortional Buckling Allowable Moment: Mad (in-k)	141.26
Allowable strong axis shear away from punch: Vag (lb)	6938
Allowable strong axis shear at punch: Vanet (lb)	6938

(check web crippling)

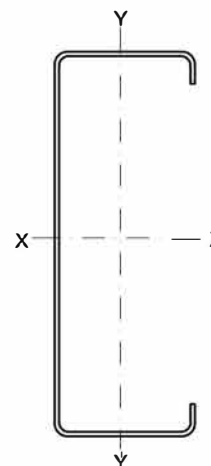
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	6.484
Torsional Warping Constant: Cw (in ⁶)	27.156
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.904
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.002

PRODUCT ID

1400 J 200-97 (14x2x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data