

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	12
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)	4.06
Cross Sectional Area: A (in ²)	1.192
Moment of Inertia: Ix (in ⁴)	21.955
Section Modulus: Sx (in ³)	3.659
Radius of Gyration: Rx (in)	4.291
Moment of Inertia: Iy (in ⁴)	0.479
Radius of Gyration: Ry (in)	0.634

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	20.892
Section Modulus: Sxe (in ³)	2.911
Local Buckling Allowable Moment: Mal (in-k)	87.15
Distortional Buckling Allowable Moment: Mad (in-k)	73.93
Allowable strong axis shear away from punch: Vag (lb)	2770
Allowable strong axis shear at punch: Vanet (lb)	2770

(check web crippling)

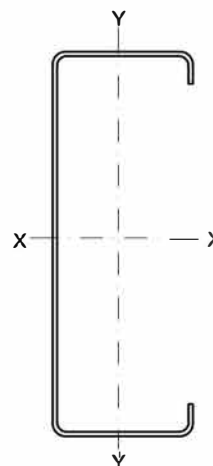
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.020
Torsional Warping Constant: Cw (in ⁶)	14.176
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.017
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.456

PRODUCT ID

1200 J 200-68 (12x2x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data