

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	8
Flange (in)	3
Lip (in)	1
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)	5.01
Cross Sectional Area: A (in ²)	1.474
Moment of Inertia: Ix (in ⁴)	14.379
Section Modulus: Sx (in ³)	3.595
Radius of Gyration: Rx (in)	3.123
Moment of Inertia: Iy (in ⁴)	1.595
Radius of Gyration: Ry (in)	1.040

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	14.189
Section Modulus: Sxe (in ³)	3.295
Local Buckling Allowable Moment: Mal (in-k)	98.64
Distortional Buckling Allowable Moment: Mad (in-k)	86.69
Allowable strong axis shear away from punch: Vag (lb)	10888
Allowable strong axis shear at punch: Vanet (lb)	5940

(check web crippling)

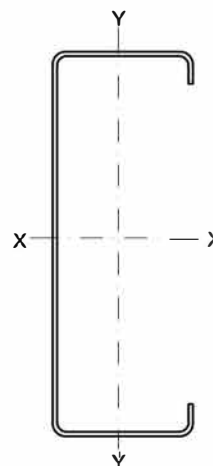
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.082
Torsional Warping Constant: Cw (in ⁶)	20.304
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.017
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.861

PRODUCT ID

800 J 300-97 (8x3x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data