

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	8
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)	4.32
Cross Sectional Area: A (in ²)	1.271
Moment of Inertia: Ix (in ⁴)	11.207
Section Modulus: Sx (in ³)	2.802
Radius of Gyration: Rx (in)	2.970
Moment of Inertia: Iy (in ⁴)	0.577
Radius of Gyration: Ry (in)	0.674

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	11.207
Section Modulus: Sxe (in ³)	2.795
Local Buckling Allowable Moment: Mal (in-k)	96.41
Distortional Buckling Allowable Moment: Mad (in-k)	85.83
Allowable strong axis shear away from punch: Vag (lb)	10888
Allowable strong axis shear at punch: Vanet (lb)	5940

(check web crippling)

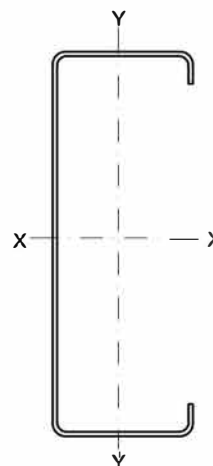
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	4.381
Torsional Warping Constant: Cw (in ⁶)	7.684
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.214
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.278

PRODUCT ID

800 J 200-97 (8x2x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data