

C – Joists with Small Punchout (J)



MATERIAL	
Web (in)	8
Flange (in)	2
Lip (in)	0.625
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)	2.47
Cross Sectional Area: A (in ²)	0.726
Moment of Inertia: Ix (in ⁴)	6.574
Section Modulus: Sx (in ³)	1.644
Radius of Gyration: Rx (in)	3.009
Moment of Inertia: Iy (in ⁴)	0.357
Radius of Gyration: Ry (in)	0.701

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	6.573	6.573
Section Modulus: Sxe (in ³)	1.639	1.483
Local Buckling Allowable Moment: Mal (in-k)	35.67	44.41
Distortional Buckling Allowable Moment: Mad (in-k)	29.35	36.01
Allowable strong axis shear away from punch: Vag (lb)	2091	2091
Allowable strong axis shear at punch: Va net (lb)	2091	2091

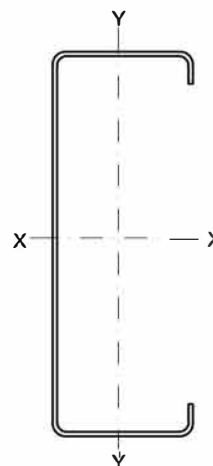
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.775
Torsional Warping Constant: Cw (in ⁶)	4.663
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.265
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.338

PRODUCT ID

800 J 200-54 (8x2x16ga)

CODES & STANDARDS

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



(check web crippling)

See Hermes/Hephaistos Technical Manual
for complete design data