

C – Joists with Small Punchout (J)



MATERIAL	
Web (in)	8
Flange (in)	1 $\frac{3}{8}$
Lip (in)	0.375
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	

PRODUCT ID

800 J 137-68 (8x1 $\frac{3}{8}$ x14 ga) (Grade 50)

CODES & STANDARDS

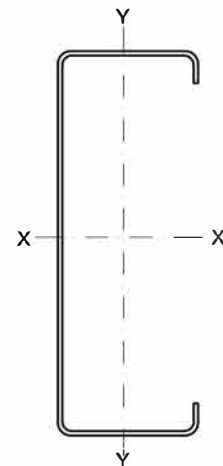
- ASTM A 1003, A 653, & C 955
- AISI S100-16

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.66
Cross Sectional Area: A (in ²)	0.782
Moment of Inertia: Ix (in ⁴)	6.305
Section Modulus: Sx (in ³)	1.576
Radius of Gyration: Rx (in)	2.839
Moment of Inertia: Iy (in ⁴)	0.134
Radius of Gyration: Ry (in)	0.414

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	6.290
Section Modulus: Sxe (in ³)	1.452
Local Buckling Allowable Moment: Mal (in-k)	43.46
Distortional Buckling Allowable Moment: Mad (in-k)	36.98
Allowable strong axis shear away from punch: Vag (lb)	4220
Allowable strong axis shear at punch: Vanet (lb)	3367

(check web crippling)

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.325
Torsional Warping Constant: Cw (in ⁶)	1.789
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.661
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.944



See Hermes/Hephaistos Technical Manual
for complete design data