

C – Joists with Small Punchout (J)



MATERIAL	
Web (in)	6
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	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.18
Cross Sectional Area: A (in ²)	0.640
Moment of Inertia: Ix (in ⁴)	3.095
Section Modulus: Sx (in ³)	1.032
Radius of Gyration: Rx (in)	2.200
Moment of Inertia: Iy (in ⁴)	0.125
Radius of Gyration: Ry (in)	0.443

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	3.095
Section Modulus: Sxe (in ³)	1.024
Local Buckling Allowable Moment: Mal (in-k)	30.65
Distortional Buckling Allowable Moment: Mad (in-k)	26.91
Allowable strong axis shear away from punch: Vag (lb)	5352
Allowable strong axis shear at punch: Vanet (lb)	2880

(check web crippling)

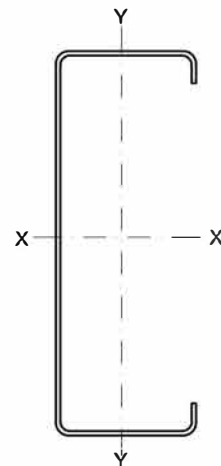
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.084
Torsional Warping Constant: Cw (in ⁶)	0.930
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.768
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.372

PRODUCT ID

600 J 137-68 (6x1 $\frac{3}{8}$ x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data