

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	6
Flange (in)	1 $\frac{5}{8}$
Lip (in)	0.500
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)	2.39
Cross Sectional Area: A (in ²)	0.693
Moment of Inertia: Ix (in ⁴)	3.526
Section Modulus: Sx (in ³)	1.175
Radius of Gyration: Rx (in)	2.256
Moment of Inertia: Iy (in ⁴)	0.218
Radius of Gyration: Ry (in)	0.561

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	3.526
Section Modulus: Sxe (in ³)	1.169
Local Buckling Allowable Moment: Mal (in-k)	38.37
Distortional Buckling Allowable Moment: Mad (in-k)	33.04
Allowable strong axis shear away from punch: Vag (lb)	5352
Allowable strong axis shear at punch: Vanet (lb)	2880

(check web crippling)

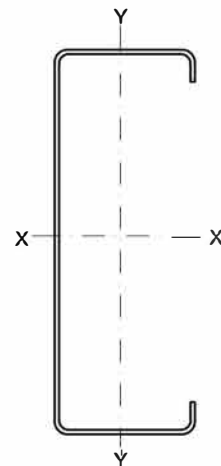
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.174
Torsional Warping Constant: Cw (in ⁶)	1.626
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.032
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.543

PRODUCT ID

600 J 162-68 (6x1 $\frac{5}{8}$ x14 ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data