

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	6
Flange (in)	2½
Lip (in)	0.625
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)	2.84
Cross Sectional Area: A (in²)	0.836
Moment of Inertia: Ix (in⁴)	4.728
Section Modulus: Sx (in³)	1.576
Radius of Gyration: Rx (in)	2.379
Moment of Inertia: Iy (in⁴)	0.688
Radius of Gyration: Ry (in)	0.908

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	4.728
Section Modulus: Sxe (in³)	1.373
Local Buckling Allowable Moment: Mal (in-k)	41.10
Distortional Buckling Allowable Moment: Mad (in-k)	37.61
Allowable strong axis shear away from punch: Vag (lb)	5352
Allowable strong axis shear at punch: Vanet (lb)	2880

(check web crippling)

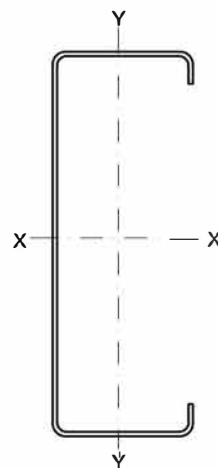
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	1.416
Torsional Warping Constant: Cw (in⁶)	5.145
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.842
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.142

PRODUCT ID

600 J 250-68 (6x2½x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data