

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	6
Flange (in)	3½
Lip (in)	1
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0107
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.93
Cross Sectional Area: A (in²)	1.449
Moment of Inertia: Ix (in⁴)	8.633
Section Modulus: Sx (in³)	2.878
Radius of Gyration: Rx (in)	2.441
Moment of Inertia: Iy (in⁴)	2.518
Radius of Gyration: Ry (in)	1.318

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	8.634
Section Modulus: Sxe (in³)	2.585
Local Buckling Allowable Moment: Mal (in-k)	77.40
Distortional Buckling Allowable Moment: Mad (in-k)	76.46
Allowable strong axis shear away from punch: Vag (lb)	10472
Allowable strong axis shear at punch: Vanet (lb)	3805

(check web crippling)

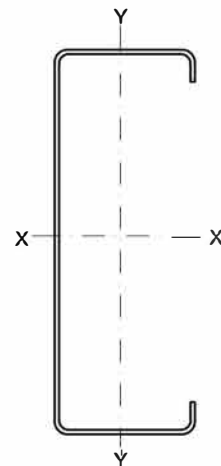
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	4.994
Torsional Warping Constant: Cw (in⁶)	21.811
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.979
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.071

PRODUCT ID

600 J 350-97 (6x3½x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data