

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)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.81
Cross Sectional Area: A (in²)	0.825
Moment of Inertia: Ix (in⁴)	5.023
Section Modulus: Sx (in³)	1.674
Radius of Gyration: Rx (in)	2.467
Moment of Inertia: Iy (in⁴)	1.491
Radius of Gyration: Ry (in)	1.644

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	4.735
Section Modulus: Sxe (in³)	1.316
Local Buckling Allowable Moment: Mal (in-k)	39.41
Distortional Buckling Allowable Moment: Mad (in-k)	35.41
Allowable strong axis shear away from punch: Vag (lb)	2822
Allowable strong axis shear at punch: Vanet (lb)	1947

(check web crippling)

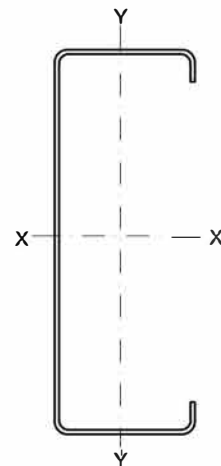
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	0.881
Torsional Warping Constant: Cw (in⁶)	12.942
Shear Center to Centroid on Principal X-axis: Xo (in)	-3.037
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.137

PRODUCT ID

600 J 350-54 (6x3½x16ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data