

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)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	3.98
Cross Sectional Area: A (in²)	1.169
Moment of Inertia: Ix (in⁴)	6.498
Section Modulus: Sx (in³)	2.166
Radius of Gyration: Rx (in)	2.358
Moment of Inertia: Iy (in⁴)	0.923
Radius of Gyration: Ry (in)	0.889

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in⁴)	6.499
Section Modulus: Sxe (in³)	2.068
Local Buckling Allowable Moment: Mal (in-k)	61.92
Distortional Buckling Allowable Moment: Mad (in-k)	59.18
Allowable strong axis shear away from punch: Vag (lb)	10472
Allowable strong axis shear at punch: Vanet (lb)	3805

(check web crippling)

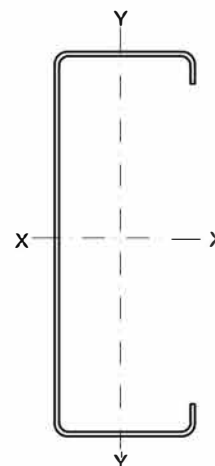
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in⁴)	4.030
Torsional Warping Constant: Cw (in⁶)	6.947
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.803
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.099

PRODUCT ID

600 J 250-97 (6x2½x12ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data