

C – Joists

with Small Punchout (J)



MATERIAL	
Web (in)	6
Flange (in)	2
Lip (in)	0.625
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.67
Cross Sectional Area: A (in ²)	0.492
Moment of Inertia: Ix (in ⁴)	2.683
Section Modulus: Sx (in ³)	0.894
Radius of Gyration: Rx (in)	2.335
Moment of Inertia: Iy (in ⁴)	0.268
Radius of Gyration: Ry (in)	0.739

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	2.683
Section Modulus: Sxe (in ³)	0.868
Local Buckling Allowable Moment: Mal (in-k)	17.16
Distortional Buckling Allowable Moment: Mad (in-k)	14.88
Allowable strong axis shear away from punch: Vag (lb)	1415
Allowable strong axis shear at punch: Vanet (lb)	1240

(check web crippling)

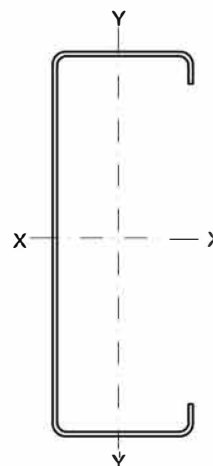
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.334
Torsional Warping Constant: Cw (in ⁶)	2.033
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.446
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.844

PRODUCT ID

600 J 200-43 (6x2x18ga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data