

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)	0.0346
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.29
Cross Sectional Area: A (in ²)	0.379
Moment of Inertia: Ix (in ⁴)	2.076
Section Modulus: Sx (in ³)	0.692
Radius of Gyration: Rx (in)	2.340
Moment of Inertia: Iy (in ⁴)	0.209
Radius of Gyration: Ry (in)	0.743

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	2.062
Section Modulus: Sxe (in ³)	0.610
Local Buckling Allowable Moment: Mal (in-k)	12.06
Distortional Buckling Allowable Moment: Mad (in-k)	10.43
Allowable strong axis shear away from punch: Vag (lb)	638
Allowable strong axis shear at punch: Vanet (lb)	638

(check web crippling)

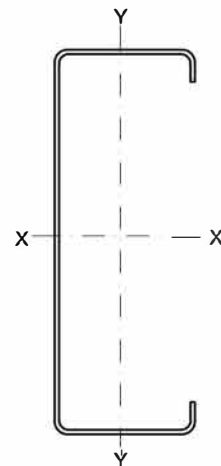
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.151
Torsional Warping Constant: Cw (in ⁶)	1.593
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.457
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.855

PRODUCT ID

600 J 200-33 (6x2x20Sga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data