C – Joists
with Small Punchout (J)

MATERIAL	
Web (in)	6
Flange (in)	2½
Lip (in)	0.625
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.28
Cross Sectional Area: A (in^2)	0.670
Moment of Inertia: Ix (in^4)	3.820
Section Modulus: Sx (in^3)	1.273
Radius of Gyration: Rx (in)	2.389
Moment of Inertia: Iy (in^4)	0.562
Radius of Gyration: Ry (in)	0.917

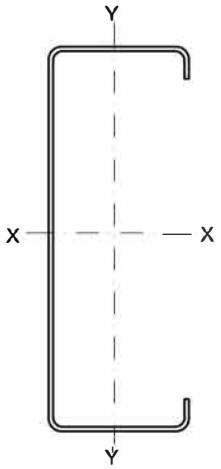
EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in^4)	3.820	3.774
Section Modulus: Sxe (in^3)	**1.149**	1.054
Local Buckling Allowable Moment:Mal (in-k)	22.71	31.56
Distortional Buckling Allowable Moment: Mad (in-k)	21.21	37.70
Allowable strong axis shear away from punch: Vag (lb)	2740	2822
Allowable strong axis shear at punch: Va net (lb)	1890	1947

(check web crippling)

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	0.715
Torsional Warping Constant: Cw (in^6)	4.194
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.860
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.163

PRODUCT ID
600 J 250-54 (6x2½x16ga)

CODES & STANDARDS
- ASTM A 1003, A 653, & C 955
- AISI S 100-16



See Hermes/Hephaistos Technical Manual for complete design data

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