C – Joists
with Small Punchout (J)

MATERIAL	
Web (in)	14
Flange (in)	1⅝
Lip (in)	0.500
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.36
Cross Sectional Area: A (in^2)	1.281
Moment of Inertia: Ix (in^4)	29.693
Section Modulus: Sx (in^3)	4.241
Radius of Gyration: Rx (in)	4.814
Moment of Inertia: Iy (in^4)	0.295
Radius of Gyration: Ry (in)	0.480

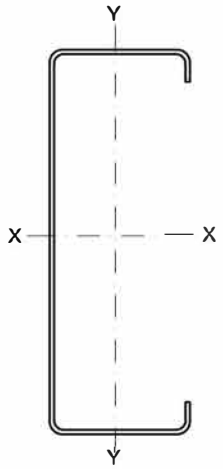
EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in^4)	26.525	25.471
Section Modulus: Sxe (in^3)	**3.403**	3.162
Local Buckling Allowable Moment:Mal (in-k)	67.24	94.66
Distortional Buckling Allowable Moment: Mad (in-k)	60.31	77.66
Allowable strong axis shear away from punch: Vag (lb)	2,364	2,364
Allowable strong axis shear at punch: Va net (lb)	2,364	2,364

(check web crippling)

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	2.171
Torsional Warping Constant: Cw (in^6)	11.658
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.697
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.888

PRODUCT ID
1400 J 162-68 (14x1⅝x14ga)

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



See Hermes/Hephaistos Technical Manual for complete design data

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