

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	14
Flange (in)	3
Lip (in)	0.625
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	5.03
Cross Sectional Area: A (in ²)	1.477
Moment of Inertia: Ix (in ⁴)	39.213
Section Modulus: Sx (in ³)	5.602
Radius of Gyration: Rx (in)	5.152
Moment of Inertia: Iy (in ⁴)	1.370
Radius of Gyration: Ry (in)	0.963

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	35.29	33.33	31.37
Allowable Design Bending Moment: Md(in-k)	86	81	76
Allowable Shear Force: Va (lb) (solid section)	2364	2364	2364
Check web crippling			
* For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.503
Torsional Warping Constant: Cw (in ⁶)	52.772
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.601
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.480



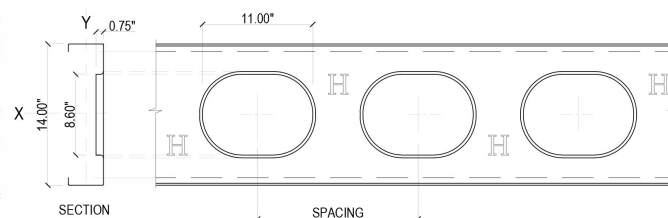
PRODUCT ID

1400 H 48 J 300-68(14x3x14 ga) Holes@48"
 1400 H 32 J 300-68 (14x3x14 ga) Holes@32"
 1400 H 16 J 300-68 (14x3x14 ga) Holes@16"

CODES & STANDARDS

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

HOLE SIZE AND SPACING



See Hermes/Hephaistos Technical Manual
for complete design data