

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	14
Flange (in)	2
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)	4.54
Cross Sectional Area: A (in ²)	1.335
Moment of Inertia: Ix (in ⁴)	32.297
Section Modulus: Sx (in ³)	4.614
Radius of Gyration: Rx (in)	4.919
Moment of Inertia: Iy (in ⁴)	0.494
Radius of Gyration: Ry (in)	0.608

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	29.07	27.45	25.84
Allowable Design Bending Moment: Md(in-k)	76	72	67
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)	2.262
Torsional Warping Constant: Cw (in ⁶)	20.083
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.932
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.043



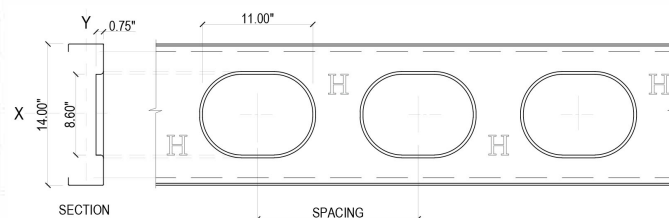
PRODUCT ID

1400 H 48 J 200-68 (14x2x14 ga) Holes@48"
 1400 H 32 J 200-68 (14x2x14 ga) Holes@32"
 1400 H 16 J 200-68 (14x2x14 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