

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	10
Flange (in)	2
Lip (in)	0.625
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	5.01
Cross Sectional Area: A (in ²)	1.474
Moment of Inertia: Ix (in ⁴)	19.343
Section Modulus: Sx (in ³)	3.869
Radius of Gyration: Rx (in)	3.622
Moment of Inertia: Iy (in ⁴)	0.610
Radius of Gyration: Ry (in)	0.643

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	18.18	17.41	16.44
Allowable Design Bending Moment: Md(in-k)	94	94	85
Allowable Shear Force: Va (lb) (solid section)	7175	7175	7175
Check web crippling			
* For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.082
Torsional Warping Constant: Cw (in ⁶)	12.679
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.088
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.836



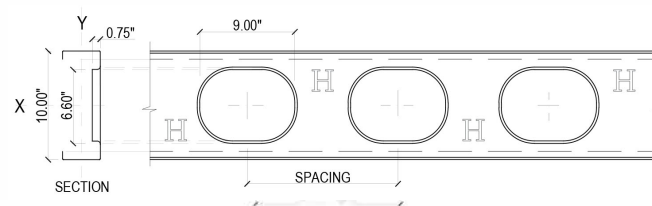
PRODUCT ID

1000 H 48 J 200-97 (10x2x12ga) Holes@48"
 1000 H 32 J 200-97 (10x2x12ga) Holes@32"
 1000 H 16 J 200-97 (10x2x12ga) 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