

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	12
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)	5.71
Cross Sectional Area: A (in ²)	1.677
Moment of Inertia: Ix (in ⁴)	30.428
Section Modulus: Sx (in ³)	5.071
Radius of Gyration: Rx (in)	4.259
Moment of Inertia: Iy (in ⁴)	0.635
Radius of Gyration: Ry (in)	0.615

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	25.86	24.34	21.30
Allowable Design Bending Moment: Md (in-k)	104	97	85
Allowable Shear Force: Va (lb) (solid section)	8145	8145	8145
Check web crippling			
*For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.783
Torsional Warping Constant: Cw (in ⁶)	19.150
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.987
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.415



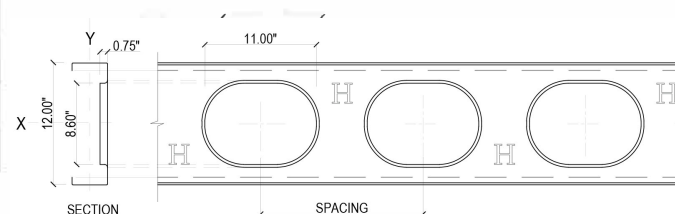
PRODUCT ID

1200 H 48 J 200-97 (12x2x12ga) Holes@48"
 1200 H 32 J 200-97 (12x2x12ga) Holes@32"
 1200 H 16 J 200-97 (12x2x12ga) 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