

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	12
Flange (in)	2½
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)	6.40
Cross Sectional Area: A (in ²)	1.881
Moment of Inertia: Ix (in ⁴)	37.627
Section Modulus: Sx (in ³)	6.271
Radius of Gyration: Rx (in)	4.473
Moment of Inertia: Iy (in ⁴)	1.787
Radius of Gyration: Ry (in)	0.975

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	31.98	30.10	26.34
Allowable Design Bending Moment: Md (in-k)	116	109	95
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)	6.484
Torsional Warping Constant: Cw (in ⁶)	50.853
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.691
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.880



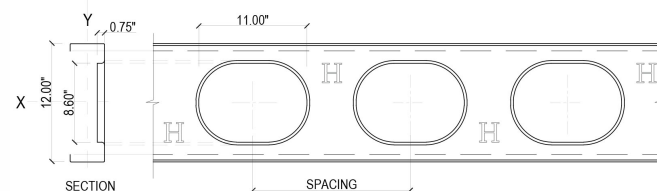
PRODUCT ID

1200 H 48 J 300-97 (12x2½x12ga) Holes@48"
 1200 H 32 J 300-97 (12x2½x12ga) Holes@32"
 1200 H 16 J 300-97 (12x2½x12ga) 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