

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	8
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)	4.67
Cross Sectional Area: A (in ²)	1.372
Moment of Inertia: Ix (in ⁴)	12.793
Section Modulus: Sx (in ³)	3.198
Radius of Gyration: Rx (in)	3.053
Moment of Inertia: Iy (in ⁴)	1.009
Radius of Gyration: Ry (in)	0.858

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	12.15	11.77	11.64
Allowable Design Bending Moment: Md (in-k)	79	76	75
Allowable Shear Force: Va (lb) (solid section)	10888	10888	10888
Check web crippling			
* For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	4.731
Torsional Warping Constant: Cw (in ⁶)	13.091
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.607
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.555



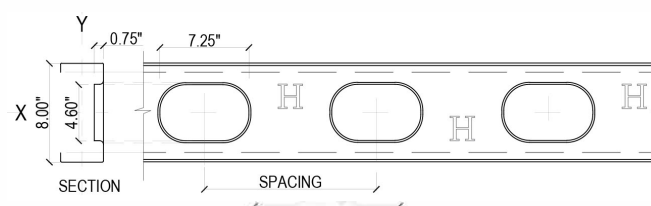
PRODUCT ID

800 H 48 J 250-97 (8x2½x12ga) Holes@48"
 800 H 32 J 250-97 (8x2½x12ga) Holes@32"
 800 H 16 J 250-97 (8x2½x12ga) 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