

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)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	3.33
Cross Sectional Area: A (in ²)	0.978
Moment of Inertia: Ix (in ⁴)	9.263
Section Modulus: Sx (in ³)	2.316
Radius of Gyration: Rx (in)	3.077
Moment of Inertia: Iy (in ⁴)	0.752
Radius of Gyration: Ry (in)	0.877

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	8.80	8.52	8.43
Allowable Design Bending Moment: Md (in-k)	50	48	47
Allowable Shear Force: Va (lb) (solid section)	4220	4220	4220
Check web crippling			
* For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.658
Torsional Warping Constant: Cw (in ⁶)	9.652
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.644
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.597



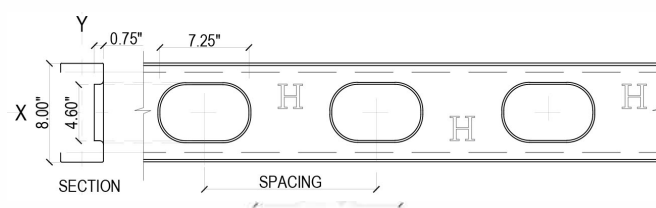
PRODUCT ID

800 H 48 J 250-68 (8x2½x14 ga) Holes@48"
 800 H 32 J 250-68 (8x2½x14 ga) Holes@32"
 800 H 16 J 250-68 (8x2½x14 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