

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)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.66
Cross Sectional Area: A (in ²)	0.783
Moment of Inertia: Ix (in ⁴)	7.467
Section Modulus: Sx (in ³)	1.867
Radius of Gyration: Rx (in)	3.089
Moment of Inertia: Iy (in ⁴)	0.614
Radius of Gyration: Ry (in)	0.886

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	7.09	6.54	6.54
Allowable Design Bending Moment: Md (in-k)	38	35	34
Allowable Shear Force: Va (lb) (solid section)	2091	2091	2091
Check web crippling			
* For other joist spans, see Hermes Technical Manual			

TORSIONAL SECTION PROPERTIES (Solid Section)	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.836
Torsional Warping Constant: Cw (in ⁶)	7.850
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.661
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.617

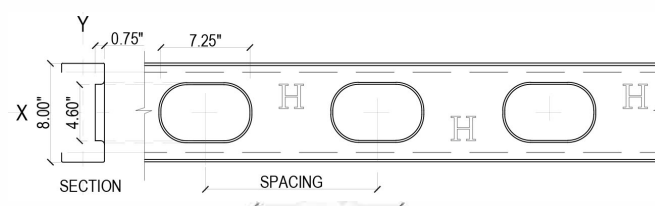
PRODUCT ID

800	H	48	J	250-54	(8x2½x16ga)	Holes@48"
800	H	32	J	250-54	(8x2½x16ga)	Holes@32"
800	H	16	J	250-54	(8x2½x16ga)	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