

C-Joists

with Big Stiffened Web Holes

MATERIAL	
Web (in)	14
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	14
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)	44.870
Section Modulus: Sx (in ³)	6.410
Radius of Gyration: Rx (in)	4.884
Moment of Inertia: Iy (in ⁴)	0.655
Radius of Gyration: Ry (in)	0.590

EFFECTIVE SECTION PROPERTIES FOR 20ft JOIST SPAN*			
Hole Spacing (in)	48	32	16
Moment of Inertia-Deflection: Ixe (in ⁴)	40.38	38.10	35.90
Allowable Design Bending Moment: Md(in-k)	127	120	113
Allowable Shear Force: Va (lb) (solid section)	6938	6938	6938
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)	27.156
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.904
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.002



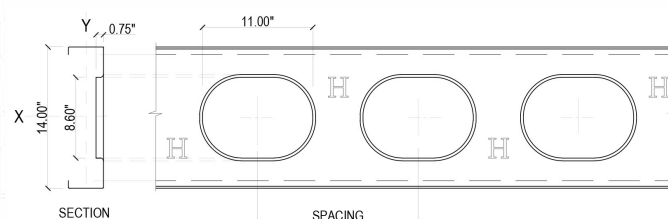
PRODUCT ID

1400 H 48 J 200-97 (14x2x12ga) Holes@48"
 1400 H 32 J 200-97 (14x2x12ga) Holes@32"
 1400 H 16 J 200-97 (14x2x12ga) 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