

1000SMX250-43

Product Description: 10" SuperMAXX Joist 18GA (2-1/2" Flange, 43mil)

Coating: G60 (standard), G90 (special order)

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

**Double
Return Flange**

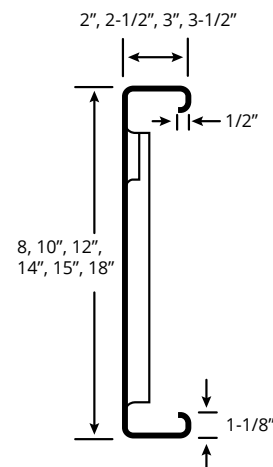


GEOMETRIC PROPERTIES			
Web Depth	10 in.	Yield Strength, Fy	33 ksi
Flange Width	2.50 in.	Design Thickness	0.0451 in.
Lip Length 1	1.125 in.	Min. Steel Thickness	0.0428 in.
Lip Length 2	0.50 in.		

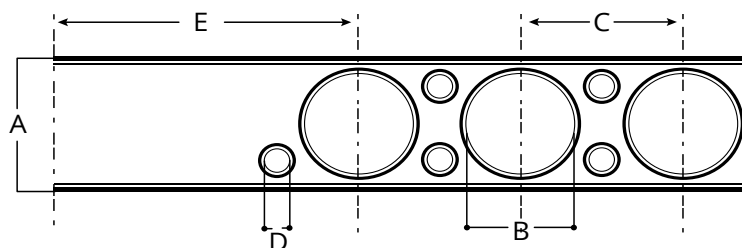
GROSS PROPERTIES		
Area (in ²)	Total cross-sectional steel area	0.7549
Weight (lb/ft)	Linear weight per foot	2.5667
I _x (in ⁴)	Moment of inertia about the x-axis	10.4227
S _x (in ³)	Section modulus about the x-axis	2.0845
R _x (in)	Radius of gyration about the x-axis	3.7158
I _y (in ⁴)	Moment of inertia about the y-axis	0.4602
R _y (in)	Radius of gyration about the y-axis	0.7808

EFFECTIVE PROPERTIES		
Max (in-k)	Maximum allowable bending moment	27.5303
I _{xe} (in ⁴)	Effective moment of inertia (x-axis)	8.9413
S _{xe} (in ³)	Effective section modulus (x-axis)	1.6685
V _{ay} (k)	Maximum allowable shear force about the y-axis	500.0

TORSIONAL PROPERTIES		
J x 1000 (in ⁴)	St. Venant torsional constant	0.512
C _w (in ⁶)	Warping constant	10.814
X _o (in)	Distance from shear center to centroid	1.557
R _o (in)	Polar radius of gyration	4.104
Beta	Torsional Flexural Constant	0.856



TYPICAL JOIST MEMBER SIZING				
A	B	C	D	E
Section Web Depth (in)	Large Hole Diameter (in)	Large Hole Spacing (in o.c.)	Small Hole Diameter (in)	Minimum Distance from End to Center of First Large Hole (in)
10	6.125	12	2.25	33



CODES AND STANDARDS:

Super Stud/EB Metal US products comply with the applicable provisions of the following:

- International Building Code (IBC): 2006–2024
- AISI S100-16 (2020) w/S2-20
- Sheet Steel: ASTM A1003/A1003M; ASTM A653/A653M
- Galvanized Coating: ASTM A653/A653M

Structural Members:

- ASTM C955; AISI S240
- Installed per ASTM C1007

Additional Standards:

- AISI S201; AISI S202
- 3rd Party Certification

For LEED Letter requests please submit through:
www.buysuperstud.com or www.ebmetal.us

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