

## 1000SMX350-54

Product Description: 10" SuperMAXX Joist 16GA (3-1/2" Flange, 54mil)

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

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

Double  
Return Flange

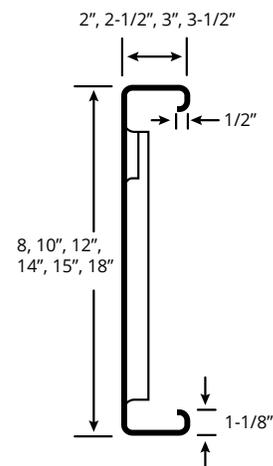


GEOMETRIC PROPERTIES			
Web Depth	10 in.	Yield Strength, Fy	50 ksi
Flange Width	3.50 in.	Design Thickness	0.0566 in.
Lip Length 1	1.125 in.	Min. Steel Thickness	0.0538 in.
Lip Length 2	0.50 in.		

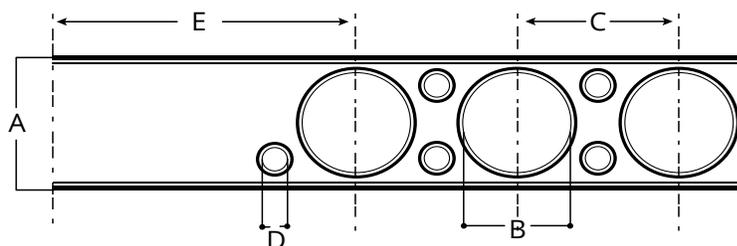
GROSS PROPERTIES		
Area (in <sup>2</sup> )	Total cross-sectional steel area	1.1104
Weight (lb/ft)	Linear weight per foot	3.7754
I <sub>x</sub> (in <sup>4</sup> )	Moment of inertia about the x-axis	17.1220
S <sub>x</sub> (in <sup>3</sup> )	Section modulus about the x-axis	3.4244
R <sub>x</sub> (in)	Radius of gyration about the x-axis	3.9267
I <sub>y</sub> (in <sup>4</sup> )	Moment of inertia about the y-axis	2.0514
R <sub>y</sub> (in)	Radius of gyration about the y-axis	1.3592

EFFECTIVE PROPERTIES		
Max (in-k)	Maximum allowable bending moment	58.9304
I <sub>xe</sub> (in <sup>4</sup> )	Effective moment of inertia (x-axis)	13.5367
S <sub>xe</sub> (in <sup>3</sup> )	Effective section modulus (x-axis)	2.3572
V <sub>ay</sub> (k)	Maximum allowable shear force about the y-axis	780.6

TORSIONAL PROPERTIES		
J x 1000 (in <sup>4</sup> )	St. Venant torsional constant	1.186
C <sub>w</sub> (in <sup>6</sup> )	Warping constant	46.331
X <sub>o</sub> (in)	Distance from shear center to centroid	2.848
R <sub>o</sub> (in)	Polar radius of gyration	5.037
Beta	Torsional Flexural Constant	0.680



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](http://www.buysuperstud.com) or [www.ebmetal.us](http://www.ebmetal.us)

NEW HAMPSHIRE FACILITY  
 12 TALLWOOD DRIVE  
 BOW, NH 03304  
 P: 603-216-1573

MISSISSIPPI FACILITY  
 53 W L RUNNELS IND DR  
 HATTIESBURG, MS 39401  
 P: 601-584-7550

NEW JERSEY FACILITY  
 2960 WOODBRIDGE AVE  
 EDISON, NJ 08837  
 P: 732-662-6200