

SuperMAXX Joist [SMX]

Product Name: 1400SMX300-54

Material and Shape Property Notes:

Design Thickness: 0.0566"
Minimum Thickness: 0.0538"
Mil Thickness: 54 mils
Gauge 16
Flange Width 3"
Web Depth 14.0"
Stiffening Lip Lengths: 1-1/8" (first lip) 1/2" (2nd lip)
Corrosion Protection: G60 (standard) G90 (available)
Yield Strength: 50 kips per square inch (KSI) minimum

Product Application & Attributes:

Large stiffened punchouts in joist members provide industry-best accessibility along the length of the web, accommodating all trade installations. In addition to the large reinforced punchouts, SuperMAXX Joists have flanges with double returns for superior strength and stiffness that dramatically increase spans and capacities.

Section Properties:

Gross Section Properties:

Cross Section Area (**A**): 1.288 in²
Member Weight 4.38 pounds per foot
Moment of Inertia, strong axis (**I_x**) 35.290 in⁴
Radius of Gyration, strong axis (**r_x**) 5.234 in.
Moment of Inertia, weak axis (**I_y**) 1.5900 in⁴
Radius of Gyration, weak axis (**r_y**) 1.1110 in.

Effective Section Properties:

Effective Moment of Inertia (**I_{x eff}**) 33.200 in⁴
Effective Section Modulus (**S_{x eff}**) 4.742 in³
Allowable Moment (**M_a**) 141.98 inch-kips

Torsional Properties:

St. Venant Torsional Constant (**J x 1000**) 3.53 in⁴
Warping Constant (**C_w**) 65.15 in⁶
Polar Radius of Gyration (**r_o**) 5.73 in
Distance of centroid from shear center (**X_o**) 2.06 in
Beta 0.8709

Codes & Standards:

Super Stud products comply with the applicable provisions of the following:
International Building Code (IBC) 2006 - 2018
Sheet Steel: ASTM A1003 and ASTM A653
Galvanized Coating: ASTM A653
Members & Tolerances: ASTM C955 and AISI S240
Meets ASTM C1007 when installed properly in structure
3rd Party Certification: Manufacturing verified & inspected by Home Innovation Research Labs, Inc.

SUPERMAXX JOIST



SuperMAXX Joists feature a double flange return

Super Joist & SuperMAXX Hole Pattern: 8" – 18" Web Depth

Joist Member Hole Sizing & Spacing

A	B	C	D	E
Section Web Depth (in.)	Large Hole Diameter (in.)	Large Hole Spacing (in. O.C.)	Small Hole Diameter (in.)	Min. Distance from end to center of First Large Hole (in.)
12	8.25	12	2.25	33
14	8.25	12	2.25	33

