

SuperMAXX Joist [SMX]

Product Name: 1600SMX250-68

Material and Shape Property Notes:

Design Thickness: 0.0713"

Minimum Thickness: 0.0677"

Mil Thickness: 68 mils

Gauge 14

Flange Width 2.5"

Web Depth 16.0"

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): 1.660 in²
Member Weight 5.65 pounds per foot
Moment of Inertia, strong axis (I_x) 55.450 in⁴
Radius of Gyration, strong axis (r_x) 5.780 in.
Moment of Inertia, weak axis (I_y) 1.2960 in⁴
Radius of Gyration, weak axis (r_y) 0.8838 in.

Effective Section Properties:

Effective Moment of Inertia (I_{x eff}) 47.420 in⁴
Effective Section Modulus (S_{x eff}) 5.928 in³
Allowable Moment (M_a) 177.49 inch-kips

Torsional Properties:

St. Venant Torsional Constant (J x 1000) 3.32 in⁴
Warping Constant (C_w) 68.89 in⁶
Polar Radius of Gyration (r_o) 6.04 in
Distance of centroid from shear center (X_o) 1.53 in
Beta 0.9359

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

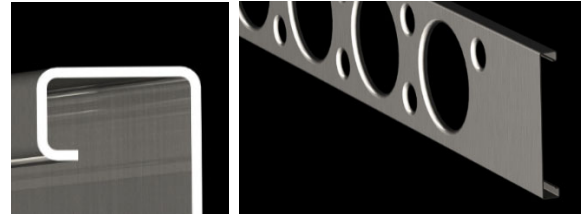
Galvanized Coating: ASTM A653

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.)
16	12.25	18	3.25	44
18	12.25	18	3.25	44

