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## **Super Stud Building Products**

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# **SUPERMAXX STUD**

**Specification Section: 05.40.00 (Cold-Formed Metal Framing)** 

## 800SMX350-43 (33ksi) Standard Punch

43mils (18ga) Coating: CP60 (G60) Standard or CP90 (G90) Available

#### **Geometric Properties**

Web Depth	8 in	Yield Strength, F <sub>y</sub>	33 ksi
Flange Width	3.5 in	Ultimate, F <sub>u</sub>	45 ksi
Design Thickness	0.0451 in	Min. Steel Thickness	0.0428 in
First Lip:	1.125 in	Second Lip:	0.5 in

#### **Gross Section Properties**

Cross Sectional Area (A)	0.8000 in <sup>2</sup>
Product Weight per Linear Foot	2.7200 lb/ft
Moment of Inertia (I <sub>x</sub> )	8.1983 in <sup>4</sup>
Section Modulus (S <sub>x</sub> )	2.0496 in <sup>3</sup>
Radius of Gyration (r <sub>x</sub> )	3.2013 in
Weak Axis Moment of Inertia (I <sub>y</sub> )	1.5409 in <sup>4</sup>
Weak Axis Radius of Gyration (r <sub>y</sub> )	1.3879 in
Depth-to-Thickness Ratio (h/t)	172

#### **Effective Section Properties, Strong Axis**

Effective Area (A <sub>e</sub> )	0.4176 in <sup>2</sup>
Moment of Inertia for Deflection (I <sub>xe</sub> )	7.1039 in <sup>4</sup>
Section Modulus (S <sub>xe</sub> )	1.6086 in <sup>3</sup>
Allowable Bending Moment (M <sub>a</sub> )	31.7867 in-k
Allowable Shear Force in Web (at Punchout) (V <sub>v</sub> )	1.051 lb

#### **Torsional Properties**

St. Venant Torsion Constant (J x 1000)	0.5424 in <sup>4</sup>
Warping Constant (C <sub>w</sub> )	24.7519 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (X <sub>o</sub> )	3.1154 in
Radius of Gyration (r <sub>o</sub> )	4.6776 in
Torsional Flexural Constant (Beta)	0.5564

#### **Codes and Standards**

Super Stud products comply with the applicable provisions of the following: International Building Code (IBC): 2006 – 2024

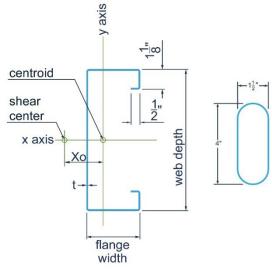
Complies with AISI S100-16 (2020) w/S2-20. Effective properties incorporate the strength increase from the cold work of forming Sheet steel: ASTM A1003/A1003M; ASTM A653/A653M

Galvanized coating: ASTM A653/A653M

Members and tolerances: ASTM C955; AISI S240, AISI

S201, AISI S202

Meets ASTM C1007 when installed properly in



structure. 3<sup>rd</sup> party Certification

SuperMAXX Joists have flanges with double returns for superior strength and stiffness that dramatically increase spans and capacities.

### Two hole pattern options Standard Structural Punch

First oval punchout is centered 12" from beginning of member; subsequent punchouts are 24" on center (o.c.). Center of last punchout is no less than 12" from end of member.

1'	Maxx Punch	0.5'	0.5'	
12 inches	24 inches	6	6"	
Only ava	llable in 6" and 8" studs. Fi	rst ov	al punch	out
	ed at 12" from beginning o			
reinforce	d circular holes 6" o.c. foll	ow an	d patteri	n
repeats.	Oval punchouts are at 24"	o.c. Ce	enter of	last
punch ou	ut is no less than 12" from	end of	membe	r.

