

## Super Stud Building Products - Product Submittal

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## Specification Section: 09.22.16 (Non-Structural Metal Framing)

# 250T200-33 (33ksi) Track

33mil (STR 20 ga) Coating: G60 (standard), G90 (special order)

### **Geometric Properties**

Web Depth	2.5 in	Yield Strength, F <sub>y</sub>	33 ksi
Flange Width	2 in	Ultimate, F <sub>u</sub>	45 ksi
Design Thickness	0.0346 in	Min. Steel Thickness	0.0329 in

### **Gross Section Properties**

Cross Sectional Area (A)	0.2248 in <sup>2</sup>
Product Weight per Linear Foot	0.7643 lb/ft
Moment of Inertia (I <sub>x</sub> )	0.2804 in <sup>4</sup>
Section Modulus (S <sub>x</sub> )	0.2119 in <sup>3</sup>
Radius of Gyration (r <sub>x</sub> )	1.1168 in
Weak Axis Moment of Inertia (I <sub>y</sub> )	0.0974 in⁴
Weak Axis Radius of Gyration (r <sub>y</sub> )	0.6584 in
Depth-to-Thickness Ratio (h/t)	66

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

Effective Area (A <sub>e</sub> )	0.1074 in <sup>2</sup>
Moment of Inertia for Deflection (I <sub>xe</sub> )	0.1855 in <sup>4</sup>
Section Modulus (S <sub>xe</sub> )	0.1127 in <sup>3</sup>
Allowable Bending Moment (M₃)	2.2262 in-k
Allowable Shear Force in Web (at Punchout) (V <sub>v</sub> )	1,024 lb

#### **Torsional Properties**

St. Venant Torsion Constant (J x 1000)	0.0897 in <sup>4</sup>
Warping Constant (C <sub>w</sub> )	0.1144 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (X <sub>o</sub> )	1.4302 in
Radius of Gyration (r <sub>o</sub> )	1.9304 in
Torsional Flexural Constant (Beta)	0.4511

#### **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

Nonstructural:

Members and tolerances: ASTM C645; AISI S220, AISI S201, AISI S202

Meets ASTM C754 when installed properly in structure.

Structural:

Members and tolerances: ASTM C955; AISI S240, AISI S201, AISI S202

Meets ASTM C1007 when installed properly in structure.

Tested for fire resistance in accordance with ASTM E119 and UL 263.

3<sup>rd</sup> party Certification





