

Super Stud Building Products - Product Submittal

Technical Services: technical@buysuperstud.com

800-477-7883 buysuperstud.com

New Jersey 2960 Woodbridge Avenue Edison, NJ 08837 732-662-6200 **Mississippi** 53 W L Runnels Industrial Dr Hattiesburg, MS 39401 601-584-7550

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

1000S200-43 (33ksi) Standard Punch

43mil (18 ga) Coating: G60 (standard), G90 (special order)

Geometric Properties

| Web Depth | 10 in | Yield Strength, F _y | 33 ksi |
|---------------------|-------------|--------------------------------|--------|
| Flange Width | 2 in | Ultimate, F _u | 45 ksi |
| Lip Length | 0.625 in | Punchout Width | 1.5 in |
| Design Thickness | 0.0451 in | Punchout Length | 4.0 in |
| Min. Steel Thicknes | s 0.0428 in | | |

Gross Section Properties

| Cross Sectional Area (A) | 0.6724 in ² |
|--|------------------------|
| Product Weight per Linear Foot | 2.2862 lb/ft |
| Moment of Inertia (I _x) | 9.0856 in ⁴ |
| Section Modulus (S _x) | 1.8171 in ³ |
| Radius of Gyration (r _x) | 3.6760 in |
| Weak Axis Moment of Inertia (I _y) | 0.3087 in ⁴ |
| Weak Axis Radius of Gyration (r _y) | 0.6776 in |
| Depth-to-Thickness Ratio (h/t) | 217 |
| | |

NOTE: h/t > 200. Bearing stiffeners may be required at supports and concentrated loads.

Effective Section Properties. Strong Axis

| Effective Area (A _e) | 0.2949 in ² |
|--|------------------------|
| Moment of Inertia for Deflection (I _{xe}) | 8.0942 in ⁴ |
| Section Modulus (S _{xe}) | 1.4397 in ³ |
| Allowable Bending Moment (M _a) | 23.7551 in-k |
| Allowable Shear Force in Web (at Punchout) (V _v) | 669 lb |

Torsional Properties

| St. Venant Torsion Constant (J x 1000) | 0.4559 in ⁴ |
|--|------------------------|
| Warping Constant (C _w) | 6.0434 in ⁶ |
| Distance from Shear Center to Neutral Axis (X _o) | 1.1421 in |
| Radius of Gyration (r _o) | 3.9085 in |
| Torsional Flexural Constant (Beta) | 0.9146 |

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

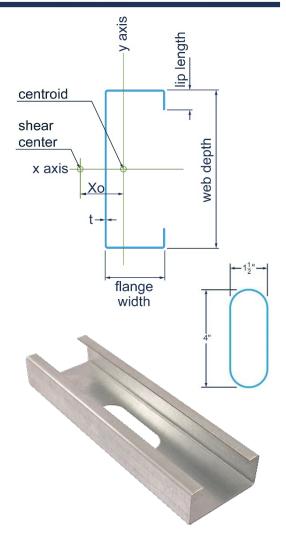
Galvanized coating: ASTM A653/A653M

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.

3rd party Certification



Structural Punchout

First 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.

Custom stiffened punchouts are available at tighter spacing to reduce thermal transmittance and increase accessibility. Contact Technical Services for additional punchout information.

