

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)

550S162-68 (50ksi) Standard Punch

68mil (14 ga) Coating: G60 (standard), G90 (special order)

Geometric Properties

Web Depth	5.5 in	Yield Strength, F _y	50 ksi
Flange Width	1.625 in	Ultimate, F _u	65 ksi
Lip Length	0.500 in	Punchout Width	1.5 in
Design Thickness	0.0713 in	Punchout Length	4.0 in
Min. Steel Thicknes	s 0.0677 in		

Gross Section Properties

Cross Sectional Area (A)	0.6574 in ²
Product Weight per Linear Foot	2.2352 lb/ft
Moment of Inertia (I _x)	2.8620 in ⁴
Section Modulus (S _x)	1.0407 in ³
Radius of Gyration (r _x)	2.0865 in
Weak Axis Moment of Inertia (I _y)	0.2128 in ⁴
Weak Axis Radius of Gyration (r _y)	0.5690 in
Depth-to-Thickness Ratio (h/t)	72

Effective Section Properties, Strong Axis

Effective Area (A _e)	0.4245 in ²
Moment of Inertia for Deflection (I _{xe})	2.8420 in ⁴
Section Modulus (S _{xe})	1.0335 in ³
Allowable Bending Moment (M _a)	33.9685 in-k
Allowable Shear Force in Web (at Punchout) (V _y)	2,532 lb

Torsional Properties

St. Venant Torsion Constant (J x 1000)	1.1140 in ⁴
Warping Constant (C _w)	1.2527 in ⁶
Distance from Shear Center to Neutral Axis (X _o)	1.0656 in
Radius of Gyration (r _o)	2.4110 in
Torsional Flexural Constant (Beta)	0.8047

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

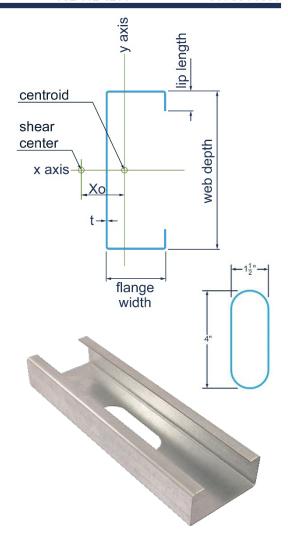
Galvanized coating: ASTM A653/A653M

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.

