



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: 09.22.16 (Non-Structural Metal Framing)

400S125-33 (33ksi) Standard Punch

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

Geometric Properties

Web Depth	4 in	Yield Strength, F_y	33 ksi
Flange Width	1.25 in	Ultimate, F_u	45 ksi
Lip Length	0.188 in	Punchout Width	1.5 in
Design Thickness	0.0346 in	Punchout Length	4.0 in
Min. Steel Thickness	0.0329 in		

Gross Section Properties

Cross Sectional Area (A)	0.2275 in ²
Product Weight per Linear Foot	0.7735 lb/ft
Moment of Inertia (I_x)	0.5307 in ⁴
Section Modulus (S_x)	0.2653 in ³
Radius of Gyration (r_x)	1.5273 in
Weak Axis Moment of Inertia (I_y)	0.0377 in ⁴
Weak Axis Radius of Gyration (r_y)	0.4071 in
Depth-to-Thickness Ratio (h/t)	109

Effective Section Properties, Strong Axis

Effective Area (A_e)	0.1183 in ²
Moment of Inertia for Deflection (I_{xe})	0.4683 in ⁴
Section Modulus (S_{xe})	0.2126 in ³
Allowable Bending Moment (M_a)	4.2010 in-k
Allowable Shear Force in Web (at Punchout) (V_y)	595 lb

Torsional Properties

St. Venant Torsion Constant ($J \times 1000$)	0.0908 in ⁴
Warping Constant (C_w)	0.1085 in ⁶
Distance from Shear Center to Neutral Axis (X_o)	0.7306 in
Radius of Gyration (r_o)	1.7413 in
Torsional Flexural Constant (Beta)	0.8240

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

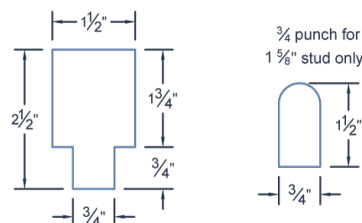
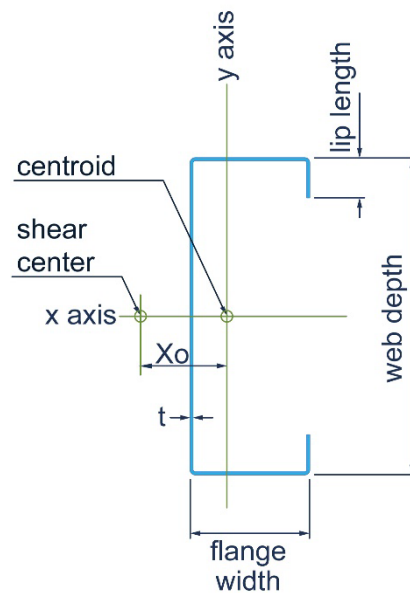
Nonstructural:

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

Meets ASTM C754 when installed properly in structure.

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

3rd party Certification



Non-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.

Sustainability

For LEED letters contact Technical Services at technical@buysuperstud.com or visit



© 2025 Super Stud Building Products