



Super Stud Building Products - Product Submittal

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Specification Section: 09.22.16 (Non-Structural Metal Framing)

250S125-33 (33ksi) Standard Punch

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

Geometric Properties

Web Depth	2.5 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)	0.1756 in ²
Product Weight per Linear Foot	0.5970 lb/ft
Moment of Inertia (I_x)	0.1779 in ⁴
Section Modulus (S_x)	0.1423 in ³
Radius of Gyration (r_x)	1.0065 in
Weak Axis Moment of Inertia (I_y)	0.0327 in ⁴
Weak Axis Radius of Gyration (r_y)	0.4315 in
Depth-to-Thickness Ratio (h/t)	66

Effective Section Properties, Strong Axis

Effective Area (A_e)	0.1156 in ²
Moment of Inertia for Deflection (I_{xe})	0.1637 in ⁴
Section Modulus (S_{xe})	0.1238 in ³
Allowable Bending Moment (M_a)	2.4457 in-k
Allowable Shear Force in Web (at Punchout) (V_y)	399 lb

Torsional Properties

St. Venant Torsion Constant ($J \times 1000$)	0.0701 in ⁴
Warping Constant (C_w)	0.0369 in ⁶
Distance from Shear Center to Neutral Axis (X_o)	0.8799 in
Radius of Gyration (r_o)	1.4048 in
Torsional Flexural Constant (Beta)	0.6077

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

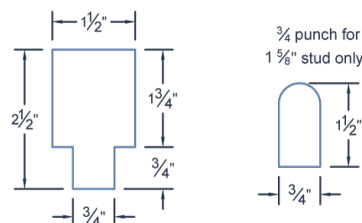
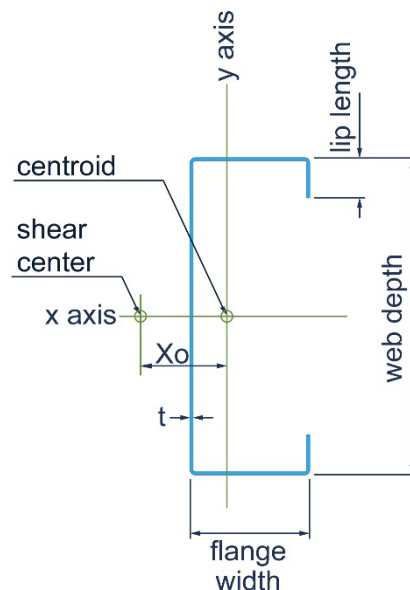
Nonstructural:

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



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