

Super Stud Building Products - Product Submittal

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Specification Section: 05.40.00 (Cold-Formed Metal Framing)

600S350-54 (50ksi) Standard Punch

54mil (16 ga) Coating: G60 (standard), G90 (special order)

Geometric Properties

Web Depth	6 in	Yield Strength, F _y	50 ksi
Flange Width	3.5 in	Ultimate, F _u	65 ksi
Lip Length	1.000 in	Punchout Width	1.5 in
Design Thickness	0.0566 in	Punchout Length	4.0 in
Min. Steel Thicknes	s 0.0538 in		

Gross Section Properties

Cross Sectional Area (A)	0.8252 in ²
Product Weight per Linear Foot	2.8057 lb/ft
Moment of Inertia (I _x)	5.0230 in ⁴
Section Modulus (S _x)	1.6743 in ³
Radius of Gyration (r _x)	2.4672 in
Weak Axis Moment of Inertia (I _y)	1.4913 in ⁴
Weak Axis Radius of Gyration (r _y)	1.3443 in
Depth-to-Thickness Ratio (h/t)	101

Effective Section Properties, Strong Axis

Effective Area (A _e)	0.4399 in ²
Moment of Inertia for Deflection (I _{xe})	4.3507 in ⁴
Section Modulus (S _{xe})	1.3163 in ³
Allowable Bending Moment (M _a)	39.4108 in-k
Allowable Shear Force in Web (at Punchout) (V _y)	1,947 lb

Torsional Properties

St. Venant Torsion Constant (J x 1000)	0.8812 in ⁴
Warping Constant (C _w)	12.6339 in ⁶
Distance from Shear Center to Neutral Axis (X _o)	3.0364 in
Radius of Gyration (r _o)	4.1369 in
Torsional Flexural Constant (Beta)	0.4613

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

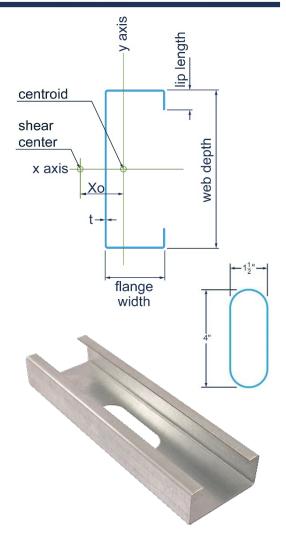
Galvanized coating: ASTM A653/A653M

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.

