

162S125-54 STRUCTURAL STUD 54mil (16GA) 50 ksi

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

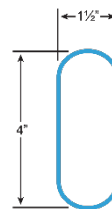
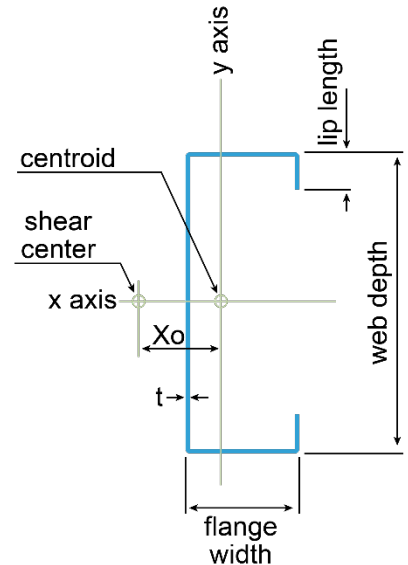
Coating: G60 (G90 available)

Geometric Properties			
Web Depth:	1-5/8 in.	Yield Strength, Fy	50 ksi
Flange Width:	1-1/4 in.	Design Thickness:	0.0566 in.
Return Lip:	0.188 in.	Min. Steel Thickness:	0.0538 in.

Gross Properties		
Area (in ²)	Total cross-sectional steel area	0.2309
Weight (lb/ft)	Linear weight per foot	0.785
I _x (in ⁴)	Moment of inertia about the x-axis	0.1033
S _x (in ³)	Section modulus about the x-axis	0.1271
R _x (in)	Radius of gyration about the x-axis	0.6689
I _y (in ⁴)	Moment of inertia about the y-axis	0.0423
R _y (in)	Radius of gyration about the y-axis	0.4279

Effective Properties		
I _x (in ³)	Effective moment of inertia (x-axis)	0.098
S _x (in ³)	Effective section modulus (x-axis)	0.1171
M _a (in-k)	Allowable bending moment-effective section modulus	3.5062
M _{ad} (in-k)	Allowable bending moment-distortional buckling	-
V _{ag} (lb)	Allowable shear force in web	1.4242
V _{anet} (lb)	Allowable strong axis shear at punchout	-

Torsional Properties		
J x 1000 (in ⁴)	St. Venant torsional constant	0.2466
C _w (in ⁶)	Warping constant	0.0204
X _o (in)	Distance from shear center to centroid	-0.975
m (in)	Distance from shear center to mid-plane of web	0.4422
R _o (in)	Polar radius of gyration	1.2575
Beta	Torsional flexural constant	0.3988



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.

Codes & Standards:

- **Structural Members**
 - ASTM C955
 - AISI S240
 - Installed per ASTM C1007
- **Material Standards**
 - ASTM A1003/A1003M
 - ASTM A653/A653M
- **Design Standards**
 - AISI S100-16 (2020) w/S2-20
 - AISI S202
- **Building Codes**
 - • International Building Code (IBC) 2006–2024

Sustainability & Compliance:

- SFIA Quality Certified Manufacturing
- Industry-Wide EPD Participant
- HPD Documentation Available Upon Request
- LEED Documentation Available Upon Request
- Buy America / Build America (BABA) Documentation Available Upon Request
- Manufactured in USA

Links:

- Submittal Builder: www.buysuperstud.com/submittal-builder