

162S125-43 STRUCTURAL STUD 43mil (18GA) 33 ksi

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

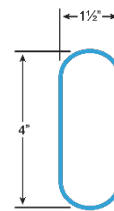
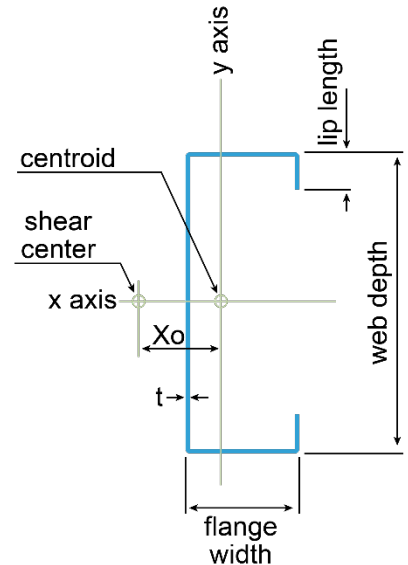
Coating: G60 (G90 available)

Geometric Properties			
Web Depth:	1-5/8 in.	Yield Strength, F_y	50 ksi
Flange Width:	1-1/4 in.	Design Thickness:	0.0451 in.
Return Lip:	0.188 in.	Min. Steel Thickness:	0.0428 in.

Gross Properties		
Area (in ²)	Total cross-sectional steel area	0.1876
Weight (lb/ft)	Linear weight per foot	0.6379
I_x (in ⁴)	Moment of inertia about the x-axis	0.0855
S_x (in ³)	Section modulus about the x-axis	0.1052
R_x (in)	Radius of gyration about the x-axis	0.6751
I_y (in ⁴)	Moment of inertia about the y-axis	0.0355
R_y (in)	Radius of gyration about the y-axis	0.4353

Effective Properties		
I_x (in ³)	Effective moment of inertia (x-axis)	0.0825
S_x (in ³)	Effective section modulus (x-axis)	0.1
M_a (in-k)	Allowable bending moment-effective section modulus	1.9752
M_{ad} (in-k)	Allowable bending moment-distortional buckling	-
V_{ag} (lb)	Allowable shear force in web	1.9752
$V_{a_{net}}$ (lb)	Allowable strong axis shear at punchout	-

Torsional Properties		
$J \times 1000$ (in ⁴)	St. Venant torsional constant	0.1272
C_w (in ⁶)	Warping constant	0.0176
X_o (in)	Distance from shear center to centroid	-0.9923
m (in)	Distance from shear center to mid-plane of web	0.5269
R_o (in)	Polar radius of gyration	1.2767
Beta	Torsional flexural constant	0.3959



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