

Structural Stud 250S137-54

Product Description

16 GA GALV 2.50" WEB X 1.37"
FLANGE C-STUD .054 MIN GAUGE
G60

Coating

Physical Properties

Design Thickness (in)	0.0566
Minimum Thickness (in)	0.0538
Web Width (in)	2.5000
Flange Width (in)	1.3750
Stiffening Lip (in)	0.3750
Yield Strength (ksi)	50.0000



Gross Section Properties

Cross Sectional Area (A)	0.316
Weight of Member (lb/ft)	1.07
Section Modulus (Sx)	0.255
Moment of Inertia (Ix)	0.318
Radius of Gyration (Rx)	1.004
Gross Moment of Inertia (Iy)	0.080
Gross Radium of Gyration (Ry)	0.504

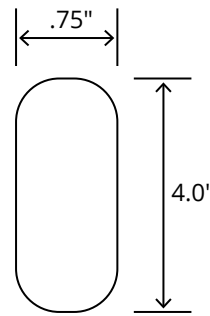
Effective Section Properties

Moment of Inertia for deflection (Ixe)	0.318
Section Modulus (Sxe)	0.244
Allowable Bending moment (Ma)	8.22
Allowable shear force in web (U)(Vag)	2353
Allowable shear at punch (Vanet)	565

Torsional Properties

St. Venant torsion constant (J x 1000)	0.337
Warping constant (Cw)	0.115
Distance from shear center to neutral axis (Xo)	-1.115
Radii of gyration (Ro)	1.583
Torsional flexural constant (Beta)	0.504

Punch Out



ASTM & Code Standards

- AISI S100-12 & ICC ES ESR-4062
- Framing meets ASTM A1003, A653 & C955

Notes

1. Calculated properties are based on AISI S100-16, North American Specification for Design of Cold-Formed Steel Structural Members.
2. The centerline bend radius is based on inside corner radii shown in thickness chart.
3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
4. Tabulated gross properties are based on full-unreduced cross section of the studs, away from punch outs.
5. For deflection calculations, use the effective moment of inertia.
6. Allowable moment includes cold-work of forming.

Mill Steel Framing LEED Green Credits

- MR Credit 2** • ConstructionWaste Management – Mill Steel Framing steel framing is 100% recyclable
- MR Credit 4** • Recycled Content – Mill Steel Framing products contain no less than 25.5% post-consumer and 6.8% pre-consumer recycled content
- MR Credit 5** • Regional Materials – Mill Steel Framing has manufacturing facilities in Indiana, Alabama & Texas
- V4 MR Credits** • Building Product Disclosure and Optimization EPD (1 point)
• Materials Ingredients (1 point) – Construction and Demolition Waste Management (1 point)

