

www.millsteelframing.com │ 2905 Lucerne Dr. SE Grand Rapids, MI 49546 │ (812) 670-4195

Structural Stud 400S137-33

20 GA GALV 4.00" WEB x 1.37" **Product Description**

FLANGE C-STUD .033 MIN

GAUGE

Coating G60

Physical Properties

Design Thickness (in) 0.0346 Minimum Thickness (in) 0.0329 Web Width (in) 4.0000 Flange Width (in) 1.3750 Stiffening Lip (in) 0.3750 Yield Strength (ksi) 33.0000

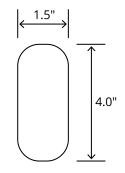


Gross Section Properties	
Cross Sectional Area (A)	0.249
Weight of Member (lb/ft)	0.85
Section Modulus (Sx)	0.302
Moment of Inertia (lx)	0.603
Radius of Gyration (Rx)	1.556
Gross Moment of Inertia (ly)	0.061
Gross Radium of Gyration (Ry)	0.496

Effective Section Properties	
Moment of Inertia for deflection (lxe)	0.603
Section Modulus (Sxe)	0.259
Allowable Bending moment (Ma)	5.12
Allowable shear force in web (U)(Vag)	976
Allowable shear at punch (Vanet)	595

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.099
Warping constant (Cw)	0.204
Distance from shear center to neutral axis (Xo)	-0.965
Radii of gyration (Ro)	1.897
Torsional flexural constant (Beta)	0.741

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.
- Tabulated gross properties are based on fullunreduced 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 MR Credit 4

- ConstructionWaste Management Mill Steel Framing steel framing is 100% recyclable
- 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)

