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

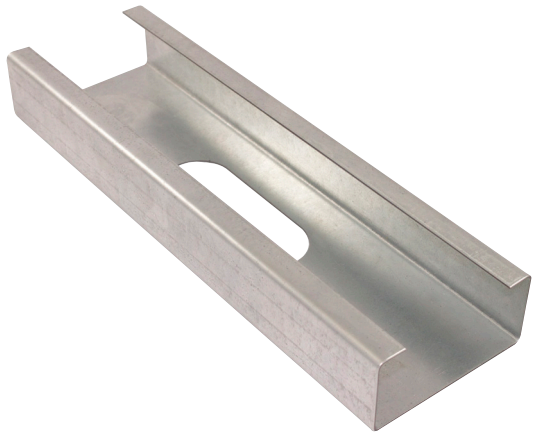
Structural Stud 800S137-33

Product Description 20 GA GALV 8.00" WEB x 1.37" FLANGE C-STUD .033 MIN GAUGE

Coating G60

Physical Properties

Design Thickness (in)	0.0346
Minimum Thickness (in)	0.0329
Web Width (in)	8.0000
Flange Width (in)	1.3750
Stiffening Lip (in)	0.3750
Yield Strength (ksi)	33.0000

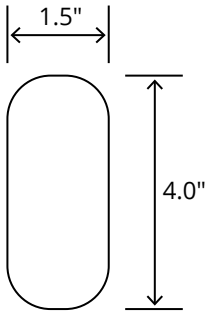


Gross Section Properties	
Cross Sectional Area (A)	0.388
Weight of Member (lb/ft)	1.32
Section Modulus (Sx)	0.800
Moment of Inertia (Ix)	3.199
Radius of Gyration (Rx)	2.873
Gross Moment of Inertia (Iy)	0.073
Gross Radium of Gyration (Ry)	0.435

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	2.998
Section Modulus (Sxe)	0.622
Allowable Bending moment (Ma)	12.30
Allowable shear force in web (U)(Vag)	474
Allowable shear at punch (Vanet)	474

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.155
Warping constant (Cw)	0.957
Distance from shear center to neutral axis (Xo)	-0.696
Radii of gyration (Ro)	2.988
Torsional flexural constant (Beta)	0.946

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)