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

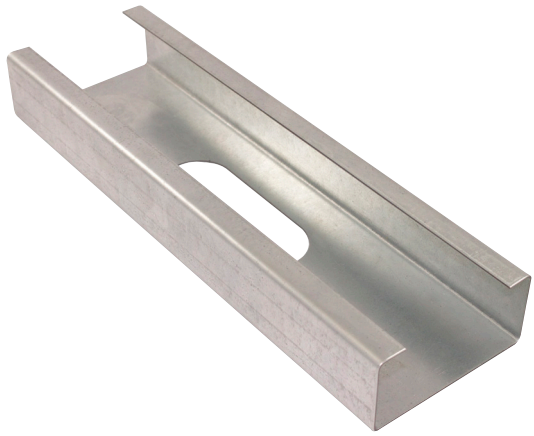
Structural Stud 1000S300-97

Product Description 12 GA GALV 10.00" WEB X 3.00" FLANGE C-STUD .097 MIN GAUGE

Coating G60

Physical Properties

Design Thickness (in)	0.1017
Minimum Thickness (in)	0.0966
Web Width (in)	10.0000
Flange Width (in)	3.0000
Stiffening Lip (in)	0.6250
Yield Strength (ksi)	50.0000

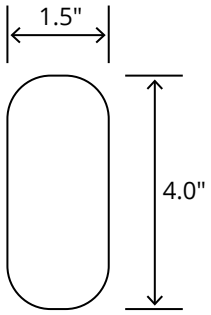


Gross Section Properties	
Cross Sectional Area (A)	1.677
Weight of Member (lb/ft)	5.71
Section Modulus (Sx)	4.865
Moment of Inertia (Ix)	24.325
Radius of Gyration (Rx)	3.808
Gross Moment of Inertia (Iy)	1.703
Gross Radium of Gyration (Ry)	1.007

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	23.972
Section Modulus (Sxe)	4.499
Allowable Bending moment (Ma)	134.70
Allowable shear force in web (U)(Vag)	9864
Allowable shear at punch (Vanet)	7177

Torsional Properties	
St. Venant torsion constant (J x 1000)	5.783
Warping constant (Cw)	33.570
Distance from shear center to neutral axis (Xo)	-1.838
Radii of gyration (Ro)	4.347
Torsional flexural constant (Beta)	0.821

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)