

Structural Stud 1200S300-97G90

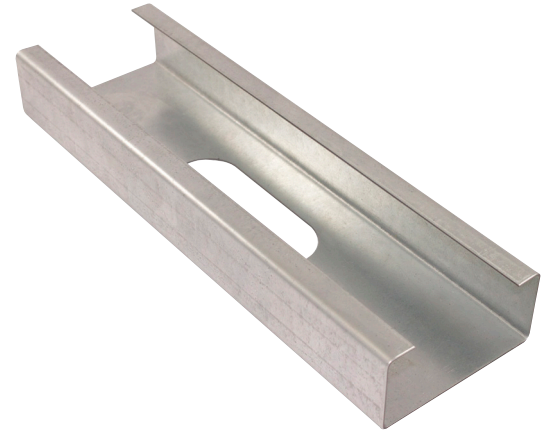
Product Description

12 GA GALV 12.00" WEB X 3.00"
FLANGE C-STUD .097 MIN
GAUGE G90 COATING
G90

Coating

Physical Properties

Design Thickness (in)	0.1017
Minimum Thickness (in)	0.0966
Web Width (in)	12.0000
Flange Width (in)	3.0000
Stiffening Lip (in)	0.6250
Yield Strength (ksi)	50.0000



Gross Section Properties

Cross Sectional Area (A)	1.881
Weight of Member (lb/ft)	6.40
Section Modulus (Sx)	6.271
Moment of Inertia (Ix)	37.627
Radius of Gyration (Rx)	4.473
Gross Moment of Inertia (Iy)	1.787
Gross Radium of Gyration (Ry)	0.975

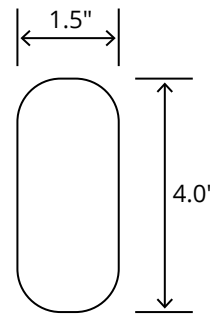
Effective Section Properties

Moment of Inertia for deflection (Ixe)	37.087
Section Modulus (Sxe)	5.831
Allowable Bending moment (Ma)	174.58
Allowable shear force in web (U)(Vag)	8147
Allowable shear at punch (Vanet)	7411

Torsional Properties

St. Venant torsion constant (J x 1000)	6.484
Warping constant (Cw)	50.853
Distance from shear center to neutral axis (Xo)	-1.691
Radii of gyration (Ro)	4.880
Torsional flexural constant (Beta)	0.880

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)

