

Structural Stud 1200S300-54G90

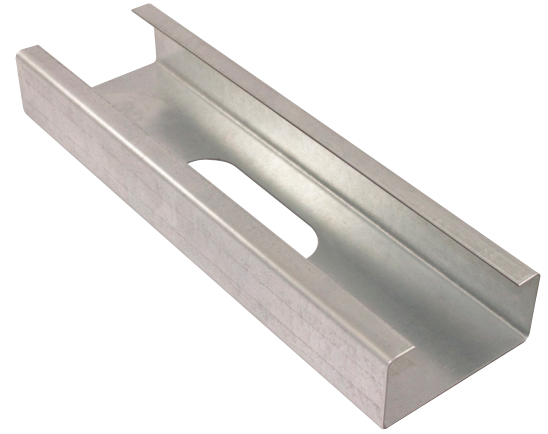
Product Description

16 GA GALV 12.00" WEB X 3.00"
FLANGE C-STUD .054 MIN
GAUGE G-90
G90

Coating

Physical Properties

Design Thickness (in)	0.0566
Minimum Thickness (in)	0.0538
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)	1.066
Weight of Member (lb/ft)	3.63
Section Modulus (Sx)	3.618
Moment of Inertia (Ix)	21.705
Radius of Gyration (Rx)	4.513
Gross Moment of Inertia (Iy)	1.074
Gross Radium of Gyration (Ry)	1.004

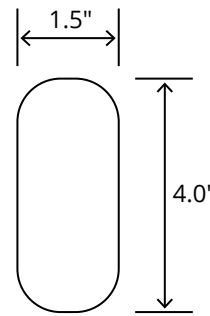
Effective Section Properties

Moment of Inertia for deflection (Ixe)	21.045
Section Modulus (Sxe)	2.273
Allowable Bending moment (Ma)	68.04
Allowable shear force in web (U)(Vag)	1377
Allowable shear at punch (Vanet)	1377

Torsional Properties

St. Venant torsion constant (J x 1000)	1.138
Warping constant (Cw)	30.051
Distance from shear center to neutral axis (Xo)	-1.743
Radii of gyration (Ro)	4.941
Torsional flexural constant (Beta)	0.876

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.

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- 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)

