

## Structural Stud 1000S300-54

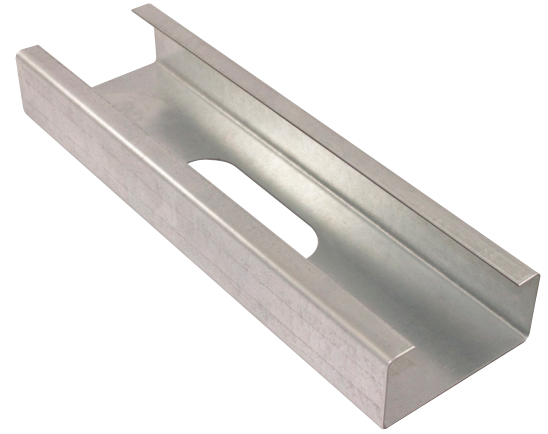
### Product Description

16 GA GALV 10.00" WEB X 3.00"  
FLANGE C-STUD .054 MIN  
GAUGE  
G60

### Coating

### Physical Properties

Design Thickness (in)	0.0566
Minimum Thickness (in)	0.0538
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)	0.953
Weight of Member (lb/ft)	3.24
Section Modulus (Sx)	2.816
Moment of Inertia (Ix)	14.080
Radius of Gyration (Rx)	3.845
Gross Moment of Inertia (Iy)	1.024
Gross Radium of Gyration (Ry)	1.037

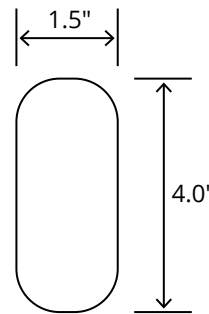
### Effective Section Properties

Moment of Inertia for deflection (Ixe)	13.441
Section Modulus (Sxe)	1.903
Allowable Bending moment (Ma)	56.97
Allowable shear force in web (U)(Vag)	1661
Allowable shear at punch (Vanet)	1661

### Torsional Properties

St. Venant torsion constant (J x 1000)	1.017
Warping constant (Cw)	19.888
Distance from shear center to neutral axis (Xo)	-1.892
Radii of gyration (Ro)	4.409
Torsional flexural constant (Beta)	0.816

### 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)

