

Structural Stud 400S162-68G90

Product Description 14 GA GALV 4.00" WEB x 1.62" FLANGE C-STUD .068 MIN GAUGE G90

Coating G90

Physical Properties

Design Thickness (in) 0.0713
 Minimum Thickness (in) 0.0677
 Web Width (in) 4.0000
 Flange Width (in) 1.6250
 Stiffening Lip (in) 0.5000
 Yield Strength (ksi) 50.0000

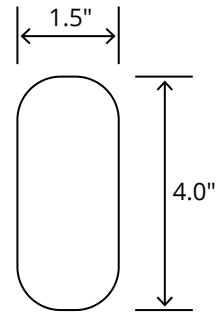


Gross Section Properties	
Cross Sectional Area (A)	0.550
Weight of Member (lb/ft)	1.87
Section Modulus (Sx)	0.673
Moment of Inertia (Ix)	1.346
Radius of Gyration (Rx)	1.564
Gross Moment of Inertia (Iy)	0.192
Gross Radium of Gyration (Ry)	0.591

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	1.346
Section Modulus (Sxe)	0.648
Allowable Bending moment (Ma)	19.41
Allowable shear force in web (U)(Vag)	4871
Allowable shear at punch (Vanet)	1356

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.933
Warping constant (Cw)	0.677
Distance from shear center to neutral axis (Xo)	-1.220
Radii of gyration (Ro)	2.069
Torsional flexural constant (Beta)	0.653

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)

