

Structural Stud 400S137-68G90

Product Description

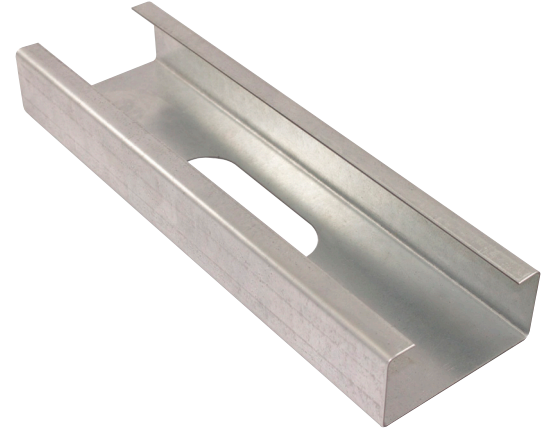
14 GA GALV 4.00" WEB x 1.37"
FLANGE C-STUD .068 MIN GAUGE
G90

Coating

G90

Physical Properties

Design Thickness (in)	0.0713
Minimum Thickness (in)	0.0677
Web Width (in)	4.0000
Flange Width (in)	1.3750
Stiffening Lip (in)	0.3750
Yield Strength (ksi)	50.0000



Gross Section Properties

Cross Sectional Area (A)	0.497
Weight of Member (lb/ft)	1.69
Section Modulus (Sx)	0.583
Moment of Inertia (Ix)	1.165
Radius of Gyration (Rx)	1.531
Gross Moment of Inertia (Iy)	0.112
Gross Radium of Gyration (Ry)	0.475

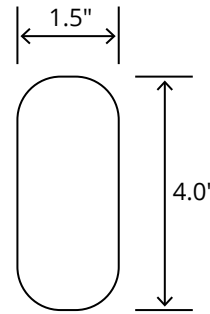
Effective Section Properties

Moment of Inertia for deflection (Ixe)	1.165
Section Modulus (Sxe)	0.558
Allowable Bending moment (Ma)	16.70
Allowable shear force in web (U)(Vag)	4871
Allowable shear at punch (Vanet)	1356

Torsional Properties

St. Venant torsion constant (J x 1000)	0.842
Warping constant (Cw)	0.375
Distance from shear center to neutral axis (Xo)	-0.922
Radii of gyration (Ro)	1.850
Torsional flexural constant (Beta)	0.751

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)

