

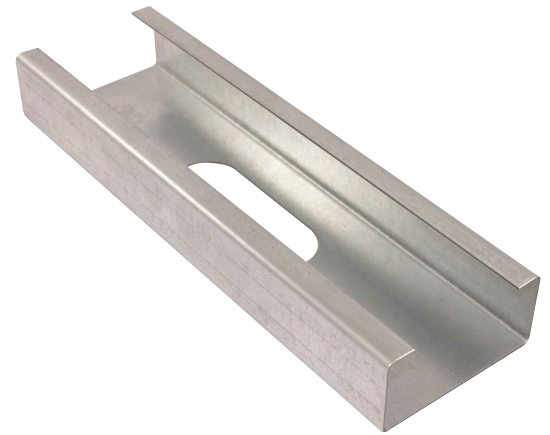
Structural Stud 250S162-43

Product Description 18 GA GALV 2.50" WEB x 1.62" FLANGE C-STUD .043 MIN GAUGE

Coating G60

Physical Properties

Design Thickness (in) 0.0451
 Minimum Thickness (in) 0.0428
 Web Width (in) 2.5000
 Flange Width (in) 1.6250
 Stiffening Lip (in) 0.5000
 Yield Strength (ksi) 33.0000



Gross Section Properties

Cross Sectional Area (A)	0.289
Weight of Member (lb/ft)	0.98
Section Modulus (Sx)	0.242
Moment of Inertia (Ix)	0.302
Radius of Gyration (Rx)	1.022
Gross Moment of Inertia (Iy)	0.111
Gross Radium of Gyration (Ry)	0.620

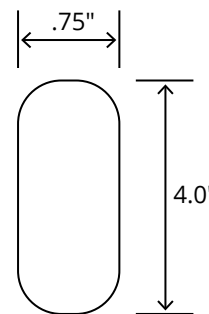
Effective Section Properties

Moment of Inertia for deflection (Ixe)	0.302
Section Modulus (Sxe)	0.240
Allowable Bending moment (Ma)	5.22
Allowable shear force in web (U)(Vag)	1265
Allowable shear at punch (Vanet)	394

Torsional Properties

St. Venant torsion constant (J x 1000)	0.196
Warping constant (Cw)	0.184
Distance from shear center to neutral axis (Xo)	-1.457
Radii of gyration (Ro)	1.885
Torsional flexural constant (Beta)	0.402

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)

