

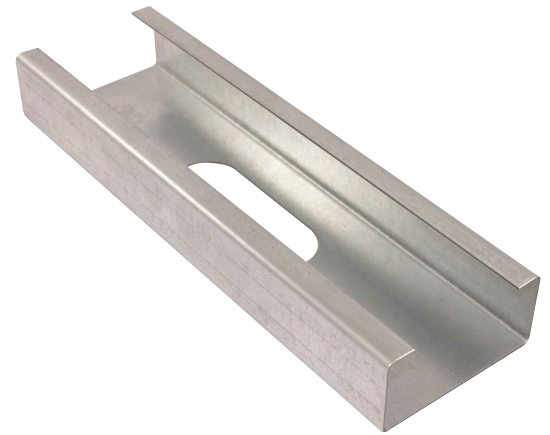
## Structural Stud 250S162-33G90

**Product Description** 20 GA GALV 2.50" WEB x 1.62" FLANGE C-STUD .033 MIN GAUGE G90

**Coating** G90

**Physical Properties**

Design Thickness (in) 0.0346  
 Minimum Thickness (in) 0.0329  
 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)	0.223
Weight of Member (lb/ft)	0.76
Section Modulus (Sx)	0.188
Moment of Inertia (Ix)	0.235
Radius of Gyration (Rx)	1.027
Gross Moment of Inertia (Iy)	0.087
Gross Radium of Gyration (Ry)	0.624

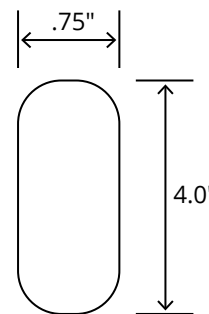
### Effective Section Properties

Moment of Inertia for deflection (Ixe)	0.235
Section Modulus (Sxe)	0.180
Allowable Bending moment (Ma)	3.55
Allowable shear force in web (U)(Vag)	975
Allowable shear at punch (Vanet)	399

### Torsional Properties

St. Venant torsion constant (J x 1000)	0.089
Warping constant (Cw)	0.146
Distance from shear center to neutral axis (Xo)	-1.470
Radii of gyration (Ro)	1.898
Torsional flexural constant (Beta)	0.401

### 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)

