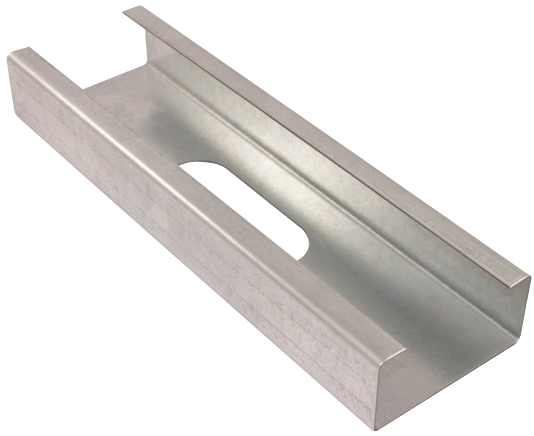
www.millsteelframing.com | 2905 Lucerne Dr. SE Grand Rapids, MI 49546 | (812) 670-4195

# Structural Stud 250S137-54G90

**Product Description** 16 GA GALV 2.50" WEB X 1.37" FLANGE C-STUD .054 MIN GAUGE G90

Coating G90



## Physical Properties

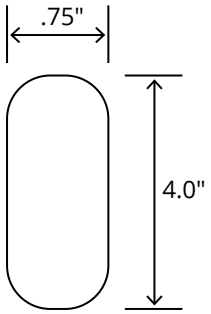
| | |
|---|---|
| Design Thickness (in) | 0.0566 |
| Minimum Thickness (in) | 0.0538 |
| Web Width (in) | 2.5000 |
| Flange Width (in) | 1.3750 |
| Stiffening Lip (in) | 0.3750 |
| Yield Strength (ksi) | 50.0000 |

| Gross Section Properties | |
|---|---|
| Cross Sectional Area (A) | 0.316 |
| Weight of Member (lb/ft) | 1.07 |
| Section Modulus (Sx) | 0.255 |
| Moment of Inertia (Ix) | 0.318 |
| Radius of Gyration (Rx) | 1.004 |
| Gross Moment of Inertia (Iy) | 0.080 |
| Gross Radium of Gyration (Ry) | 0.504 |

| Effective Section Properties | |
|---|---|
| Moment of Inertia for deflection (Ixe) | 0.318 |
| Section Modulus (Sxe) | 0.244 |
| Allowable Bending moment (Ma) | 8.22 |
| Allowable shear force in web (U)(Vag) | 2353 |
| Allowable shear at punch (Vanet) | 565 |

| Torsional Properties | |
|---|---|
| St. Venant torsion constant (J x 1000) | 0.337 |
| Warping constant (Cw) | 0.115 |
| Distance from shear center to neutral axis (Xo) | -1.115 |
| Radii of gyration (Ro) | 1.583 |
| Torsional flexural constant (Beta) | 0.504 |

## 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)