

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

Structural Stud 600S250-54G90

Product Description 16 GA GALV 6.00" WEB x 2.50"

FLANGE C-STUD .054 MIN GAUGE

G90

Coating G90

Physical Properties

Design Thickness (in)0.0566Minimum Thickness (in)0.0538Web Width (in)6.0000Flange Width (in)2.5000Stiffening Lip (in)0.6250Yield Strength (ksi)50.0000

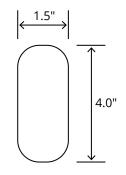


| Gross Section Properties | |
|-------------------------------|-------|
| Cross Sectional Area (A) | 0.670 |
| Weight of Member (lb/ft) | 2.28 |
| Section Modulus (Sx) | 1.273 |
| Moment of Inertia (lx) | 3.820 |
| Radius of Gyration (Rx) | 2.389 |
| Gross Moment of Inertia (ly) | 0.562 |
| Gross Radium of Gyration (Ry) | 0.917 |

| Effective Section Properties | |
|--|-------|
| Moment of Inertia for deflection (lxe) | 3.766 |
| Section Modulus (Sxe) | 1.069 |
| Allowable Bending moment (Ma) | 32.00 |
| Allowable shear force in web (U)(Vag) | 2823 |
| Allowable shear at punch (Vanet) | 1947 |

| Torsional Properties | |
|---|--------|
| St. Venant torsion constant (J x 1000) | 0.715 |
| Warping constant (Cw) | 4.194 |
| Distance from shear center to neutral axis (Xo) | -1.860 |
| Radii of gyration (Ro) | 3.163 |
| Torsional flexural constant (Beta) | 0.654 |

Punch Out



ASTM & Code Standards

- AISI S100-12 & ICC ES ESR-4062
- Framing meets ASTM A1003, A653 & C955

Notes

- 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 fullunreduced 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 MR Credit 4

- ConstructionWaste Management Mill Steel Framing steel framing is 100% recyclable
- *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)

