

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

Structural Stud

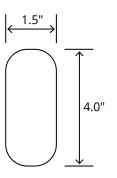
| Product Description | 16 GA GALV 12.00" WEB X 3.00" FLANGE C-STUD .054 MIN GAUGE |
|------------------------|---|
| Coating | G60 |
| Physical Properties | |
| Design Thickness (in) | 0.0566 |
| Minimum Thickness (in) | 0.0538 |
| Web Width (in) | 12.0000 |
| Flange Width (in) | 3.0000 |
| Stiffening Lip (in) | 0.6250 |
| Yield Strength (ksi) | 50.0000 |

| Gross Section Properties | |
|-------------------------------|--------|
| Cross Sectional Area (A) | 1.066 |
| Weight of Member (lb/ft) | 3.63 |
| Section Modulus (Sx) | 3.618 |
| Moment of Inertia (lx) | 21.705 |
| Radius of Gyration (Rx) | 4.513 |
| Gross Moment of Inertia (ly) | 1.074 |
| Gross Radium of Gyration (Ry) | 1.004 |

| Effective Section Properties | |
|--|--------|
| Moment of Inertia for deflection (lxe) | 21.045 |
| Section Modulus (Sxe) | 2.273 |
| Allowable Bending moment (Ma) | 68.04 |
| Allowable shear force in web (U)(Vag) | 1377 |
| Allowable shear at punch (Vanet) | 1377 |

| Torsional Properties | |
|---|--------|
| St. Venant torsion constant (J x 1000) | 1.138 |
| Warping constant (Cw) | 30.051 |
| Distance from shear center to neutral axis (Xo) | -1.743 |
| Radii of gyration (Ro) | 4.941 |
| Torsional flexural constant (Beta) | 0.876 |

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 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 | 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) |

