

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

Structural Stud 1200S162-54G90

Product Description 16 GA GALV 12.00" WEB x 1.62"

FLANGE C-STUD .054 MIN GAUGE

G90

Coating G90

Physical Properties

 Design Thickness (in)
 0.0566

 Minimum Thickness (in)
 0.0538

 Web Width (in)
 12.0000

 Flange Width (in)
 1.6250

 Stiffening Lip (in)
 0.5000

 Yield Strength (ksi)
 50.0000

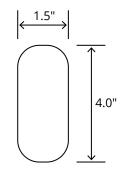


Gross Section Properties	
Cross Sectional Area (A)	0.896
Weight of Member (lb/ft)	3.05
Section Modulus (Sx)	2.623
Moment of Inertia (lx)	15.736
Radius of Gyration (Rx)	4.191
Gross Moment of Inertia (ly)	0.212
Gross Radium of Gyration (Ry)	0.486

Effective Section Properties	
Moment of Inertia for deflection (lxe)	14.299
Section Modulus (Sxe)	1.914
Allowable Bending moment (Ma)	57.32
Allowable shear force in web (U)(Vag)	1377
Allowable shear at punch (Vanet)	1377

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.957
Warping constant (Cw)	6.340
Distance from shear center to neutral axis (Xo)	-0.732
Radii of gyration (Ro)	4.282
Torsional flexural constant (Beta)	0.971

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)

