

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

## **Structural Stud 1200S162-97G90**

Product Description 12 GA GALV 12.00" WEB X 1.62"

FLANGE C-STUD .097 MIN GAUGE

G-90

Coating G90

**Physical Properties** 

Design Thickness (in)0.1017Minimum Thickness (in)0.0966Web Width (in)12.0000Flange Width (in)1.6250Stiffening Lip (in)0.5000Yield Strength (ksi)50.0000

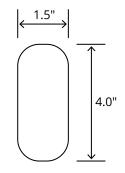


Gross Section Properties	
Cross Sectional Area (A)	1.576
Weight of Member (lb/ft)	5.36
Section Modulus (Sx)	4.496
Moment of Inertia (lx)	26.977
Radius of Gyration (Rx)	4.138
Gross Moment of Inertia (ly)	0.332
Gross Radium of Gyration (Ry)	0.459

Effective Section Properties	
Moment of Inertia for deflection (lxe)	26.738
Section Modulus (Sxe)	4.091
Allowable Bending moment (Ma)	122.50
Allowable shear force in web (U)(Vag)	8147
Allowable shear at punch (Vanet)	7411

Torsional Properties	
St. Venant torsion constant (J x 1000)	5.433
Warping constant (Cw)	10.331
Distance from shear center to neutral axis (Xo)	-0.691
Radii of gyration (Ro)	4.220
Torsional flexural constant (Beta)	0.973

### **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)

