

Structural Stud 800S162-97

Product Description 12 GA GALV 8.00" WEB X 1.62" FLANGE C-STUD .097 MIN GAUGE

Coating G60

Physical Properties

Design Thickness (in) 0.1017
 Minimum Thickness (in) 0.0966
 Web Width (in) 8.0000
 Flange Width (in) 1.6250
 Stiffening Lip (in) 0.5000
 Yield Strength (ksi) 50.0000



Gross Section Properties	
Cross Sectional Area (A)	1.169
Weight of Member (lb/ft)	3.98
Section Modulus (Sx)	2.429
Moment of Inertia (Ix)	9.717
Radius of Gyration (Rx)	2.883
Gross Moment of Inertia (Iy)	0.305
Gross Radium of Gyration (Ry)	0.511

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	9.714
Section Modulus (Sxe)	2.429
Allowable Bending moment (Ma)	72.71
Allowable shear force in web (U)(Vag)	10885
Allowable shear at punch (Vanet)	5938

Torsional Properties	
St. Venant torsion constant (J x 1000)	4.030
Warping constant (Cw)	4.114
Distance from shear center to neutral axis (Xo)	-0.866
Radii of gyration (Ro)	3.053
Torsional flexural constant (Beta)	0.920

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)

