

## Structural Stud 400S162-68

**Product Description** 14 GA GALV 4.00" WEB x 1.62" FLANGE C-STUD .068 MIN GAUGE

**Coating** G60

**Physical Properties**

Design Thickness (in)	0.0713
Minimum Thickness (in)	0.0677
Web Width (in)	4.0000
Flange Width (in)	1.6250
Stiffening Lip (in)	0.5000
Yield Strength (ksi)	50.0000



Gross Section Properties	
Cross Sectional Area (A)	0.550
Weight of Member (lb/ft)	1.87
Section Modulus (Sx)	0.673
Moment of Inertia (Ix)	1.346
Radius of Gyration (Rx)	1.564
Gross Moment of Inertia (Iy)	0.192
Gross Radium of Gyration (Ry)	0.591

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	1.346
Section Modulus (Sxe)	0.648
Allowable Bending moment (Ma)	19.41
Allowable shear force in web (U)(Vag)	4871
Allowable shear at punch (Vanet)	1356

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.933
Warping constant (Cw)	0.677
Distance from shear center to neutral axis (Xo)	-1.220
Radii of gyration (Ro)	2.069
Torsional flexural constant (Beta)	0.653

### 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)

