

Structural Stud 800S162-43

Product Description 18 GA GALV 8.00" WEB x 1.62" FLANGE C-STUD .043 MIN GAUGE

Coating G60

Physical Properties

Design Thickness (in)	0.0451
Minimum Thickness (in)	0.0428
Web Width (in)	8.0000
Flange Width (in)	1.6250
Stiffening Lip (in)	0.5000
Yield Strength (ksi)	33.0000



Gross Section Properties	
Cross Sectional Area (A)	0.537
Weight of Member (lb/ft)	1.83
Section Modulus (Sx)	1.159
Moment of Inertia (Ix)	4.635
Radius of Gyration (Rx)	2.938
Gross Moment of Inertia (Iy)	0.160
Gross Radium of Gyration (Ry)	0.546

Effective Section Properties	
Moment of Inertia for deflection (Ixe)	4.500
Section Modulus (Sxe)	1.019
Allowable Bending moment (Ma)	20.14
Allowable shear force in web (U)(Vag)	1051
Allowable shear at punch (Vanet)	1051

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.364
Warping constant (Cw)	2.076
Distance from shear center to neutral axis (Xo)	-0.926
Radii of gyration (Ro)	3.128
Torsional flexural constant (Beta)	0.912

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)

