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Structural Stud

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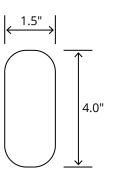
Product Description	12 GA GALV 10.00" WEB X 1.62" FLANGE C-STUD .097 MIN GAUGE
Coating	G60
Physical Properties	
Design Thickness (in)	0.1017
Minimum Thickness (in)	0.0966
Web Width (in)	10.0000
Flange Width (in)	1.6250
Stiffening Lip (in)	0.5000
Yield Strength (ksi)	50.0000

Gross Section Properties		
Cross Sectional Area (A)	1.372	
Weight of Member (lb/ft)	4.67	
Section Modulus (Sx)	3.395	
Moment of Inertia (lx)	16.974	
Radius of Gyration (Rx)	3.517	
Gross Moment of Inertia (ly)	0.320	
Gross Radium of Gyration (Ry)	0.483	

Effective Section Properties	
Moment of Inertia for deflection (lxe)	16.968
Section Modulus (Sxe)	3.270
Allowable Bending moment (Ma)	97.90
Allowable shear force in web (U)(Vag)	9864
Allowable shear at punch (Vanet)	7177

Torsional Properties	
St. Venant torsion constant (J x 1000)	4.731
Warping constant (Cw)	6.827
Distance from shear center to neutral axis (Xo)	-0.768
Radii of gyration (Ro)	3.632
Torsional flexural constant (Beta)	0.955

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 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	 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)

