

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

# **Structural Stud**

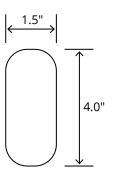
Product Description	14 GA GALV 3.62" WEB x 1.37" FLANGE C-STUD .068 MIN GAUGE G90
Coating	G90
Physical Properties	
Design Thickness (in)	0.0713
Minimum Thickness (in)	0.0677
Web Width (in)	3.6250
Flange Width (in)	1.3750
Stiffening Lip (in)	0.3750
Yield Strength (ksi)	50.0000

Gross Section Properties	
Cross Sectional Area (A)	0.470
Weight of Member (lb/ft)	1.60
Section Modulus (Sx)	0.509
Moment of Inertia (lx)	0.923
Radius of Gyration (Rx)	1.401
Gross Moment of Inertia (ly)	0.109
Gross Radium of Gyration (Ry)	0.481

Effective Section Properties	
Moment of Inertia for deflection (lxe)	0.923
Section Modulus (Sxe)	0.493
Allowable Bending moment (Ma)	14.77
Allowable shear force in web (U)(Vag)	4370
Allowable shear at punch (Vanet)	1004

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.797
Warping constant (Cw)	0.302
Distance from shear center to neutral axis (Xo)	-0.959
Radii of gyration (Ro)	1.765
Torsional flexural constant (Beta)	0.704

#### **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	<ul> <li>ConstructionWaste Management – Mill Steel Framing steel framing is 100% recyclable</li> </ul>
MR Credit 4	<ul> <li>Recycled Content – Mill Steel Framing products contain no less than 25.5% post-consumer</li> </ul>
	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)

