

ProSTUD® 250PDS125-33G90

Product Description 2 1/2" PROSTUD®33MIL
(33MIL) G90

Coating G90

Physical Properties

Design Thickness (in) 0.0346
Minimum Thickness (in) 0.0329
Web Width (in) 2.5
Flange Width (in) 1.25
Stiffening Lip (in) 0.25
Yield Strength (ksi) 33



Gross Section Properties

Cross Sectional Area (A)	0.182
Moment of Inertia (Ix)	0.186
Radius of Gyration (Rx)	1.01
Gross Moment of Inertia (Iy)	0.037
Gross Radius of Gyration (Ry)	0.449

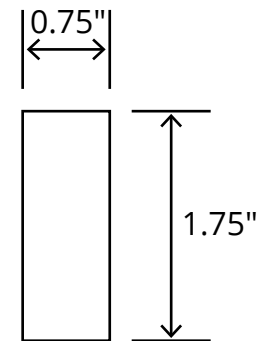
Effective Section Properties

Effective Area (Ae)	0.125
Moment of Inertia for deflection (Ixe)	0.186
Section Modulus (Sxe)	0.138
Allowable Bending moment (Ma)	2735
Allowable shear force in web (U)(Vag)	1007
Allowable shear force in web (P) (Vanet)	431

Torsional Properties

St. Venant torsion constant (J x 1000)	0.07267
Warping constant (Cw)	0.046
Distance from shear center to neutral axis (Xo)	-0.937
Radii of gyration (Ro)	1.449
Torsional flexural constant (Beta)	0.582
Unbraced Length (Lu)	30.1

Punch Out



Notes

1. Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing - NonStructural Members.
2. Effective Properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
3. Tabulated gross properties including torsional properties are based on full-unreduced cross section of the studs, away from punchouts.
4. For deflection calculations, use the effective moment of inertia.
5. Allowable moment includes cold-work of forming.
6. Allowable moment is taken as the lowest value based on load or distortional buckling. Distortional buckling strength is based on a k-phi = 0.

ASTM & Code Standards

• AISI S100-07 & S220-11 • Meets or exceeds ASTM C645 & C754 • ASTM E119, E72, & E90 • ATI CCRR-0207 • LA RR 26019

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)

