

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

# ProSTUD® 162PDS125-33G90

Product Description 1 5/8" PROSTUD®33MIL

(33MIL) G90

Coating G90

**Physical Properties** 

Design Thickness (in) 0.0346
Minimum Thickness (in) 0.0329
Web Width (in) 1.625
Flange Width (in) 1.25
Stiffening Lip (in) 0.25
Yield Strength (ksi) 33

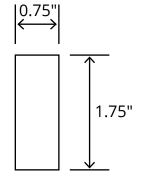


Gross Section Properties	
Cross Sectional Area (A)	0.152
Moment of Inertia (lx)	0.07
Radius of Gyration (Rx)	0.679
Gross Moment of Inertia (ly)	0.032
Gross Radium of Gyration (Ry)	0.456

Effective Section Properties	
Effective Area (Ae)	0.114
Moment of Inertia for deflection (lxe)	0.07
Section Modulus (Sxe)	0.078
Allowable Bending moment (Ma)	1541
Allowable shear force in web (U)(Vag)	632
Allowable shear force in web (P) (Vanet)	123

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.06059
Warping constant (Cw)	0.019
Distance from shear center to neutral axis (Xo)	-1.065
Radii of gyration (Ro)	1.344
Torsional flexural constant (Beta)	0.371
Unbraced Length (Lu)	30.8

## **Punch Out**



#### **Notes**

- 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
- 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)

