

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

# ProSTUD® 400PDS125-33G60

Product Description 4" PROSTUD®33MIL (33MIL)

G60

Coating G60

**Physical Properties** 

Design Thickness (in) 0.0346
Minimum Thickness (in) 0.0329
Web Width (in) 4
Flange Width (in) 1.25
Stiffening Lip (in) 0.25
Yield Strength (ksi) 33

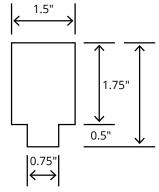


Gross Section Properties	
Cross Sectional Area (A)	0.234
Moment of Inertia (lx)	0.553
Radius of Gyration (Rx)	1.538
Gross Moment of Inertia (ly)	0.043
Gross Radium of Gyration (Ry)	0.426

<b>Effective Section Properties</b>	
Effective Area (Ae)	0.128
Moment of Inertia for deflection (lxe)	0.553
Section Modulus (Sxe)	0.222
Allowable Bending moment (Ma)	4394
Allowable shear force in web (U)(Vag)	957
Allowable shear force in web (P) (Vanet)	602

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.09338
Warping constant (Cw)	0.132
Distance from shear center to neutral axis (Xo)	-0.783
Radii of gyration (Ro)	1.777
Torsional flexural constant (Beta)	0.806
Unbraced Length (Lu)	29.5

# **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 MR Credit 4

- 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 • Region

• 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)

