

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

## **ProTRAK®**

# 362PDT200-33G90

3 5/8" ProTrak®33MIL (33mil)

2" leg G90

G90

Product Description	
---------------------	--

Coating

### Physical Properties

Design Thickness (in)	0.0346
Minimum Thickness (in)	0.0329
Web Width (in)	3.625
Flange Width (in)	2
Yield Strength (ksi)	33

Gross Section Properties	
Cross Sectional Area (A)	0.264
Moment of Inertia (lx)	0.61
Radius of Gyration (Rx)	1.521
Gross Moment of Inertia (ly)	0.11
Gross Radium of Gyration (Ry)	0.645

Effective Section Properties	
Effective Area (Ae)	0.107
Moment of Inertia for deflection (lxe)	0.452
Section Modulus (Sxe)	0.186
Allowable Bending moment (Ma)	3669
Allowable shear force in web (U)(Vag)	1024

Torsional Properties	
St. Venant torsion constant (J x 1000)	0.10515
Warping constant (Cw)	0.263
Distance from shear center to neutral axis (Xo)	-1.272
Radii of gyration (Ro)	2.085
Torsional flexural constant (Beta)	0.628

### **ASTM & Code Standards**

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

### **Section Properties Table 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 fullunreduced 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.
- Allowable moment is taken as the lowest value based on loacl or distortional buckling. Distortional buckling strength is based on a k-phi = 0.

### 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
Regional Materials – Mill Steel Framing has manufacturing facilities in Indiana, Alabama & Texas
Building Product Disclosure and Optimization EPD (1 point)
Materials Ingredients (1 point) – Construction and Demolition Waste Management (1 point)

