

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

# **ProTRAK®**

Yield Strength (ksi)

# 250PDT125-15G90

| Product Description        | <b>2 1/2" ProTrak®25 (15mil)<br/>1-1/4" leg G90</b><br>G90 |  |
|----------------------------|--|--|
| Coating                    |  |  |
| <b>Physical Properties</b> |  |  |
| Design Thickness (in)      | 0.0158   |  |
| Minimum Thickness (in)     | 0.015  |  |
| Web Width (in)             | 2.5  |  |
| Flange Width (in)          | 1.25   |  |

| Gross Section Properties      |       |
|-------------------------------|-------|
| Cross Sectional Area (A)      | 0.079 |
| Moment of Inertia (lx)        | 0.085 |
| Radius of Gyration (Rx)       | 1.038 |
| Gross Moment of Inertia (ly)  | 0.013 |
| Gross Radium of Gyration (Ry) | 0.4   |

50

| Effective Section Properties           |       |
|--|-------|
| Effective Area (Ae)                    | 0.02  |
| Moment of Inertia for deflection (lxe) | 0.059 |
| Section Modulus (Sxe)                  | 0.024 |
| Allowable Bending moment (Ma)          | 724   |
| Allowable shear force in web (U)(Vag)  | 143   |

| Torsional Properties                            |         |  |
|---|---------|--|
| St. Venant torsion constant (J x 1000)          | 0.00657 |  |
| Warping constant (Cw)                           | 0.015   |  |
| Distance from shear center to neutral axis (Xo) | -0.771  |  |
| Radii of gyration (Ro)                          | 1.353   |  |
| Torsional flexural constant (Beta)              | 0.675   |  |



#### **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
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
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)

