

Technical Services: 888-437-3244, Engineering Services: 877-832-3206, Sales 800-543-7140



Standard Wall, Chase Wall

## 09.22.16 (Non-Structural Metal Framing)

## 350PDT125-15 (50ksi, G40EQ)

3-1/2" ProTRAK® 25 (15mil) Drywall Track with PDT125 (1-1/4") legs

Coating: G40EQ Color Code: None

## **Geometric Properties**

Web depth: 3.500 in Design Thickness: 0.0158 in Leg width: 1.250 in Min. steel thickness: 0.0150 in

Yield strength, Fy: 50 ksi

Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.095 in <sup>2</sup>
Member weight per foot of length	0.322 lb/ft
Moment of inertia (Ix)	0.181 in <sup>4</sup>
Radius of gyration (Rx)	1.383 in
Gross moment of inertia (ly)	0.014 in <sup>4</sup>
Gross radius of gyration (Ry)	0.383 in
Effective Section Properties, Strong Axis	_
Effective Area (Ae)	0.021 in <sup>2</sup>
Moment of inertia for deflection (lxe)	0.116 in <sup>4</sup>
Section modulus (Sxe)	0.034 in <sup>3</sup>
Allowable bending moment (Ma)	1,022 in-lbs
Allowable shear force in web (Vag)	101 lb
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.0079 in <sup>4</sup>
Warping constant (Cw)	0.031 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.678 in
Radii of gyration (Ro)	1.587 in
Torsional flexural constant (Beta)	0.818
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- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2 of AISI S100-16 (2020) w/S2-20.
- Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the tracks.
- For deflection calculations, use the effective moment of inertia.
- · Allowable moment includes cold work of forming.
- Allowable moment is taken as the lowest value based on local or distortional buckling. Distortional buckling strength is based on a k-phi = 0.
- Web depth for track sections is equal to the nominal height plus two times the design thickness plus the bend radius. Hems on nonstructural track sections are ignored.



- Embossments in web are only placed on sections 2-1/2" and wider.
- U.S. Patent No. 9,010,070

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

- LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- LEED v4 MR Credit: Building Product
  Disclosure and Optimization: EPD (1 point) Sourcing of Raw Materials (1 point) Material
  Ingredients (1 point) Construction and
  Demolition Waste Management (up to 2 points) Innovation Credit (up to 2 points).

## **Code Approvals & Performance Standards**

- AISI S100-16 (2020) w/S2-20 North American Specification for the Design of Cold-Formed Steel Structural Members
- AISI S220-20 North American Standard for Cold-Formed Steel Framing Nonstructural Members
- o (Compliant to ASTM C645, but IBC replaced with AISI S220 in IBC 2015)
- Section A3 Material Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 Products Thickness, shapes, tolerances, identification
- Section C Installation (Referencing ASTM C754)
- AISI S202-20 Code of Standard Practice for Cold-Formed Steel Structural Framing
  - o Section F3 Delivery, Handling and Storage of Materials
- ASTM E72 Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
- ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials
- IBC 2024 International Building Code
- Intertek CCRR-0207 Non-Structural Metal Framing
- LA RR #26019 City of Los Angeles ProSTUD Research Report
- UL Designs 263 "Fire Tests of Building Construction and Materials"
- UL File Number R26512 Full list of ProSTUD and ProTRAK UL design assemblies
- SDS For ASTM A1003 Steel Framing Products For Interior Framing, Exterior Framing and Clips/Accessories