

Standard Wall, Chase Wall
09.22.16 (Non-Structural Metal Framing)
250PDT125-33 (33ksi, G40EQ)
2-1/2" ProTRAK® 33mil Drywall Track with PDT125 (1-1/4") legs
Coating: G40EQ

Color Code: White

Geometric Properties
Web depth: 2.500 in

Design Thickness: 0.0346 in

Leg width: 1.250 in

Min. steel thickness: 0.0329 in

Yield strength, Fy: 33 ksi

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.173 in ²
Member weight per foot of length	0.588 lb/ft
Moment of inertia (Ix)	0.188 in ⁴
Radius of gyration (Rx)	1.043 in
Gross moment of inertia (Iy)	0.027 in ⁴
Gross radius of gyration (Ry)	0.397 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.102 in ²
Moment of inertia for deflection (Ixe)	0.160 in ⁴
Section modulus (Sxe)	0.100 in ³
Allowable bending moment (Ma)	1,972 in-lbs
Allowable shear force in web (Vag)	1,024 lb

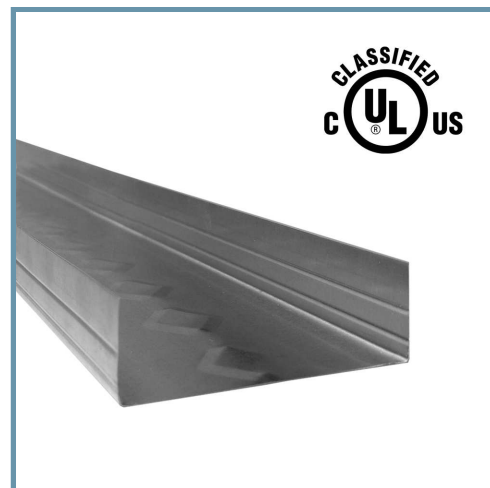
Torsional Properties

St. Venant torsional constant (J x 1000)	0.0689 in ⁴
Warping constant (Cw)	0.032 in ⁶
Distance from shear center to neutral axis (Xo)	-0.762 in
Radii of gyration (Ro)	1.351 in
Torsional flexural constant (Beta)	0.682

- 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.

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
 - (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
 - 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
- 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



- 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).