

09.22.16 (Non-Structural Metal Framing)

Product Submittal Sheet

Standard Wall, Chase Wall

550PDT125-18 (50ksi, G40EQ)

5-1/2" ProTRAK® 20 (18mil) Drywall Track with PDT125 (1-1/4") legs

Coating: G40EQ

Color Code: Brown

Geometric Properties

Web depth: 5.500 inDesign Thickness: 0.0190 inLeg width: 1.250 inMin. steel thickness: 0.0181 inYield strength, Fy: 50 ksiStrength, Fy: 50 ksi

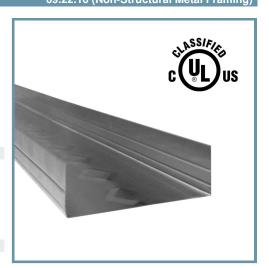
Gross Section Properties of Full Section, Strong Axis

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Cross sectional area (A)	0.152 in ²
Member weight per foot of length	0.517 lb/ft
Moment of inertia (Ix)	0.630 in ⁴
Radius of gyration (Rx)	2.036 in
Gross moment of inertia (ly)	0.019 in ⁴
Gross radius of gyration (Ry)	0.349 in
Effective Section Properties, Strong Axis	
Effective Area (Ae)	0.029 in ²
Moment of inertia for deflection (lxe)	0.388 in ⁴
Section modulus (Sxe)	0.075 in ³
Allowable bending moment (Ma)	2,260 in-lbs
Allowable shear force in web (Vag)	112 lb
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.0183 in ⁴
Warping constant (Cw)	0.107 in ⁶
Distance from shear center to neutral axis (Xo)	-0.548 in
Radii of gyration (Ro)	2.137 in
Torsional flexural constant (Beta)	0.934
	Cross sectional area (A) Member weight per foot of length Moment of inertia (Ix) Radius of gyration (Rx) Gross moment of inertia (Iy) Gross radius of gyration (Ry) Effective Section Properties, Strong Axis Effective Area (Ae) Moment of inertia for deflection (Ixe) Section modulus (Sxe) Allowable bending moment (Ma) Allowable shear force in web (Vag) Torsional Properties St. Venant torsional constant (J x 1000) Warping constant (Cw) Distance from shear center to neutral axis (Xo) Radii of gyration (Ro)

- 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.
- Web-height to thickness ratio exceeds 260.

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)
- $\circ~$ 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
- 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



- 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).