

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

05.40.00 (Cold-Formed Metal Framing)

250T125-33 (33ksi, CP60)

250 (2-1/2") structural track with T125 (1-1/4") leg - 33mils (20ga)

Coating: CP60 per AISI S240

Color Code: White

Geometric Properties

| Web depth: 2.646 in | Thickness: 33mils (20ga) |
|---------------------|---------------------------------|
| Leg width: 1.25 in | Design Thickness: 0.0346 in |
| | Min. steel thickness: 0.0329 in |

Yield strength, Fy: 33 ksi *Fy with Cold-Work, Fya: 33.0 ksi Ultimate, Fu: 45.0 ksi

| Gross Section Properties of Full Section, Strong Axis | | |
|---|-----------------------|--|
| Cross sectional area (A) | 0.173 in ² | |
| Member weight per foot of length | 0.59 lb/ft | |
| Moment of inertia (Ix) | 0.192 in ⁴ | |
| Section Modulus (Sx) | 0.145in ³ | |
| Radius of gyration (Rx) | 1.054 in | |
| Gross moment of inerita (ly) | 0.027 in ⁴ | |
| Gross radius of gyration (Ry) | 0.397 in | |
| Effective Section Properties, Strong Axis | | |
| Effective Area (Ae) | 0.105 in ² | |
| Moment of inertia for deflection (lx) | 0.166 in ⁴ | |
| Section modulus (Sx) | 0.103 in ³ | |
| Allowable bending moment (Ma) | 2.03 in-k | |
| Allowable shear force in web | 1024 lb | |
| Torsional Properties | | |
| St. Venant torsional constant (J x 1000) | 0.069 in ⁴ | |
| Warping constant (Cw) | 0.033 in ⁶ | |
| Distance from shear center to neutral axis (Xo) | -0.760 in | |
| Distance between shear center and web centerline (m) | 0.456 in | |
| Radii of gyration (Ro) | 1.358 in | |
| Torsional flexural constant (Beta) | 0.687 | |

Load-bearing walls

Curtain walls

Tall interior walls

· Floor & ceiling joists

Trusses



• Effective properties incorporate the strength increase from the cold work of forming.

Code Approvals & Performance Standards

- AISI S100-16 (2020) w/S2-20 North American Specification for the Design of Cold-Formed Steel Structural Members
- AISI S240-20 North American Standard for Cold-Formed Steel Structural Framing
- (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)
- 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 C1007)
- AISI S202-20 Code of Standard Practice for Cold-Formed Steel Structural Framing
 Section F3 Delivery, Handling and Storage of Materials
- IBC 2021 International Building Code
- ICC-ES ESR-1166P Structural Studs and Track
- ESR-1166P LABC and LARC Supplement
- ESR-1166P Catalog ClarkDietrich Structural Technical Design Guide (6/22/20)
- Intertek CCRR-0206 Structural Studs and Track
- SFIA Stud Code Compliance Certification Program
- SDS For ASTM A1003 Steel Framing Products For Interior Framing, Exterior Framing and Clips/Accessories

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).