

05.40.00 (Cold-Formed Metal Framing)

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



1000T150-43 (33ksi, CP60)

1000 (10") structural track with T150 (1-1/2") leg - 43mils (18ga)

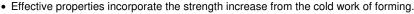
Coating: CP60 per AISI S240 Color Code: Yellow

Geometric Properties

Web depth: 10.161 in Thickness: 43mils (18ga) Leg width: 1.50 in Design Thickness: 0.0451 in Yield strength, Fy: 33 ksi *Fy with Cold-Work, Fya: 33.0 ksi

Min. steel thickness: 0.0428 in Ultimate, Fu: 45.0 ksi

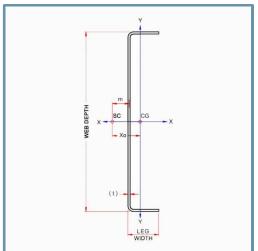
| Gross Section Properties of Full Section, Strong Axis | |
|---|-----------------------|
| | |
| Member weight per foot of length | 1.99 lb/ft |
| Moment of inertia (Ix) | 7.210 in ⁴ |
| Section Modulus (Sx) | 1.419in ³ |
| Radius of gyration (Rx) | 3.508 in |
| Gross moment of inerita (ly) | 0.080 in ⁴ |
| Gross radius of gyration (Ry) | 0.370 in |
| Effective Section Properties, Strong Axis | |
| Effective Area (Ae) | 0.188 in ² |
| Moment of inertia for deflection (lx) | 6.197 in ⁴ |
| Section modulus (Sx) | 0.837 in ³ |
| Allowable bending moment (Ma) | 16.54 in-k |
| Allowable shear force in web | 822 lb |
| Torsional Properties | s |
| St. Venant torsional constant (J x 1000) | 0.397 in ⁴ |
| Warping constant (Cw) | 1.612 in ⁶ |
| Distance from shear center to neutral axis (Xo) | -0.513 in |
| Distance between shear center and web centerline (m) | 0.345 in |
| Radii of gyration (Ro) | 3.565 in |
| Torsional flexural constant (Beta) | 0.979 |
| | |



Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

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
 - o (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)
 - o 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
 - o 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



- · Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



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).