

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

05.40.00 (Cold-Formed Metal Framing)

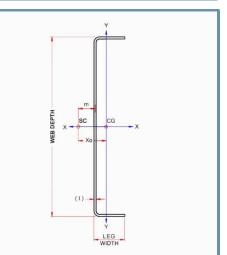
350T150-54 (50ksi, CP60)

350 (3-1/2") structural track with T150 (1-1/2") leg - 54mils (16ga)

 Coating: CP60 per AISI S240
 Color Code: Green

 Geometric Properties

Web depth: 3.698 in Thickness: 54mils (16ga) Yield strength, Fy: 50 ksi Leg width: 1.50 in Design Thickness: 0.0566 in *Fy with Cold-Work, Fya: 50.0 ksi Min. steel thickness: 0.0538 in Ultimate, Fu: 65.0 ksi **Gross Section Properties of Full Section, Strong Axis** Cross sectional area (A) 0.367 in² 1.25 lb/ft Member weight per foot of length 0.762 in⁴ Moment of inertia (Ix) 0.412in³ Section Modulus (Sx) Radius of gyration (Rx) 1.440 in Gross moment of inerita (ly) 0.079 in⁴ Gross radius of gyration (Ry) 0.465 in **Effective Section Properties, Strong Axis** 0.227 in² Effective Area (Ae) Moment of inertia for deflection (lx) 0.679 in⁴ Section modulus (Sx) 0.310 in³ Allowable bending moment (Ma) 9.28 in-k Allowable shear force in web 3372 lb **Torsional Properties** 0.392 in⁴ St. Venant torsional constant (J x 1000) 0.187 in⁶ Warping constant (Cw) Distance from shear center to neutral axis (Xo) -0.855 in Distance between shear center and web centerline (m) 0.521 in



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)

1.738 in

0.758

- 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

Radii of gyration (Ro)

Torsional flexural constant (Beta)

- 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).