

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

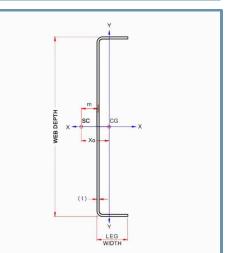
## 05.40.00 (Cold-Formed Metal Framing)

## 800T150-54 (50ksi, CP60)

## 800 (8") structural track with T150 (1-1/2") leg - 54mils (16ga)

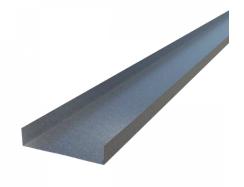
Coating: CP60 per AISI S240		Color Code: Green
Geometric Properties		
Web depth: 8.198 in	Thickness: 54mils (16ga)	Yield strength, Fy: 50 ksi
Leg width: 1.50 in	Design Thickness: 0.0566 in	*Fy with Cold-Work, Fya: 50.0 ksi
	Min. steel thickness: 0.0538 in	Ultimate, Fu: 65.0 ksi

Ultimate, Fu: 65.0 ksi **Gross Section Properties of Full Section, Strong Axis** Cross sectional area (A) 0.622 in<sup>2</sup> Member weight per foot of length 2.12 lb/ft 5.216 in<sup>4</sup> Moment of inertia (Ix) 1.272in<sup>3</sup> Section Modulus (Sx) Radius of gyration (Rx) 2.896 in Gross moment of inerita (ly) 0.096 in<sup>4</sup> Gross radius of gyration (Ry) 0.393 in **Effective Section Properties, Strong Axis** 0.241 in<sup>2</sup> Effective Area (Ae) Moment of inertia for deflection (lx) 4.693 in<sup>4</sup> Section modulus (Sx) 0.844 in<sup>3</sup> 25.27 in-k Allowable bending moment (Ma) Allowable shear force in web 2039 lb **Torsional Properties** 0.664 in<sup>4</sup> St. Venant torsional constant (J x 1000) 1.215 in<sup>6</sup> Warping constant (Cw) Distance from shear center to neutral axis (Xo) -0.580 in Distance between shear center and web centerline (m) 0.383 in Radii of gyration (Ro) 2.980 in Torsional flexural constant (Beta) 0.962



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).