

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

### 05.40.00 (Cold-Formed Metal Framing)

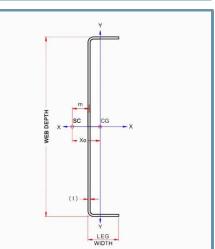
# 1200T350-54 (50ksi, CP60)

#### 1200 (12") structural track with T350 (3-1/2") leg - 54mils (16ga)

Coating: CP60 per AISI S240CoGeometric Properties

Color Code: Green

#### Web depth: 12.198 in Thickness: 54mils (16ga) Yield strength, Fy: 50 ksi Leg width: 3.50 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) 1.075 in<sup>2</sup> 3.66 lb/ft Member weight per foot of length 22.728 in<sup>4</sup> Moment of inertia (Ix) 3.726in<sup>3</sup> Section Modulus (Sx) Radius of gyration (Rx) 4.599 in Gross moment of inerita (ly) 1.146 in<sup>4</sup> Gross radius of gyration (Ry) 1.032 in **Effective Section Properties, Strong Axis** 0.253 in<sup>2</sup> Effective Area (Ae) Moment of inertia for deflection (lx) 16.549 in<sup>4</sup> Section modulus (Sx) 1.433 in<sup>3</sup> 42.91 in-k Allowable bending moment (Ma) Allowable shear force in web 1354 lb **Torsional Properties** 1.148 in<sup>4</sup> St. Venant torsional constant (J x 1000) 30.618 in<sup>6</sup> Warping constant (Cw) Distance from shear center to neutral axis (Xo) -1.731 in Distance between shear center and web centerline (m) 1.097 in Radii of gyration (Ro) 5.021 in Torsional flexural constant (Beta) 0.881 Effective properties incorporate the strength increase from the cold work of forming.



• Load-bearing walls

Curtain walls

Tall interior walls

Floor & ceiling joists

Trusses



• 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
  - (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
- 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).