

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

#### 05.40.00 (Cold-Formed Metal Framing)

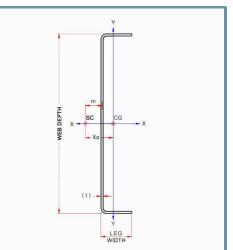
# 1150T350-54 (50ksi, CP60)

#### 1150 (11-1/2") structural track with T350 (3-1/2") leg - 54mils (16ga)

Coating: CP60 per AISI S240 Color Code: Green

### **Geometric Properties**

Web depth: 11.698 in Leg width: 3.50 in	Thickness: 54mils (16ga) Design Thickness: 0.0566 in Min. steel thickness: 0.0538 in	Yield strength, Fy: 50 ksi *Fy with Cold-Work, Fya: 50.0 ksi Ultimate, Fu: 65.0 ksi
Gross Section Properties of Full Section, Strong Axis		
Cross sectional area (A)		1.046 in <sup>2</sup>
Member weight per foot of length		3.56 lb/ft
Moment of inertia (Ix)		20.575 in <sup>4</sup>
Section Modulus (Sx)		3.518in <sup>3</sup>
Radius of gyration (Rx)		4.434 in
Gross moment of inerita (ly)		1.134 in <sup>4</sup>
Gross radius of gyration (Ry)		1.041 in
Effective Section Properties, Strong Axis		
Effective Area (Ae)		0.252 in <sup>2</sup>
Moment of inertia for deflection (Ix)		15.214 in <sup>4</sup>
Section modulus (Sx)		1.373 in <sup>3</sup>
Allowable bending moment (Ma)		41.11 in-k
Allowable shear force in web		1414 lb
Torsional Properties		
St. Venant torsional constant (J x 1000)		1.117 in <sup>4</sup>
Warping constant (Cw)		27.757 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)		-1.766 in
Distance between shear center and web centerline (m)		1.114 in
Radii of gyration (Ro)		4.885 in
Torsional flexural constant (Beta)		0.869



· Load-bearing walls

Curtain walls

Tall interior walls

Floor & ceiling joists

Trusses



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

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).