

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

### 05.40.00 (Cold-Formed Metal Framing)

# 1400T350-118 (50ksi, CP60)

#### 1400 (14") structural track with T350 (3-1/2") leg - 118mils (10ga)

Coating: CP60 per AISI S240

# **Geometric Properties**

Geometric Propert	ties	
Web depth: 14.435 in Leg width: 3.50 in	Thickness: 118mils (10ga) Design Thickness: 0.1242 in Min. steel thickness: 0.1180 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)		2.605 in <sup>2</sup>
Member weight per foot of length		8.86 lb/ft
Moment of inertia (lx)		72.704 in <sup>4</sup>
Section Modulus (Sx)		10.074in <sup>3</sup>
Radius of gyration (Rx)		5.283 in
Gross moment of inerita (ly)		2.536 in <sup>4</sup>
Gross radius of gyration (Ry)		0.987 in
	Effective Section Properties,	Strong Axis
Effective Area (Ae)		1.151 in <sup>2</sup>
Moment of inertia for deflection (lx)		65.745 in <sup>4</sup>
Section modulus (Sx)		6.965 in <sup>3</sup>
Allowable bending moment (Ma)		208.55 in-k
Allowable shear force in web		12344 lb
	Torsional Propertie	es la
St. Venant torsional constant (J x 1000)		13.394 in <sup>4</sup>
Warping constant (Cw)		95.978 in <sup>6</sup>

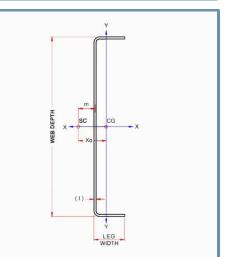
Color Code: Blue

-1.579 in

1.015 in

5.602 in

0.921



• 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**

Distance from shear center to neutral axis (Xo)

Radii of gyration (Ro)

Torsional flexural constant (Beta)

Distance between shear center and web centerline (m)

- 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)
- $\circ~$  Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
- $\circ\,$  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).