

05.40.00 (Cold-Formed Metal Framing)

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



## 1600T350-68 (50ksi, CP60)

1600 (16") structural track with T350 (3-1/2") leg - 68mils (14ga)

Coating: CP60 per AISI S240 Color Code: Orange

## **Geometric Properties**

Web depth: 16.250 in Thickness: 68mils (14ga) Leg width: 3.50 in Design Thickness: 0.0713 in

Yield strength, Fy: 50 ksi \*Fy with Cold-Work, Fya: 50.0 ksi

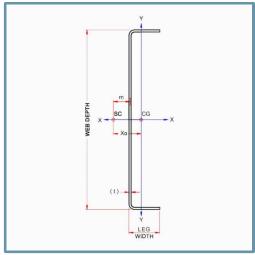
Min. steel thickness: 0.0677 in Ultimate, Fu: 65.0 ksi

Gross Section Properties of Full Sec	ction, Strong Axis
Cross sectional area (A)	1.639 in <sup>2</sup>
Member weight per foot of length	5.58 lb/ft
Moment of inertia (lx)	56.929 in <sup>4</sup>
Section Modulus (Sx)	7.007in <sup>3</sup>
Radius of gyration (Rx)	5.894 in
Gross moment of inerita (ly)	1.529 in <sup>4</sup>
Gross radius of gyration (Ry)	0.966 in
Effective Section Properties, 9	Strong Axis
Effective Area (Ae)	0.399 in <sup>2</sup>
Moment of inertia for deflection (lx)	40.452 in <sup>4</sup>
Section modulus (Sx)	2.938 in <sup>3</sup>
Allowable bending moment (Ma)	87.96 in-k
Allowable shear force in web	2030 lb
Torsional Propertie	s
St. Venant torsional constant (J x 1000)	2.777 in <sup>4</sup>
Warping constant (Cw)	74.779 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-1.496 in
Distance between shear center and web centerline (m)	0.974 in
Radii of gyration (Ro)	6.157 in
Torsional flexural constant (Beta)	0.941

- 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
- o (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)
- o Section A5 Products Thickness, shapes, tolerances, identification
- o Section C Installation (Referencing ASTM C1007)
- AISI S202-20 Code of Standard Practice for Cold-Formed Steel Structural Framing
  - o Section F3 Delivery, Handling and Storage of Materials
- SDS For ASTM A1003 Steel Framing Products For Interior Framing, Exterior Framing and Clips/Accessories



- · Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



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).