

**1400T200-54 (50ksi, CP60)**
**1400 (14") structural track with T200 (2") leg - 54mils (16ga)**
**Coating:** CP60 per AISI S240

**Color Code:** Green

**Geometric Properties**

**Web depth:** 14.198 in    **Thickness:** 54mils (16ga)    **Yield strength, Fy:** 50 ksi  
**Leg width:** 2.00 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)	1.018 in <sup>2</sup>
Member weight per foot of length	3.46 lb/ft
Moment of inertia (Ix)	24.232 in <sup>4</sup>
Section Modulus (Sx)	3.413 in <sup>3</sup>
Radius of gyration (Rx)	4.879 in
Gross moment of inertia (Iy)	0.242 in <sup>4</sup>
Gross radius of gyration (Ry)	0.487 in

**Effective Section Properties, Strong Axis**

Effective Area (Ae)	0.249 in <sup>2</sup>
Moment of inertia for deflection (Ix)	18.392 in <sup>4</sup>
Section modulus (Sx)	1.589 in <sup>3</sup>
Allowable bending moment (Ma)	47.57 in-k
Allowable shear force in web	1160 lb

**Torsional Properties**

St. Venant torsional constant (J x 1000)	1.087 in <sup>4</sup>
Warping constant (Cw)	9.520 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.665 in
Distance between shear center and web centerline (m)	0.449 in
Radii of gyration (Ro)	4.948 in
Torsional flexural constant (Beta)	0.982

- 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
- **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 CRR-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



- 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](http://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).