

## 250T150-97 (50ksi, CP60)

250 (2-1/2") structural track with T150 (1-1/2") leg - 97mils (12ga)

Coating: CP60 per AISI S240

Color Code: Red

### Geometric Properties

Web depth: 2.856 in

Thickness: 97mils (12ga)

Yield strength,  $F_y$ : 50 ksi

Leg width: 1.50 in

Design Thickness: 0.1017 in

\* $F_y$  with Cold-Work,  $F_{ya}$ : 50.0 ksi

Min. steel thickness: 0.0966 in

Ultimate,  $F_u$ : 65.0 ksi

#### Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.557 in <sup>2</sup>
Member weight per foot of length	1.90 lb/ft
Moment of inertia (Ix)	0.701 in <sup>4</sup>
Section Modulus (Sx)	0.491 in <sup>3</sup>
Radius of gyration (Rx)	1.122 in
Gross moment of inertia (Iy)	0.124 in <sup>4</sup>
Gross radius of gyration (Ry)	0.472 in

#### Effective Section Properties, Strong Axis

Effective Area (Ae)	0.532 in <sup>2</sup>
Moment of inertia for deflection (Ix)	0.701 in <sup>4</sup>
Section modulus (Sx)	0.463 in <sup>3</sup>
Allowable bending moment (Ma)	13.87 in-k
Allowable shear force in web	4476 lb

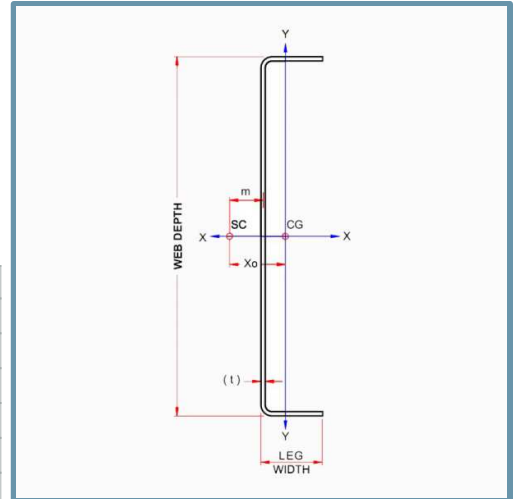
#### Torsional Properties

St. Venant torsional constant (J x 1000)	1.921 in <sup>4</sup>
Warping constant (Cw)	0.168 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.935 in
Distance between shear center and web centerline (m)	0.550 in
Radii of gyration (Ro)	1.534 in
Torsional flexural constant (Beta)	0.629

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

### 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).