

## 1600T150-97 (50ksi, CP60)

1600 (16") structural track with T150 (1-1/2") leg - 97mils (12ga)

Coating: CP60 per AISI S240

Color Code: Red

### Geometric Properties

Web depth: 16.356 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)	1.930 in <sup>2</sup>
Member weight per foot of length	6.57 lb/ft
Moment of inertia (Ix)	54.708 in <sup>4</sup>
Section Modulus (Sx)	6.690 in <sup>3</sup>
Radius of gyration (Rx)	5.324 in
Gross moment of inertia (Iy)	0.183 in <sup>4</sup>
Gross radius of gyration (Ry)	0.308 in

#### Effective Section Properties, Strong Axis

Effective Area (Ae)	0.740 in <sup>2</sup>
Moment of inertia for deflection (Ix)	51.389 in <sup>4</sup>
Section modulus (Sx)	5.047 in <sup>3</sup>
Allowable bending moment (Ma)	151.12 in-k
Allowable shear force in web	5908 lb

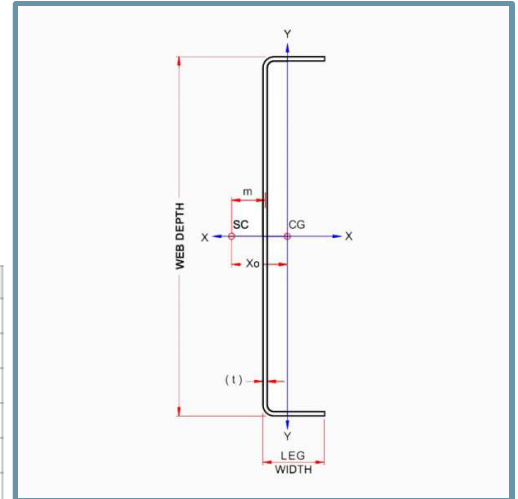
#### Torsional Properties

St. Venant torsional constant (J x 1000)	6.654 in <sup>4</sup>
Warping constant (Cw)	10.066 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.363 in
Distance between shear center and web centerline (m)	0.253 in
Radii of gyration (Ro)	5.345 in
Torsional flexural constant (Beta)	0.995

- 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
- [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



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- **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).