

**400T250-43 (33ksi, CP60)**
**400 (4") structural track with T250 (2-1/2") leg - 43mils (18ga)**
**Coating:** CP60 per AISI S240

**Color Code:** Yellow

**Geometric Properties**

**Web depth:** 4.161 in    **Thickness:** 43mils (18ga)    **Yield strength, Fy:** 33 ksi  
**Leg width:** 2.50 in    **Design Thickness:** 0.0451 in    **\*Fy with Cold-Work, Fya:** 33.0 ksi  
**Min. steel thickness:** 0.0428 in    **Ultimate, Fu:** 45.0 ksi

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

Cross sectional area (A)	0.405 in <sup>2</sup>
Member weight per foot of length	1.38 lb/ft
Moment of inertia (Ix)	1.193 in <sup>4</sup>
Section Modulus (Sx)	0.574 in <sup>3</sup>
Radius of gyration (Rx)	1.715 in
Gross moment of inertia (Iy)	0.268 in <sup>4</sup>
Gross radius of gyration (Ry)	0.813 in

**Effective Section Properties, Strong Axis**

Effective Area (Ae)	0.182 in <sup>2</sup>
Moment of inertia for deflection (Ix)	0.888 in <sup>4</sup>
Section modulus (Sx)	0.324 in <sup>3</sup>
Allowable bending moment (Ma)	6.40 in-k
Allowable shear force in web	1739 lb

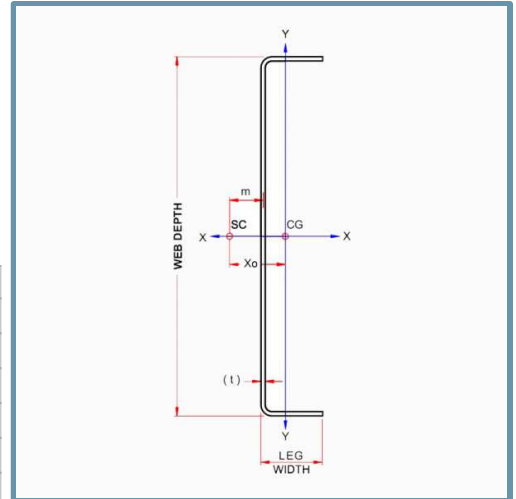
**Torsional Properties**

St. Venant torsional constant (J x 1000)	0.275 in <sup>4</sup>
Warping constant (Cw)	0.799 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-1.653 in
Distance between shear center and web centerline (m)	0.970 in
Radii of gyration (Ro)	2.517 in
Torsional flexural constant (Beta)	0.569

- 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).