

**400T300-33 (33ksi, CP60)**
**400 (4") structural track with T300 (3") leg - 33mils (20ga)**
**Coating:** CP60 per AISI S240

**Color Code:** White

**Geometric Properties**
**Web depth:** 4.146 in

**Thickness:** 33mils (20ga)

**Yield strength,  $F_y$ :** 33 ksi

**Leg width:** 3.00 in

**Design Thickness:** 0.0346 in

**\* $F_y$  with Cold-Work,  $F_{ya}$ :** 33.0 ksi

**Min. steel thickness:** 0.0329 in

**Ultimate,  $F_u$ :** 45.0 ksi

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

Cross sectional area (A)	0.346 in <sup>2</sup>
Member weight per foot of length	1.18 lb/ft
Moment of inertia (Ix)	1.061 in <sup>4</sup>
Section Modulus (Sx)	0.512 in <sup>3</sup>
Radius of gyration (Rx)	1.751 in
Gross moment of inertia (Iy)	0.338 in <sup>4</sup>
Gross radius of gyration (Ry)	0.989 in

**Effective Section Properties, Strong Axis**

Effective Area (Ae)	0.113 in <sup>2</sup>
Moment of inertia for deflection (Ix)	0.687 in <sup>4</sup>
Section modulus (Sx)	0.218 in <sup>3</sup>
Allowable bending moment (Ma)	4.32 in-k
Allowable shear force in web	940 lb

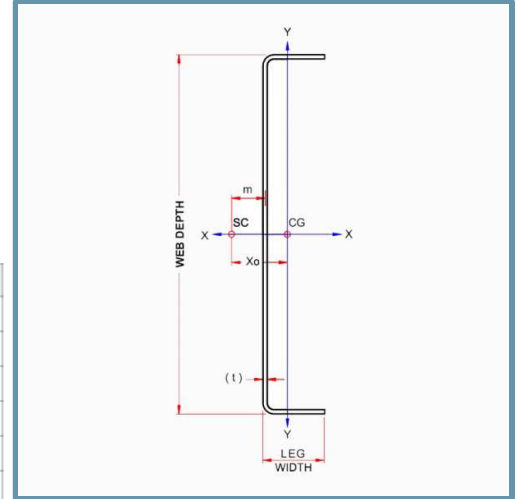
**Torsional Properties**

St. Venant torsional constant (J x 1000)	0.138 in <sup>4</sup>
Warping constant (Cw)	1.009 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-2.103 in
Distance between shear center and web centerline (m)	1.213 in
Radii of gyration (Ro)	2.910 in
Torsional flexural constant (Beta)	0.478

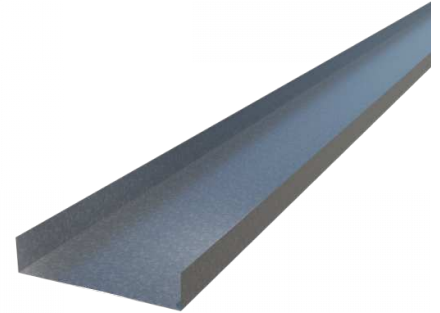
- Effective properties incorporate the strength increase from the cold work of forming.
- **This section does not meet the requirements of AISI North American Specifications. Increase the thickness or contact ClarkDietrich Tech Support for design solutions.**

**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 CRRR-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).