

400T300-43 (33ksi, CP60)
400 (4") structural track with T300 (3") leg - 43mils (18ga)
Coating: CP60 per AISI S240

Color Code: Yellow

Geometric Properties
Web depth: 4.161 in

Thickness: 43mils (18ga)

Yield strength, F_y : 33 ksi

Leg width: 3.00 in

Design Thickness: 0.0451 in

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

Min. steel thickness: 0.0428 in

Ultimate, F_u : 45.0 ksi

Gross Section Properties of Full Section, Strong Axis

| | |
|----------------------------------|-----------------------|
| Cross sectional area (A) | 0.451 in ² |
| Member weight per foot of length | 1.53 lb/ft |
| Moment of inertia (Ix) | 1.384 in ⁴ |
| Section Modulus (Sx) | 0.665 in ³ |
| Radius of gyration (Rx) | 1.753 in |
| Gross moment of inertia (Iy) | 0.439 in ⁴ |
| Gross radius of gyration (Ry) | 0.987 in |

Effective Section Properties, Strong Axis

| | |
|---------------------------------------|-----------------------|
| Effective Area (Ae) | 0.183 in ² |
| Moment of inertia for deflection (Ix) | 0.955 in ⁴ |
| Section modulus (Sx) | 0.334 in ³ |
| Allowable bending moment (Ma) | 6.60 in-k |
| Allowable shear force in web | 1739 lb |

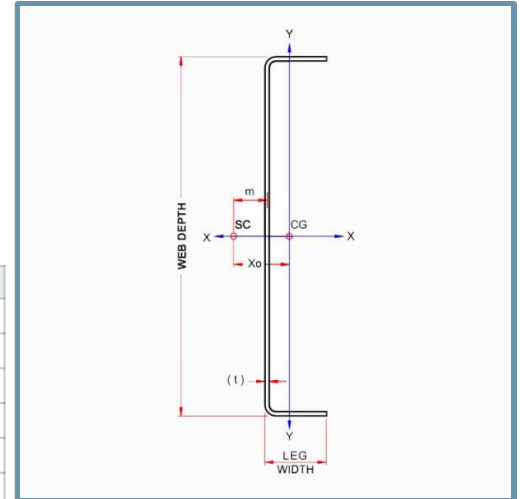
Torsional Properties

| | |
|--|-----------------------|
| St. Venant torsional constant (J x 1000) | 0.305 in ⁴ |
| Warping constant (Cw) | 1.313 in ⁶ |
| Distance from shear center to neutral axis (Xo) | -2.097 in |
| Distance between shear center and web centerline (m) | 1.210 in |
| Radii of gyration (Ro) | 2.906 in |
| Torsional flexural constant (Beta) | 0.479 |

- 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.

- **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).