

400T150-54 (50ksi, CP60)

400 (4") structural track with T150 (1-1/2") leg - 54mils (16ga)

Coating: CP60 per AISI S240

Color Code: Green

Geometric Properties

Web depth: 4.198 in

Thickness: 54mils (16ga)

Yield strength, F_y : 50 ksi

Leg width: 1.50 in

Design Thickness: 0.0566 in

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

Min. steel thickness: 0.0538 in

Ultimate, F_u : 65.0 ksi

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.396 in ²
Member weight per foot of length	1.35 lb/ft
Moment of inertia (Ix)	1.026 in ⁴
Section Modulus (Sx)	0.489in ³
Radius of gyration (Rx)	1.610 in
Gross moment of inertia (Iy)	0.082 in ⁴
Gross radius of gyration (Ry)	0.456 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.230 in ²
Moment of inertia for deflection (Ix)	0.918 in ⁴
Section modulus (Sx)	0.374 in ³
Allowable bending moment (Ma)	11.19 in-k
Allowable shear force in web	3372 lb

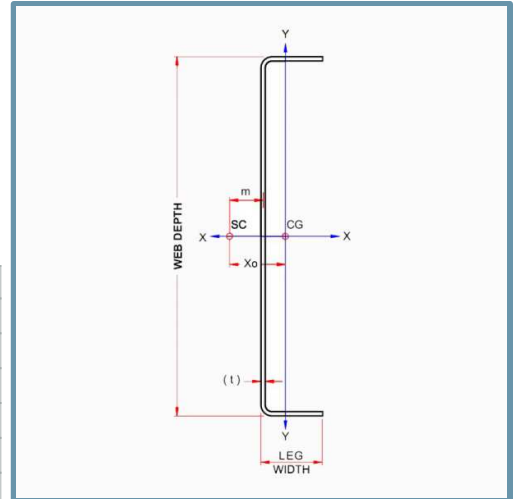
Torsional Properties

St. Venant torsional constant (J x 1000)	0.422 in ⁴
Warping constant (Cw)	0.252 in ⁶
Distance from shear center to neutral axis (Xo)	-0.811 in
Distance between shear center and web centerline (m)	0.501 in
Radii of gyration (Ro)	1.860 in
Torsional flexural constant (Beta)	0.810

- 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.

- **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).