

1200T300-54 (50ksi, CP60)
1200 (12") structural track with T300 (3") leg - 54mils (16ga)
Coating: CP60 per AISI S240

Color Code: Green

Geometric Properties

Web depth: 12.198 in **Thickness:** 54mils (16ga) **Yield strength, Fy:** 50 ksi
Leg width: 3.00 in **Design Thickness:** 0.0566 in ***Fy with Cold-Work, Fya:** 50.0 ksi
Min. steel thickness: 0.0538 in **Ultimate, Fu:** 65.0 ksi

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	1.018 in ²
Member weight per foot of length	3.46 lb/ft
Moment of inertia (Ix)	20.642 in ⁴
Section Modulus (Sx)	3.384 in ³
Radius of gyration (Rx)	4.503 in
Gross moment of inertia (Iy)	0.745 in ⁴
Gross radius of gyration (Ry)	0.855 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.252 in ²
Moment of inertia for deflection (Ix)	14.455 in ⁴
Section modulus (Sx)	1.391 in ³
Allowable bending moment (Ma)	41.65 in-k
Allowable shear force in web	1354 lb

Torsional Properties

St. Venant torsional constant (J x 1000)	1.087 in ⁴
Warping constant (Cw)	20.211 in ⁶
Distance from shear center to neutral axis (Xo)	-1.375 in
Distance between shear center and web centerline (m)	0.884 in
Radii of gyration (Ro)	4.785 in
Torsional flexural constant (Beta)	0.917

- Effective properties incorporate the strength increase from the cold work of forming.
- **Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.**

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).