

Technical Services: 888-437-3244, Engineering Services: 877-832-3206, Sales 800-543-7140

05.40.00 (Cold-Formed Metal Framing)

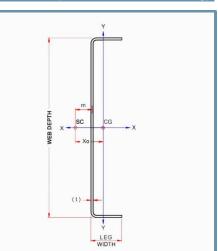
1200T300-97 (50ksi, CP60)

1200 (12") structural track with T300 (3") leg - 97mils (12ga)

| Coating: CP60 per AISI S240 | |
|-----------------------------|--|
| Geometric Properties | |

Color Code: Red

| Web depth: 12.356 in Leg width: 3.00 in | Thickness: 97mils (12ga) Design Thickness: 0.1017 in Min. steel thickness: 0.0966 in | Yield strength, Fy: 50 ksi *Fy with Cold-Work, Fya: 50.0 ksi Ultimate, Fu: 65.0 ksi | |
|---|--|---|--|
| Gross Section Properties of Full Section, Strong Axis | | | |
| Cross sectional area (A) |) | 1.828 in ² | |
| Member weight per foot | of length | 6.22 lb/ft | |
| Moment of inertia (Ix) | | 37.452 in ⁴ | |
| Section Modulus (Sx) | | 6.062in ³ | |
| Radius of gyration (Rx) | | 4.526 in | |
| Gross moment of inerita | ı (ly) | 1.310 in ⁴ | |
| Gross radius of gyration (Ry) | | 0.847 in | |
| Effective Section Properties, Strong Axis | | | |
| Effective Area (Ae) | | 0.776 in ² | |
| Moment of inertia for de | flection (Ix) | 33.385 in ⁴ | |
| Section modulus (Sx) | | 4.052 in ³ | |
| Allowable bending mom | ent (Ma) | 121.31 in-k | |
| Allowable shear force in | web | 7902 lb | |
| Torsional Properties | | | |
| St. Venant torsional con | stant (J x 1000) | 6.303 in ⁴ | |
| Warping constant (Cw) | | 36.357 in ⁶ | |
| Distance from shear center to neutral axis (Xo) | | -1.355 in | |
| Distance between shear center and web centerline (m) | | 0.871 in | |
| Radii of gyration (Ro) | | 4.800 in | |
| Torsional flexural consta | ant (Beta) | 0.920 | |



Load-bearing walls

Curtain walls

Tall interior walls

Floor & ceiling joists

Trusses



• 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 CCRR-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

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).