

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

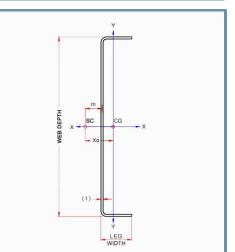
05.40.00 (Cold-Formed Metal Framing)

1400T150-68 (50ksi, CP60)

1400 (14") structural track with T150 (1-1/2") leg - 68mils (14ga)

		iiiio (14gu)
Coating: CP60 per AISI	S240	Color Code: Orange
Geometric Propert	ies	
Web depth: 14.250 in Leg width: 1.50 in	Thickness: 68mils (14ga) Design Thickness: 0.0713 in Min. steel thickness: 0.0677 in	Yield strength, Fy: 50 ksi *Fy with Cold-Work, Fya: 50.0 ksi Ultimate, Fu: 65.0 ksi
(Gross Section Properties of Full S	ection, Strong Axis
Cross sectional area (A)		1.211 in ²

Gross Section Properties of Full Section, Strong Axis			
Cross sectional area (A)	1.211 in ²		
Member weight per foot of length	4.12 lb/ft		
Moment of inertia (Ix)	27.000 in ⁴		
Section Modulus (Sx)	3.790in ³		
Radius of gyration (Rx)	4.722 in		
Gross moment of inerita (ly)	0.130 in ⁴		
Gross radius of gyration (Ry)	0.328 in		
Effective Section Properties, Strong Axis			
Effective Area (Ae)	0.381 in ²		
Moment of inertia for deflection (Ix)	23.807 in ⁴		
Section modulus (Sx)	2.352 in ³		
Allowable bending moment (Ma)	70.42 in-k		
Allowable shear force in web	2322 lb		
Torsional Properties			
St. Venant torsional constant (J x 1000)	2.052 in ⁴		
Warping constant (Cw)	5.349 in ⁶		
Distance from shear center to neutral axis (Xo)	-0.407 in		
Distance between shear center and web centerline (m)	0.280 in		
Radii of gyration (Ro)	4.751 in		
Torsional flexural constant (Beta)	0.993		



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).