

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

## 05.40.00 (Cold-Formed Metal Framing)

## 1400T200-97 (50ksi, CP60)

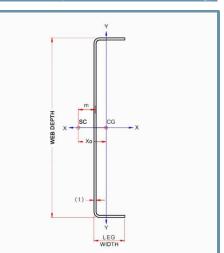
## 1400 (14") structural track with T200 (2") leg - 97mils (12ga)

Web depth: 14.356 in Leg width: 2.00 in	Thickness: 97mils (12ga) Design Thickness: 0.1017 in Min. steel thickness: 0.0966 in	Y *
Coating: CP60 per AISI Geometric Propert		

Color Code: Red

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 <sup>2</sup>		
Member weight per foot of length	6.22 lb/ft		
Moment of inertia (Ix)	43.791 in <sup>4</sup>		
Section Modulus (Sx)	6.101in <sup>3</sup>		
Radius of gyration (Rx)	4.894 in		
Gross moment of inerita (ly)	0.420 in <sup>4</sup>		
Gross radius of gyration (Ry)	0.479 in		
Effective Section Properties, Strong Axis			
Effective Area (Ae)	0.759 in <sup>2</sup>		
Moment of inertia for deflection (Ix)	41.756 in <sup>4</sup>		
Section modulus (Sx)	4.559 in <sup>3</sup>		
Allowable bending moment (Ma)	136.49 in-k		
Allowable shear force in web	6761 lb		
Torsional Properties			
St. Venant torsional constant (J x 1000)	6.303 in <sup>4</sup>		
Warping constant (Cw)	16.883 in <sup>6</sup>		
Distance from shear center to neutral axis (Xo)	-0.651 in		
Distance between shear center and web centerline (m)	0.439 in		
Radii of gyration (Ro)	4.960 in		
Torsional flexural constant (Beta)	0.983		



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
  o 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).