

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

## 05.40.00 (Cold-Formed Metal Framing)

## 550T250-43 (33ksi, CP60)

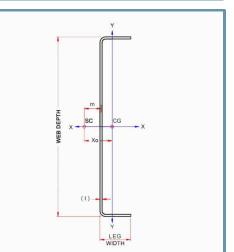
## 550 (5-1/2") structural track with T250 (2-1/2") leg - 43mils (18ga)

Coating: CP60 per AISI S240Color Code: YellowGeometric PropertiesYield strength, FyWeb depth: 5.661 in<br/>Leg width: 2.50 inThickness: 43mils (18ga)<br/>Design Thickness: 0.0451 inYield strength, Fy\*Fy with Cold-Wor

Min. steel thickness: 0.0428 in

Yield strength, Fy: 33 ksi \*Fy with Cold-Work, Fya: 33.0 ksi Ultimate, Fu: 45.0 ksi

Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.473 in <sup>2</sup>
Member weight per foot of length	1.61 lb/ft
Moment of inertia (Ix)	2.400 in <sup>4</sup>
Section Modulus (Sx)	0.848in <sup>3</sup>
Radius of gyration (Rx)	2.252 in
Gross moment of inerita (ly)	0.295 in <sup>4</sup>
Gross radius of gyration (Ry)	0.790 in
Effective Section Properties, Strong Axis	
Effective Area (Ae)	0.187 in <sup>2</sup>
Moment of inertia for deflection (lx)	1.841 in <sup>4</sup>
Section modulus (Sx)	0.516 in <sup>3</sup>
Allowable bending moment (Ma)	10.20 in-k
Allowable shear force in web	1504 lb
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.321 in <sup>4</sup>
Warping constant (Cw)	1.643 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-1.484 in
Distance between shear center and web centerline (m)	0.899 in
Radii of gyration (Ro)	2.810 in
Torsional flexural constant (Beta)	0.721



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
- 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).