

05.40.00 (Cold-Formed Metal Framing)

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



Solution Colvider Col

800T300-43 (33ksi, CP60)

800 (8") structural track with T300 (3") leg - 43mils (18ga)

Coating: CP60 per AISI S240 Color Code: Yellow

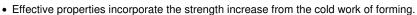
Geometric Properties

Web depth: 8.161 in Leg width: 3.00 in Thickness: 43mils (18ga) Design Thickness: 0.0451 in

Yield strength, Fy: 33 ksi
*Fy with Cold-Work, Fya: 33.0 ksi

Min. steel thickness: 0.0428 in Ultimate, Fu: 45.0 ksi

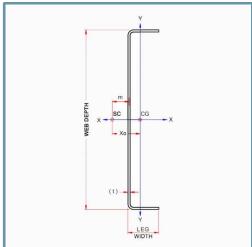
Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.631 in ²
Member weight per foot of length	2.15 lb/ft
Moment of inertia (lx)	6.374 in ⁴
Section Modulus (Sx)	1.562in ³
Radius of gyration (Rx)	3.178 in
Gross moment of inerita (ly)	0.540 in ⁴
Gross radius of gyration (Ry)	0.925 in
Effective Section Properties, Strong Axis	
Effective Area (Ae)	0.192 in ²
Moment of inertia for deflection (lx)	4.925 in ⁴
Section modulus (Sx)	0.737 in ³
Allowable bending moment (Ma)	14.56 in-k
Allowable shear force in web	1030 lb
Torsional Propertie	s
St. Venant torsional constant (J x 1000)	0.428 in ⁴
Warping constant (Cw)	6.330 in ⁶
Distance from shear center to neutral axis (Xo)	-1.657 in
Distance between shear center and web centerline (m)	1.024 in
Radii of gyration (Ro)	3.702 in
Torsional flexural constant (Beta)	0.800



 This section does not meet the requirements of AISI North American Specifications. Increase the thickness or contact ClarkDietrich Tech Support for design solutions.

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
 - o (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)
 - o 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
 - o 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



- 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).