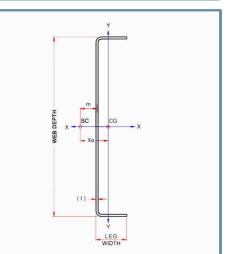


Technical Services: 888-437-3244, Engineering Services: 877-832-3206, Sales 800-543-7140

05.40.00 (Cold-Formed Metal Framing)

Coating: CP60 per AISI S240		Color Code: Orange	
Geometric Prope	rties		
Web depth: 5.750 in Leg width: 2.00 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 Section	ection, S	Strong Axis
Cross sectional area (A)			0.676 in ²
Member weight per foot of length			2.30 lb/ft
Moment of inertia (Ix)			3.275 in ⁴
Section Modulus (Sx)			1.139in ³
Radius of gyration (Rx)			2.201 in
Gross moment of inerita (ly)			0.248 in ⁴
Gross radius of gyration (Ry)			0.606 in
	Effective Section Properties	, Strong	Axis
Effective Area (Ae)			0.369 in ²
Moment of inertia for deflection (Ix)			2.895 in ⁴
Section modulus (Sx)			0.857 in ³
Allowable bending moment (Ma)			25.67 in-k
Allowable shear force in web			5350 lb
	Torsional Propert	ies	
St. Venant torsional constant (J x 1000)			1.146 in ⁴
Warping constant (Cw)			1.434 in ⁶
Distance from shear center to neutral axis (Xo)			-1.070 in
Distance between shear center and web centerline (m)			0.663 in
Radii of gyration (Ro)			2.521 in
Torsional flexural constant (Beta)			0.820



· 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).