Product Submittal Sheet

05.40.00 (Cold-Formed Metal Framing)

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses

Geometric Properties

- Web depth: 3.625 in
- Flange width: 1.625 in
- Punchout width: 1.50 in
- Stiffening lip: 0.500 in
- Punchout length: 4.00 in
- Design thickness: 0.0451 in
- 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): 0.340 in²
- Member weight per foot of length: 1.16 lb/ft
- Moment of inertia (Ix): 0.710 in⁴
- Section modulus (Sx): 0.392 in³
- Radius of gyration (Rx): 1.445 in
- Gross moment of inertia (Iy): 0.127 in⁴
- Gross radius of gyration (Ry): 0.611 in

Effective Section Properties, Strong Axis

- Effective Area (Ae): 0.248 in²
- Moment of inertia for deflection (Ix): 0.710 in⁴
- Section modulus (Sx): 0.372 in³
- Allowable bending moment (Ma): 7.34 in-k
- Allowable moment based on distortion buckling (Mad): 7.62 in-k
- Allowable shear force in web (solid section): 1739 lb
- Allowable shear force in web (perforated section): 676 lb
- Unbraced length (Lu): 42.5 in

Torsional Properties

- St. Venant torsion constant (J x 1000): 0.230 in⁴
- Warping constant (Cw): 0.376 in⁶
- Distance from shear center to neutral axis (Xo): -1.297 in
- Distance between shear center and web centerline (m): 0.782 in
- Radii of gyration (Ro): 2.036 in
- Torsional flexural constant (Beta): 0.594

ASTM & Code Standards:

- AISI North American Specification [NASPEC] S100-12
- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program, ICC-ES ESR-1166P and Intertek CCRR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at i tools.clarkdietrich.com

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

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). LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)