Product Submittal Sheet

Technical Services: 888-437-3244
Engineering Services: 877-832-3206
Sales: 800-543-7140
clarkdietrich.com

05.40.00 (Cold-Formed Metal Framing)

**Used in framing applications:**
- **Load-bearing walls**
- **Curtain walls**
- **Tall interior walls**
- **Floor & ceiling joists**
- **Trusses**

**Structural Stud**

**05.40.00 (Cold-Formed Metal Framing)**

**Structural Punchout**

East market punchout spacing:
- 12" from lead end then 24" o.c.

West market punchout spacing:
- 24" from lead end then 24" o.c.

**Product Submittal Sheet**

**Product category:** S162 (1-5/8" Flange Structural Stud)

**Product name:** 600S162-54 (50ksi, CP60) P - Punched
54mils (16ga)

Coating: CP60 per ASTM C955
Color coding: Green

**Geometric Properties**

- **Web depth:** 6.000 in
- **Flange width:** 1.625 in
- **Punchout width:** 1.50 in
- **Stiffening lip:** 0.500 in
- **Punchout length:** 4.00 in
- **Design thickness:** 0.0566 in
- **Min. steel thickness:** 0.0538 in
- **Yield strength, Fy:** 50 ksi
- **Fy with Cold-Work, Fya:** 55.3 ksi
- **Ultimate, Fu:** 65.0 ksi

**Gross Section Properties of Full Section, Strong Axis**

- **Cross sectional area (A):** 0.556 in²
- **Member weight per foot of length:** 1.89 lb/ft
- **Moment of inertia (Ix):** 2.861 in⁴
- **Section modulus (Sx):** 0.954 in³
- **Radius of gyration (Rx):** 2.268 in
- **Gross moment of inertia (Iy):** 0.180 in⁴
- **Gross radius of gyration (Ry):** 0.570 in

**Effective Section Properties, Strong Axis**

- **Effective Area (Ae):** 0.307 in²
- **Moment of inertia for deflection (Ix):** 2.860 in⁴
- **Section modulus (Sx):** 0.916 in³
- **Allowable bending moment (Ma):** 30.33 in-k
- **Allowable moment based on distortion buckling (Mad):** 23.17 in-k
- **Allowable shear force in web (solid section):** 2823 lb
- **Allowable shear force in web (perforated section):** 1947 lb
- **Unbraced length (Lu):** 31.4 in

**Torsional Properties**

- **St. Venant torsion constant (J x 1000):** 0.594 in⁴
- **Warping constant (Cw):** 1.337 in⁶
- **Distance from shear center to neutral axis (Xo):** -1.049 in
- **Distance between shear center and web centerline (m):** 0.663 in
- **Radii of gyration (Ro):** 2.563 in
- **Torsional flexural constant (Beta):** 0.833

**ASTM & Code Standards:**

- **AISI North American Specification [NASPEC] S100-16**
- **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 [itools.clarkdietrich.com](http://itools.clarkdietrich.com)**

**Sustainability Credits:**

For more details and LEED letters contact Technical Services at 888-437-3244 or visit [www.clarkdietrich.com/LEED](http://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)

**Project Information**

- **Name:**
- **Address:**

**Contractor Information**

- **Name:**
- **Contact:**
- **Phone:**
- **Fax:**

**Architect Information**

- **Name:**
- **Contact:**
- **Phone:**
- **Fax:**

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