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

**Product Submittal Sheet**

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

**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  
- **Stiffening lip:** 0.500 in  
- **Design thickness:** 0.0566 in  
- **Yield strength, Fy:** 50 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 (Ixx):** 2.861 in⁴  
- **Section modulus (Sx):** 0.954 in³  
- **Radius of gyration (Rx):** 2.268 in  
- **Gross moment of inertia (Ix):** 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):** 25.91 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] S100-12**  
- **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 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

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### Contractor Information

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