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  
- **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 (Iᵧ)**: 0.180 in⁴
- **Gross radius of gyration (Rᵧ)**: 0.570 in

**Effective Area Properties, Strong Axis**

- **Effective Area (Aₑ)**: 0.307 in²
- **Effective Moment of inertia for deflection (Iₓₑ)**: 2.860 in⁴
- **Effective Section Modulus (Sₓₑ)**: 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](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](mailto:info@clarkdietrich.com) / 888-437-3244

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**Project Information**

Name:  
Address:

**Contractor Information**

Name:  
Contact:  
Phone:  
Fax:

**Architect Information**

Name:  
Contact:  
Phone:  
Fax:

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