

**Product category:** S162 (1-5/8" Flange Structural Stud)  
**Product name:** **362S162-54 (50ksi, CP60) P - Punched**  
 54mils (16ga) Coating: CP60 per AISI S240  
 Color coding: Green

### 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	0.0566 in	Min. steel thickness	0.0538 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, Strong Axis

Cross sectional area (A)	0.422 in <sup>2</sup>
Member weight per foot of length	1.44 lb/ft
Moment of inertia (Ix)	0.873 in <sup>4</sup>
Section modulus (Sx)	0.482 in <sup>3</sup>
Radius of gyration (Rx)	1.438 in
Gross moment of inertia (Iy)	0.154 in <sup>4</sup>
Gross radius of gyration (Ry)	0.605 in

### Effective Section Properties, Strong Axis

Effective Area (Ae)	0.296 in <sup>2</sup>
Moment of inertia for deflection (Ix)	0.873 in <sup>4</sup>
Section modulus (Sx)	0.444 in <sup>3</sup>
Allowable bending moment (Ma)	13.28 in-k
Allowable moment based on distortion buckling (Mad)	12.94 in-k
Allowable shear force in web (solid section)	3372 lb
Allowable shear force in web (perforated section)	1016 lb
Unbraced length (Lu)	34.4 in

### Torsional Properties

St. Venant torsion constant (J x 1000)	0.451 in <sup>4</sup>
Warping constant (Cw)	0.457 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-1.283 in
Distance between shear center and web centerline (m)	0.774 in
Radii of gyration (Ro)	2.020 in
Torsional flexural constant (Beta)	0.597

### Code Approvals & Performance Standards

#### AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

#### AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

- 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 S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

#### ClarkDietrich's structural framing comply with:

- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at [www.clarkdietrich.com/SupportDocs](http://www.clarkdietrich.com/SupportDocs)

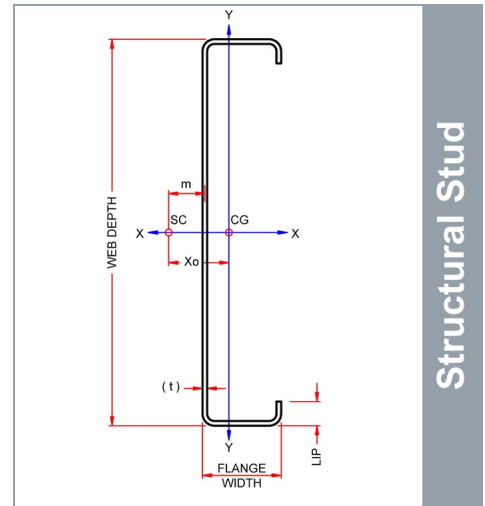
### Sustainability Credits:

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)

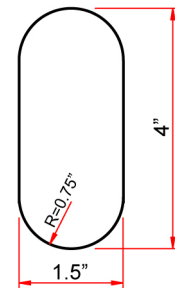
### 05.40.00 (Cold-Formed Metal Framing)



Structural Stud

Used in framing applications:

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



**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.