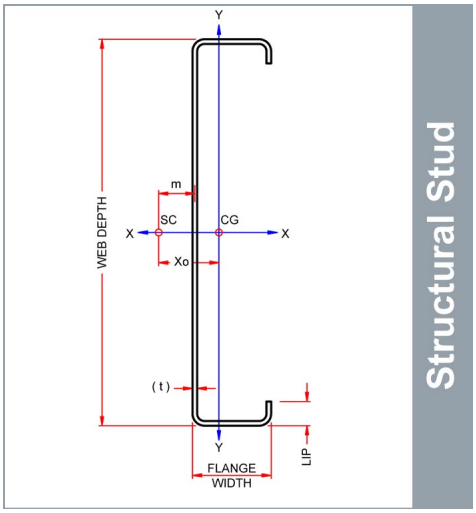
Product Submittal Sheet

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 AISI S240
Color coding: Green

05.40.00 (Cold-Formed Metal Framing)



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 in^2
Member weight per foot of length	1.89 lb/ft
Moment of inertia (Ix)	2.861 in^4
Section modulus (Sx)	0.954 in^3
Radius of gyration (Rx)	2.268 in
Gross moment of inertia (Iy)	0.180 in^4
Gross radius of gyration (Ry)	0.570 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.307 in^2
Moment of inertia for deflection (Ix)	2.860 in^4
Section modulus (Sx)	0.916 in^3
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 in^4
Warping constant (Cw)	1.337 in^6
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

Code Approvals & Performance Standards

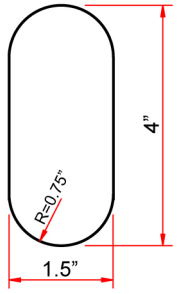
AISI S100-16 - North American Specification for the Design of CFS Structural Members
- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

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

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.

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)

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