



**Product category:** S200 (2" Flange Structural Stud)  
**Product name:** 1350S200-54 (50ksi, CP60) P - Punched  
 54mils (16ga) Coating: CP60 per ASTM C955  
 Color coding: Green

**Geometric Properties**

Web depth	13.500 in		
Flange width	2.000 in	Punchout width	1.50 in
Stiffening lip	0.625 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)	1.037 in <sup>2</sup>
Member weight per foot of length	3.53 lb/ft
Moment of inertia (Ix)	23.697 in <sup>4</sup>
Section modulus (Sx)	3.511 in <sup>3</sup>
Radius of gyration (Rx)	4.779 in
Gross moment of inertia (Iy)	0.403 in <sup>4</sup>
Gross radius of gyration (Ry)	0.623 in

**Effective Section Properties, Strong Axis**

Effective Area (Ae)	0.338 in <sup>2</sup>
Moment of inertia for deflection (Ix)	21.360 in <sup>4</sup>
Section modulus (Sx)	2.348 in <sup>3</sup>
Allowable bending moment (Ma)	70.31 in-k
Allowable moment based on distortion buckling (Mad)	60.08 in-k
Allowable shear force in web (solid section)	1221 lb
Allowable shear force in web (perforated section)	1221 lb
Unbraced length (Lu)	38.4 in

**Torsional Properties**

St. Venant torsion constant (J x 1000)	1.108 in <sup>4</sup>
Warping constant (Cw)	15.066 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.966 in
Distance between shear center and web centerline (m)	0.642 in
Radii of gyration (Ro)	4.916 in
Torsional flexural constant (Beta)	0.961

Web-depth to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

**ASTM & Code Standards:**

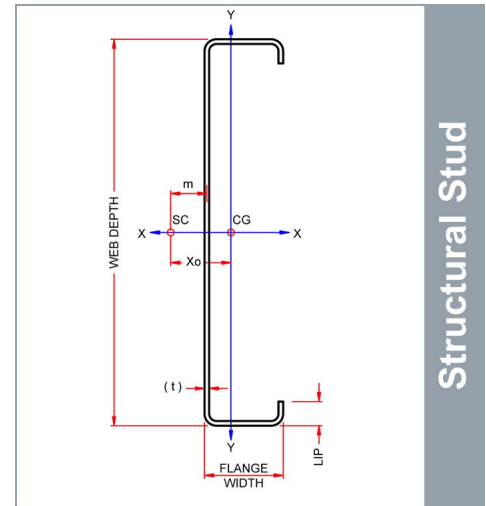
- AISI North American Specification [NASPEC] S100-12
- \* Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or 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 CCR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at [tools.clarkdietrich.com](http://tools.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).

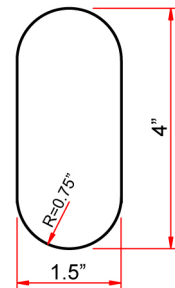
**LEED 2009 Credit MR 2 & MR 4** -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at ([info@clarkdietrich.com](mailto:info@clarkdietrich.com) / 888-437-3244)

**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.

**Project Information**

Name:  
Address:

**Contractor Information**

Name:  
Contact:  
Phone:  
Fax:

**Architect Information**

Name:  
Contact:  
Phone:  
Fax: