

**Product category:** S200 (2" Flange Structural Stud)  
**Product name:** **800S200-54 (50ksi, CP60) - Punched**  
54mils (16ga) Finish: CP60 per ASTM C955  
Color coding: Green

### Geometric Properties

Web depth	8.000 in	Punchout width	1.50 in
Flange width	2.000 in	Punchout length	4.00 in
Stiffening lip	0.625 in	Min. steel thickness	0.0538 in
Design thickness	0.0566 in	Fy with Cold-Work, Fya	50.0 ksi
Yield strength, Fy	50 ksi		
Ultimate, Fu	65.0 ksi		

### Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.726 in <sup>2</sup>
Member weight per foot of length	2.47 lb/ft
Moment of inertia (Ix)	6.574 in <sup>4</sup>
Section modulus (Sx)	1.644 in <sup>3</sup>
Radius of gyration (Rx)	3.009 in
Gross moment of inertia (Iy)	0.357 in <sup>4</sup>
Gross radius of gyration (Ry)	0.701 in

### Effective Section Properties, Strong Axis

Effective Area (Ae)	0.335 in <sup>2</sup>
Moment of inertia for deflection (Ix)	6.573 in <sup>4</sup>
Section modulus (Sx)	1.499 in <sup>3</sup>
Allowable bending moment (Ma)	44.87 in-k
Allowable moment based on distortion buckling (Mad)	37.39 in-k
Allowable shear force in web (solid section)	2091 lb
Allowable shear force in web (perforated section)	2091 lb
Unbraced length (Lu)	40.7 in

### Torsional Properties

St. Venant torsion constant (J x 1000)	0.775 in <sup>4</sup>
Warping constant (Cw)	4.663 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-1.265 in
Distance between shear center and web centerline (m)	0.804 in
Radii of gyration (Ro)	3.338 in
Torsional flexural constant (Beta)	0.856

### ASTM & Code Standards:

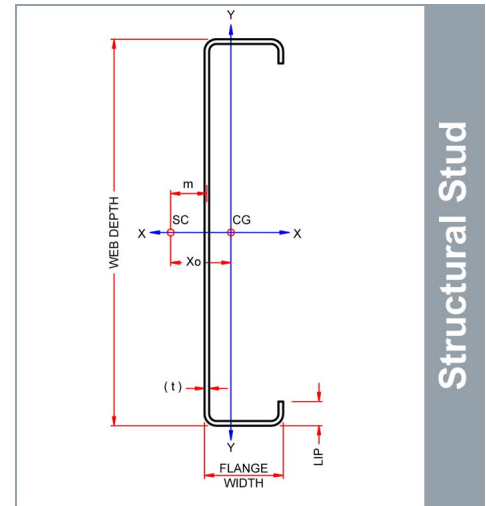
- AISI North American Specification [NASPEC] S100-07 with 2010 supplement
- \* Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955, A653 and A1003
- Galvanized sheet steel meets or exceeds requirements of ASTM A924
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program and ICC-ES ESR-1166P
- For installation & storage information refer to ASTM C1007
- MSDS & Product Certification Information is available at [www.clarkdietrich.com](http://www.clarkdietrich.com)

### GREEN Benefits and Recycled Content:

**LEED Credit MR 2** - ClarkDietrich products are manufactured from cold-formed steel. Steel is 100% recyclable, which helps divert debris from the waste stream. The contribution to LEED must be calculated by the contractor based on weight or volume.

**LEED Credit MR 4** - ClarkDietrich's steel products have a minimum recycled content of 34.9%, of which 24.3% is post-consumer, and 9.4% is pre-consumer. To report a higher number for your project or seek Credit MR 5, contact Technical Services at 888-437-3244 or visit [www.clarkdietrich.com](http://www.clarkdietrich.com).

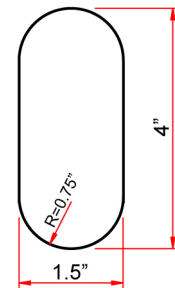
### 05.40.00 (Cold-Formed Metal Framing)



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: