

Product category: S250 (2-1/2" Flange Structural Stud)
Product name: **1150S250-68 (50ksi, CP60) P - Punched**
 68mils (14ga) Coating: CP60 per ASTM C955
 Color coding: Orange

Geometric Properties

| | | | |
|--------------------|-----------|------------------------|-----------|
| Web depth | 11.500 in | | |
| Flange width | 2.500 in | Punchout width | 1.50 in |
| Stiffening lip | 0.625 in | Punchout length | 4.00 in |
| Design thickness | 0.0713 in | Min. steel thickness | 0.0677 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) | 1.228 in ² |
| Member weight per foot of length | 4.18 lb/ft |
| Moment of inertia (Ix) | 22.081 in ⁴ |
| Section modulus (Sx) | 3.840 in ³ |
| Radius of gyration (Rx) | 4.241 in |
| Gross moment of inertia (Iy) | 0.828 in ⁴ |
| Gross radius of gyration (Ry) | 0.821 in |

Effective Section Properties, Strong Axis

| | |
|---|------------------------|
| Effective Area (Ae) | 0.490 in ² |
| Moment of inertia for deflection (Ix) | 21.382 in ⁴ |
| Section modulus (Sx) | 2.872 in ³ |
| Allowable bending moment (Ma) | 85.97 in-k |
| Allowable moment based on distortion buckling (Mad) | 78.38 in-k |
| Allowable shear force in web (solid section) | 2895 lb |
| Allowable shear force in web (perforated section) | 2895 lb |
| Unbraced length (Lu) | 48.3 in |

Torsional Properties

| | |
|--|------------------------|
| St. Venant torsion constant (J x 1000) | 2.081 in ⁴ |
| Warping constant (Cw) | 21.822 in ⁶ |
| Distance from shear center to neutral axis (Xo) | -1.391 in |
| Distance between shear center and web centerline (m) | 0.897 in |
| Radii of gyration (Ro) | 4.538 in |
| Torsional flexural constant (Beta) | 0.906 |

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 tools.clarkdietrich.com

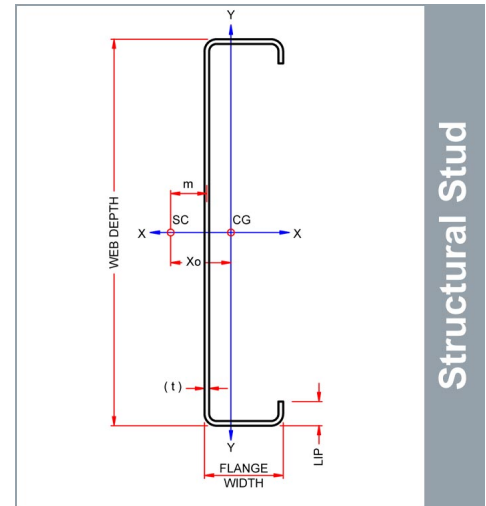
Sustainability Credits:

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)

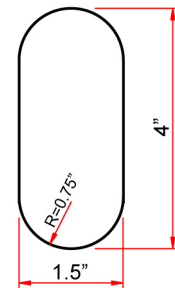
05.40.00 (Cold-Formed Metal Framing)



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: