

Product category: S300 (3" Flange Structural Stud)
Product name: **800S300-43 (33ksi, CP60) P - Punched**
 43mils (18ga) Coating: CP60 per ASTM C955
 Color coding: Yellow

Geometric Properties

Web depth	8.000 in	Punchout width	1.50 in
Flange width	3.000 in	Punchout length	4.00 in
Stiffening lip	0.625 in	Min. steel thickness	0.0428 in
Design thickness	0.0451 in	Fy with Cold-Work, Fya	33.0 ksi
Yield strength, Fy	33 ksi		
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.672 in ²
Member weight per foot of length	2.29 lb/ft
Moment of inertia (Ix)	6.730 in ⁴
Section modulus (Sx)	1.683 in ³
Radius of gyration (Rx)	3.164 in
Gross moment of inertia (Iy)	0.779 in ⁴
Gross radius of gyration (Ry)	1.076 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.302 in ²
Moment of inertia for deflection (Ix)	6.561 in ⁴
Section modulus (Sx)	1.313 in ³
Allowable bending moment (Ma)	25.95 in-k
Allowable moment based on distortion buckling (Mad)	22.75 in-k
Allowable shear force in web (solid section)	1051 lb
Allowable shear force in web (perforated section)	1051 lb
Unbraced length (Lu)	72.3 in

This section does not meet the requirements of AISI North American Specifications. Increase the thickness or contact ClarkDietrich Technical Services @ 888-437-3244 for design solutions.

Torsional Properties

St. Venant torsion constant (J x 1000)	0.456 in ⁴
Warping constant (Cw)	9.785 in ⁶
Distance from shear center to neutral axis (Xo)	-2.087 in
Distance between shear center and web centerline (m)	1.277 in
Radii of gyration (Ro)	3.940 in
Torsional flexural constant (Beta)	0.719

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 products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer).
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at tools.clarkdietrich.com

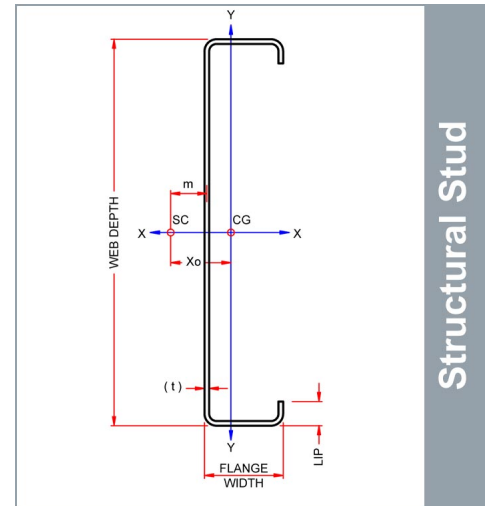
Sustainability Credits:

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).

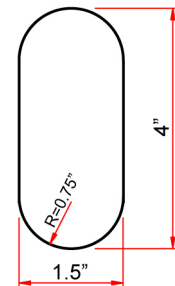
LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

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	Contractor Information	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax: