

Product Submittal Sheet

Technical Services: 888-437-3244 Engineering Services: 877-832-3206 Sales: 800-543-7140 clarkdietrich.com

S300 (3" Flange Structural Stud) **Product category:**

600S300-43 (33ksi, CP60) P - Punched **Product name:**

43mils (18ga) Coating: CP60 per ASTM C955

Color coding: Yellow

Geometric Properties

Web depth 6.000 in Flange width 3.000 in

Punchout width 1.50 in 4.00 in Stiffening lip 0.625 in Punchout length Design thickness 0.0451 in Min. steel thickness 0.0428 in Yield strength, Fy Fy with Cold-Work, Fya 33.0 ksi 33 ksi

Ultimate, Fu 45.0 ksi

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.582 in ²
Member weight per foot of length	1.98 lb/ft
Moment of inertia (Ix)	3.483 in⁴
Section modulus (Sx)	1.161 in ³
Radius of gyration (Rx)	2.446 in
Gross moment of inertia (Iy)	0.710 in ⁴
Gross radius of gyration (Ry)	1.105 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.300 in ²
Moment of inertia for deflection (Ix)	3.365 in⁴
Section modulus (Sx)	0.945 in ³
Allowable bending moment (Ma)	18.67 in-k
Allowable moment based on distortion buckling (Mad)	16.78 in-k
Allowable shear force in web (solid section)	1416 lb
Allowable shear force in web (perforated section)	1240 lb
Unbraced length (Lu)	72.9 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)	0.395 in⁴
Warping constant (Cw)	5.237 in ⁶
Distance from shear center to neutral axis (Xo)	-2.314 in
Distance between shear center and web centerline (m)	1.378 in
Radii of gyration (Ro)	3.543 in
Torsional flexural constant (Beta)	0.574

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 itools.clarkdietrich.com

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

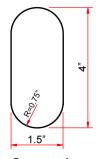
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

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)

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.

Mana a		
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax: