

Product Submittal Sheet

Technical Services: 888-437-3244 Engineering Services: 877-832-3206

Sales: 800-543-7140 clarkdietrich.com

Product category:	S250 (2	S250 (2-1/2" Flange Structural Stud)		05.40.00 (Cold-Formed Metal Framing)	
Product name:		250-43 (33ksi, CP60) P - I	Y		
	43mils	(18ga) Coating	: CP60 per ASTM C955		
		Color coding	-		
			j. Tellow		
Geometric Properti				<u>ס</u>	
	600 in			tc IIIIII	
Flange width 2.50		Punchout width	1.50 in		
Stiffening lip 0.62		Punchout length	4.00 in		
5	51 in	Min. steel thickness	0.0428 in		
Yield strength, Fy 33 k	si	Fy with Cold-Work, Fya	33.0 ksi		
Ultimate, Fu 45.0) ksi				
				Structural Stud	
Gross Section Prop					
Cross sectional area (A)			0.785 in ²		
Member weight per foot	of length		2.67 lb/ft		
Moment of inertia (Ix) Section modulus (Sx)			14.279 in ⁴ 2.483 in ³	FLANGE	
			2.483 m ³ 4.265 in	WIDTH	
Radius of gyration (Rx)	(1,4)		4.265 m 0.550 in ⁴		
Gross moment of inertia (ly) Gross radius of gyration (Ry)			0.837 in	Used in framing applications:	
	(13)		0.007 11	Load-bearing walls	
Effective Section Properties, Strong Axis				• Curtain walls	
Effective Area (Ae)			0.302 in ²		
Moment of inertia for de	flection (Ix)	13.394 in⁴	 Tall interior walls 	
Section modulus (Sx)	<i></i>		1.766 in ³	 Floor & ceiling joists 	
Allowable bending mom			34.90 in-k	•.	
Allowable moment based on distortion buckling (Mad)			31.59 in-k	• Trusses	
Allowable shear force in web (solid section)			725 lb		
Allowable shear force in web (perforated section) Unbraced length (Lu)			725 lb 60.0 in		
Unbraced length (Lu)			00.0 III		
Torsional Properties					
St. Venant torsion constant (J x 1000)			0.532 in⁴	*	
Warping constant (Cw)			14.361 in ⁶		
Distance from shear center to neutral axis (Xo)			-1.419 in	Ś	
Distance between shear center and web centerline (m)			0.913 in		
Radii of gyration (Ro)			4.572 in		
Torsional flexural consta	ant (Beta)		0.904	1.5"	
Web-depth to thickness ratio exce	eeds 200. Wet	o Stiffeners are required at all suppo	rt points and concentrated loads.	- 1.5 -	
ASTM & Code Sta	ndarde			Structural	
AISI North American Specific Alignment of the second				Punchout	
		East market punchout spacing:			
 * Effective properties incorporate the strength increase from the cold work of forming Gross properties are based on the cross section away from the punchouts 				12" from lead end then 24" o.c.	
Structural framing is produced to meet or exceed ASTM C955				West market punchout spacing:	
 Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003 ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance 				24" from lead end then 24" o.c.	
Clark Dietrich's structural a Certification Program, ICC					
 For installation & storage 					
		ion is available at <u>itools.clarko</u>	lietrich.com		
Sustainability Credits:					
			-437-3244 or visit www.clarkdie		
		closure and Optimization: EPD (1 nts) - Innovation Credit (up to 2 pc		I point) - Material Ingredients (1 point) - Construction and	
				e recycled content of 34.2% (19.8% post-consumer and	
			se contact us at (info@clarkdietrich.c		

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