

## **Product Submittal Sheet**

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

Product category: Product name:		S250 (2-1/2" Flange Structural Stud)			05.40.00 (Cold-Formed Metal Framin
			50-68 (50ksi, CP60) P - P	unched	
		68mils	(14ga) Coating	g: CP60 per ASTM C955	
			Color coding	g: Orange	
Geometric Pro	perties				
Neb depth	9.250 i				
Tange width	2.500 i		Punchout width	1.50 in	, m .
Stiffening lip	0.625 i		Punchout length	4.00 in	
Design thickness	0.0231		Min. steel thickness	0.0677 in	
ield strength, Fy	50 ksi	, 111	Fy with Cold-Work, Fya	54.4 ksi	× xo
lltimate, Fu	65.0 ks	si	r y with Cold-Work, r ya	5-1- KSI	
Fross Section I	Proner	ties of	f Full Section, Strong	Avis	
Cross sectional are			(t)		
		lenath		1.067 in <sup>2</sup> 3.63 lb/ft	
Member weight per foot of length Moment of inertia (Ix)				13.074 in <sup>4</sup>	
Section modulus (Sx)				2.827 in <sup>3</sup>	
Radius of gyration				3.500 in	WIDTH -
Gross moment of i		/)		0.783 in <sup>4</sup>	
Gross radius of gy				0.856 in	Used in framing applications:
		• /			<ul> <li>Load-bearing walls</li> </ul>
Effective Section Properties, Strong Axis					• Curtain walls
Effective Area (Ae)	)			0.488 in <sup>2</sup>	
Noment of inertia f		ction (Ix	.)	13.031 in⁴	<ul> <li>Tall interior walls</li> </ul>
Section modulus (Sx)				2.467 in <sup>3</sup>	<ul> <li>Floor &amp; ceiling joists</li> </ul>
Allowable bending moment (Ma)				80.34 in-k	
Allowable moment based on distortion buckling (Mad)				66.24 in-k	• Trusses
Allowable shear force in web (solid section)				3628 lb	
Allowable shear force in web (perforated section) Unbraced length (Lu)				3483 lb 47.1 in	
<b>Forsional Prop</b>					
St. Venant torsion constant (J x 1000)				1.809 in <sup>4</sup>	<b>*</b>
Warping constant (Cw)				13.349 in <sup>6</sup>	*
Distance from shear center to neutral axis (Xo) Distance between shear center and web centerline (m)				-1.542 in 0.975 in	
Radii of gyration (Ro)				3.919 in	
Torsional flexural constant (Beta)				0.845	1.5"
					Structural
ASTM & Code Standards: • AISI North American Specification [NASPEC] \$100-12					Punchout
* Effective propertie		-			
Gross properties ar			East market punchout spacing:		
Structural framing is	s produce	ed to mee	12" from lead end then 24" o.c.		
Sheet steel meets of			West market punchout spacing:		
ClarkDietrich's struc Certification Progra			24" from lead end then 24" o.c.		
For installation & st					
			ion is available at itools.clarke	dietrich.com	
<b>Sustainability Cred</b> for more details and		ters cont	act Technical Services at 888	-437-3244 or visit www.clarkdie	etrich.com/LEED
					(1 point) - Material Ingredients (1 point) - Construction and
emolition Waste Mana	igement (u	p to 2 poir	nts) - Innovation Credit (up to 2 po	pints).	
				ecyclable and have a national avera se contact us at (info@clarkdietrich.)	age recycled content of 34.2% (19.8% post-consumer and com / 888-437-3244)

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