

# **Product Submittal Sheet**

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

Product category:		5162 (1-5/8" Flang	je Structural Stu	05.40.00 (Cold-Formed Metal Framing)	
Product name:		200S162-54 (50k	si, CP60) P - P		
	5	4mils (16ga)	Coating Color coding	:CP60 per AISI S240 :Green	
Geometric Pro	perties				σ
Web depth	12.000 i	n			
Flange width	1.625 in	Punchout	width	1.50 in	ŏ
Stiffening lip	0.500 in	Punchout	length	4.00 in	É sc cg
Design thickness	0.0566 i	n Min. steel	thickness	0.0538 in	
Yield strength, Fy	50 ksi	Fy with Co	old-Work, Fya	50.0 ksi	
Ultimate, Fu	65.0 ksi				
Gross Section	Propert	ies of Full Sec	tion, Strong	Axis	
Cross sectional area (A)				0.896 in <sup>2</sup>	
Member weight per foot of length				3.05 lb/ft	
Moment of inertia (IX) Section modulus (SX)				15.736 III* 2.623 in <sup>3</sup>	Ý d
Radius of gyration (Rx)				4.191 in	WIDTH
Gross moment of inertia (Iy)				0.212 in <sup>4</sup>	
Gross radius of gyrat	tion (Ry)			0.486 in	

## Effective Section Properties, Strong Axis

Effective Area (Ae)	0.312 in <sup>2</sup>
Moment of inertia for deflection (Ix)	14.299 in <sup>4</sup>
Section modulus (Sx)	1.914 in <sup>3</sup>
Allowable bending moment (Ma)	57.32 in-k
Allowable moment based on distortion buckling (Mad)	45.22 in-k
Allowable shear force in web (solid section)	1377 lb
Allowable shear force in web (perforated section)	1377 lb
Unbraced length (Lu)	30.5 in
<b>o</b> ( )	

#### **Torsional Properties**

St. Venant torsion constant (J x 1000)	0.957 in⁴
Warping constant (Cw)	6.340 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-0.732 in
Distance between shear center and web centerline (m)	0.493 in
Radii of gyration (Ro)	4.282 in
Torsional flexural constant (Beta)	0.971

### **Code Approvals & Performance Standards**

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
  Gross properties are based on the cross section away from the punchouts
- Web-depth to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.
   AISI S240-15 North American Standard for Cold-Formed Steel Structural Framing
- (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2017)
- Section A3 Material Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
- · Section A5 Products Thickness, shapes, tolerances, identification
- Section C Installation (Referencing ASTM C1007)
- AISI S202-15 Code of Standard Practice for Cold-Formed Steel Structural Framing
- · Section F3 Delivery, Handling and Storage of Materials
- ClarkDietrich's structural framing comply with:
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

#### **Structural Punchout**

1.5"

East Coast / Central punch spacing: Center of punchouts are

12" from lead end, then 24" o.c.

#### West Coast punch spacing:

Center of punchouts are 24" from lead end, then 24" o.c.

Center of tail end puchout not less than 12" from end of stud.

If lateral bracing is required for head-of-wall deflection track and a punchout is not spaced 12" from the top of stud, use strapping and blocking in lieu of CRC or Spazzer Bar lateral bridging.

If custom punchout patterns are required, contact ClarkDietrich Sales or local plant for requests.

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED. LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and

Demolition Waste Management (up to 2 points) 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).