

05.40.00 (Cold-Formed Metal Framing)





925S162-54-P (50ksi, CP60, Punched)

9-1/4" structural stud with S162 (1-5/8") flange - 54mils (16ga)

Coating: CP60 per AISI S240 Color Code: Green

Geometric Properties

Web depth: 9.250 in Thickness: 54mils (16ga) Yield strength, Fy: 50 ksi Flange width: 1.625 in Design Thickness: 0.0566 in *Fy with Cold-Work, Fya: 50.0 ksi

Stiffening lip: 0.500 in Min. steel thickness: 0.0538 in Ultimate, Fu: 65.0 ksi **Gross Section Properties of Full Section, Strong Axis** Cross sectional area (A) 0.740 in^2 2.52 lb/ft Member weight per foot of length 8.201 in⁴ Moment of inertia (Ix) 1.773 in³ Section Modulus (Sx) Radius of gyration (Rx) 3.328 in Gross moment of inertia (ly) 0.201 in⁴ Gross radius of gyration (Ry) 0.521 in **Effective Section Properties, Strong Axis** 0.311 in² Effective Area (Ae) Moment of inertia for deflection (Ix) 7.841 in⁴ Section modulus (Sx) 1.443 in³ Allowable bending moment (Ma) 43.22 in-k Allowable moment based on distortion buckling (Mad) 36.29 in-k Allowable shear force in web (solid section) 1800 lb Allowable shear force in web (perforated section) 1800 lb Unbraced length (Lu) 31.6 in **Torsional Properties** 0.791 in⁴ St. Venant torsional constant (J x 1000) 3.521 in⁶ Warping constant (Cw) Distance from shear center to neutral axis (Xo) -0.848 in Distance between shear center and web centerline (m) 0.556 in 3.474 in

- Effective properties incorporate the strength increase from the cold work of forming.
- Gross properties are based on the cross section away from the punchouts.
- Effective properties are based on knockout/punched sections.

Code Approvals & Performance Standards

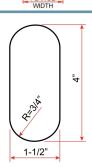
Radii of gyration (Ro)

Torsional flexural constant (Beta)

- AISI S100-16 (2020) w/S2-20 North American Specification for the Design of Cold-Formed Steel Structural Members
- AISI S240-20 North American Standard for Cold-Formed Steel Structural Framing
 - o (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)

0.940

- Section A3 Material Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
- o Section A5 Products Thickness, shapes, tolerances, identification
- Section C Installation (Referencing ASTM C1007)
- AISI S202-20 Code of Standard Practice for Cold-Formed Steel Structural Framing
 - o Section F3 Delivery, Handling and Storage of Materials
- SDS For ASTM A1003 Steel Framing Products For Interior Framing, Exterior Framing and Clips/Accessories



Structural Punchout

East Coast / Central punch spacing:

Center of punchoutss 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 punchout 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).