Product Submittal Sheet

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

Product category: (TLD) TRAKLOC Deflection Stud
Product name: 362TLD125-30 33ksi G40 - Punched
3-5/8" TRAKLOC Stud 30 mils (20ga DW)

Coating: G40
Color coding: Pink

Geometric Properties

- Web depth: 3.625 in
- Flange width: 1.250 in
- Stiffening lip: 0.288 in
- Design thickness: 0.0312 in
- Yield stress, Fy: 33 ksi

- Weight: 0.689 lb/ft
- Punchout width: 1.500 in
- Punchout length: 4.000 in
- Minimum thickness: 0.0296 in

Gross Section Properties of Full Section, Strong Axis

- Cross sectional area (A): 0.202 in²
- Moment of inertia (Ix): 0.404 in⁴
- Radius of gyration (Rx): 1.413 in
- Gross moment of inertia (Iy): 0.040 in⁴
- Gross radius of gyration (Ry): 0.445 in

Effective Section Properties, Strong Axis

- Effective area (Ae): 0.114 in²
- Moment of inertia for deflection (Ixe): 0.401 in⁴
- Section modulus (Sxe): 0.179 in³
- Allowable bending moment - Local buckling (Mal): 3531 in-lbs
- Allowable bending moment - Distortional buckling (Mad): 3822 in-lbs
- Allowable shear force in web (Unpunched) (Vag): 785 lb
- Allowable shear force in web (Punched) (Vanet): 453 lb

Torsional Properties

- St. Venant torsion constant (J x 1000): 0.0657 in⁴
- Warping constant (Cw): 0.108 in⁶
- Distance from shear center to neutral axis (Xo): -0.859 in
- Radii of gyration (Ro): 1.712 in
- Torsional flexural constant (Beta): 0.748
- Stud/track end reaction (Rx): 126 lbs
- Unbraced Length (Lu): 30.8 in

Notes:
• Calculated properties are based on AISI S100-07 w/ S2-10 Supplement and AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members.
• Gross and torsional properties are based on full-unreduced cross section of the studs, away from punch-outs.
• The allowable moment based on local buckling (Mal) is based on the compression flange continuously braced.
• The distortional buckling moment (Mad) does not consider the beneficial effect of sheathing to rotational stiffness.
• For deflection calculations, use the effective moment of inertia.
• Stud/Track End Reaction (Rx) is the maximum end reaction (web crippling) capacity based on a minimum bearing length of 1 inch.
• East Coast Punch Pattern: Center of knockouts are 12" from the leading edge then 48" o.c.
• West Coast Punch Pattern: Center of knockouts are 24" from the leading edge then 48" o.c.

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)

Project Information
Name:
Address:

Contractor Information
Name:
Contact:
Phone:
Fax:

Architect Information
Name:
Contact:
Phone:
Fax:

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**Product category:** (TLD) TRAKLOC Deflection Stud  
**Product name:** 362TLD125-30 33ksi G40 - Punched  
3-5/8" TRAKLOC Stud 30 mils (20ga DW)

### 3-5/8" TRAKLOC Stud 30 mils (20ga DW) Drywall Stud - COMPOSITE Limiting Heights (AC86-2012)

**(1 layer) 5/8" Type X Gypsum Board**

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**Composite Table Notes:**
- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program were observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of 5/8" Type X Gypsum Board complying with ASTM C1396 and from the following manufacturers: American Gypsum, CertainTeed, Georgia Pacific, Continental, National Gypsum or USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754 using minimum No. 6 Type S fine thread Drywall bugle head screws spaced as listed below:
  - Screws spaced a maximum of 16 inch on-center to framing members spaced at 12 inch on-center.
  - Screws spaced a maximum of 12 inch on-center to framing members spaced at 16 inch or 24 inch on-center.
  - Screws spaced 16 inch on-center to the top and bottom track.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754.
- Stud end bearing must be a minimum of 1 inch.
- The minimum overlap of the TSO (Outer Stud) and TSE (Inner Stud) must be 8 inches and the maximum un-lapped length of the TSE must be 4 inches.
- f: Adjacent to the height value indicates that flexural stress controls the allowable wall height.
- s: Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

### 3-5/8" TRAKLOC Stud 30 mils (20ga DW) Drywall Stud - NON-COMPOSITE Limiting Heights (FULLY BRACED)

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**Non-Composite Table Notes:**
- Heights are based on AISI S100-07 w/S2-10 Supplement, and AISI S100-12 Specification using steel properties alone.
- Compression flange must be continuously braced.
- End bearing must be 1 inch.
- The minimum overlap of the TSO (Outer Stud) and TSE (Inner Stud) must be 8 inches and the maximum un-lapped length of the TSE must be 4 inches.
- e: Web stiffeners are required at the stud/track connection.