Product Submittal Sheet

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

09.22.16 (Non-Structural Metal Framing)

 ASTM & Code Standards:
• AISI-NASPEC 2007 w/S2-10
• Meets or exceeds ASTM C645
• ICC ESR-1464 - Evaluation Report
• SDS & Product Certification Information available at www.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

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
Radius 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 12" 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)

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### Product Submittal Sheet

**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)

<table>
<thead>
<tr>
<th>Spacing (inches)</th>
<th>5 psf</th>
<th>7.5 psf</th>
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<tbody>
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<td>L/120</td>
<td>L/240</td>
<td>L/360</td>
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<tr>
<td>12</td>
<td>24'-7&quot;</td>
<td>20'-2&quot;</td>
<td>17'-10&quot;</td>
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<td>24</td>
<td>20'-1&quot;</td>
<td>16'-7&quot;</td>
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</tr>
</tbody>
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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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<tr>
<td>24</td>
<td>15'-4&quot;</td>
<td>13'-10&quot;</td>
<td>12'-1&quot;</td>
</tr>
</tbody>
</table>

**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.