Product Submittal Sheet

**Product category:** (TLD) TRAKLOC Deflection Stud
**Product name:** 362TLD125-24 57ksi G40 - Punched
3-5/8” TRAKLOC Stud 24 mils (20ga EQ)

**Coating:** G40
**Color coding:** Pink

**Geometric Properties**
- **Web depth:** 3.625 in
- **Weight:** 0.554 lb/ft
- **Flange width:** 1.250 in
- **Punchout width:** 1.500 in
- **Stiffening lip:** 0.288 in
- **Punchout length:** 4.000 in
- **Design thickness:** 0.0250 in
- **Minimum thickness:** 0.0238 in
- **Yield stress, Fy:** 57 ksi

**Gross Section Properties of Full Section, Strong Axis**
- **Cross sectional area (A):** 0.163 in²
- **Moment of inertia (Ix):** 0.327 in⁴
- **Radius of gyration (Rx):** 1.416 in
- **Gross moment of inertia (Iy):** 0.033 in⁴
- **Gross radius of gyration (Ry):** 0.448 in

**Effective Section Properties, Strong Axis**
- **Effective area (Ae):** 0.067 in²
- **Moment of inertia for deflection (Ixe):** 0.306 in⁴
- **Section modulus (Sxe):** 0.109 in³
- **Allowable bending moment - Local buckling (Mal):** 3710 in-lbs
- **Allowable bending moment - Distortional buckling (Mad):** 3986 in-lbs
- **Allowable shear force in web (Unpunched) (Vag):** 402 lb
- **Allowable shear force in web (Punched) (Vanet):** 292 lb

**Torsional Properties**
- **St. Venant torsion constant (J x 1000):** 0.0339 in³
- **Warping constant (Cw):** 0.088 in⁶
- **Distance from shear center to neutral axis (Xo):** -0.866 in
- **Radius of gyration (Ro):** 1.719 in
- **Torsional flexural constant (Beta):** 0.746
- **Stud/track end reaction (Rx):** 107 lbs
- **Unbraced Length (Lu):** 23.5 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 24” 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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**Project Information**

**Name:**
**Address:**

**Contractor Information**

**Name:**
**Contact:**
**Phone:**
**Fax:**

**Architect Information**

**Name:**
**Contact:**
**Phone:**
**Fax:**

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**Product Submittal Sheet**

**Product category:** (TLD) TRAKLOC Deflection Stud

**Product name:**
- 362TLD125-24 57ksi G40 - Punched
- 3-5/8” TRAKLOC Stud 24 mils (20ga EQ)

### 3-5/8” TRAKLOC Stud 24 mils (20ga EQ) Drywall Stud - COMPOSITE Limiting Heights (AC86-2012)

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

<table>
<thead>
<tr>
<th>Spacing (inches)</th>
<th>5 psf</th>
<th>7.5 psf</th>
<th>10 psf</th>
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<td>L/120</td>
<td>L/240</td>
<td>L/360</td>
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<tr>
<td>12</td>
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<td>19'-1&quot;</td>
<td>16'-8&quot;</td>
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<tr>
<td>24</td>
<td>19'-1&quot;</td>
<td>15'-2&quot;</td>
<td>13'-3&quot;</td>
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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 16inch 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 24 mils (20ga EQ) Drywall Stud - NON-COMPOSITE Limiting Heights (FULLY BRACED)

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<tr>
<td>24</td>
<td>15'-9&quot;</td>
<td>12-7&quot;</td>
<td>11-0&quot;</td>
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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.

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**Extension Insert with Flange Slots**

**Place Top Wallboard Screw Through Slot Location Only**

**Do Not Screw to the Top Track**

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**Project Information**

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**Contractor Information**

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