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)

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

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 in⁵
- 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 24" from the leading edge then 48" o.c.

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

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

<table>
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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/2010 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.

WALL BOARD FINISH HEIGHT IS DEPENDENT ON THE DEFLECTION GAP REQUIRED
DO NOT SCREW THE BOARD TO THE TOP TRACK

EXTENSION INSERT WITH FLANGE SLOTS
PLACE TOP WALLBOARD SCREW THRU SLOT LOCATION ONLY
DO NOT SCREW THRU STUD OVERLAP
TRAKLOC STUD

Project Information
Name:
Address:

Contractor Information
Name:
Contact:
Phone:
Fax:

Architect Information
Name:
Contact:
Phone:
Fax:

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