Product Submittal Sheet

Product category: (TLE) TRAKLOC Elevator Stud
Product name: 362TLE125-24 57ksi G40 - Punched
3-5/8" TRAKLOC Stud 24 mils (20ga EQ)
Coating: G40
Color coding: Pink

Geometric Properties
- Web depth: 3.625 in
- Flange width: 1.250 in
- Stiffening lip: 0.288 in
- Design thickness: 0.0250 in
- Yield stress, Fy: 57 ksi

Gross Section Properties of Full Section, Strong Axis
- Cross sectional area (A): 0.158 in²
- Moment of inertia (Iₓ): 0.306 in⁴
- Radius of gyration (Rₓ): 1.390 in
- Gross moment of inertia (Iᵧ): 0.029 in⁴
- Gross radius of gyration (Rᵧ): 0.425 in

Effective Section Properties, Strong Axis
- Effective area (Aₑ): 0.066 in²
- Moment of inertia for deflection (Iₓₑ): 0.281 in⁴
- Section modulus (Sₓₑ): 0.104 in³
- Allowable bending moment - Local buckling (Mₐ): 3562 in-lbs
- Allowable bending moment - Distortional buckling (Mₐd): 3520 in-lbs
- Allowable shear force in web (Unpunched) (Vₑₐ): 408 lb
- Allowable shear force in web (Punched) (Vₑₐₜ): 288 lb

Torsional Properties
- St. Venant torsion constant (J x 1000): 0.0330 in⁴
- Warping constant (Cw): 0.076 in⁶
- Distance from shear center to neutral axis (Xₒ): -0.817 in
- Radii of gyration (Rₒ): 1.667 in
- Torsional flexural constant (β): 0.760
- Stud/track end reaction (Rx): 107 lbs
- Unbraced Length (Lu): 22.4 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 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.
- The minimum overlap of the TSO (Outer Stud) and TSE (Inner Stud) must be minimum 11 inches and for the non-composite wall configuration must be connected with a minimum of (4) #8 x 9/16" long water head screws complying with ASTM C1513.
- 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.

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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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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

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<td>24</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 12 inch on-center studs.
  - 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 11 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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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 11 inches and must be connected with a minimum of (4) #8 x 9/16” long wafer head screws complying with ASTM C1513.
- e: Web stiffeners are required at the stud/track connection.