

Product category: (TLF) TRAKLOC Fixed Length Stud
Product name: **362TLF125-18 33ksi G40 - Punched**
3-5/8" TRAKLOC Stud 18 mils (25ga)
Coating: G40
Color coding: None

Geometric Properties

| | | | |
|------------------|-----------|-------------------|-------------|
| Web depth | 3.625 in | Weight | 0.419 lb/ft |
| Flange width | 1.250 in | Punchout width | 1.500 in |
| Stiffening lip | 0.288 in | Punchout length | 4.000 in |
| Design thickness | 0.0188 in | Minimum thickness | 0.0179 in |
| Yield stress, Fy | 33 ksi | | |

Gross Section Properties of Full Section, Strong Axis

| | |
|-------------------------------|-----------------------|
| Cross sectional area (A) | 0.123 in ² |
| Moment of inertia (Ix) | 0.248 in ⁴ |
| Radius of gyration (Rx) | 1.419 in |
| Gross moment of inertia (Iy) | 0.025 in ⁴ |
| Gross radius of gyration (Ry) | 0.451 in |

Effective Section Properties, Strong Axis

| | |
|--|-----------------------|
| Effective area (Ae) | 0.056 in ² |
| Moment of inertia for deflection (Ixe) | 0.243 in ⁴ |
| Section modulus (Sxe) | 0.091 in ³ |
| Allowable bending moment - Local buckling (Mal) | 1797 in-lbs |
| Allowable bending moment - Distortional buckling (Mad) | 1914 in-lbs |
| Allowable shear force in web (Unpunched) (Vag) | 170 lb |
| Allowable shear force in web (Punched) (Vanet) | 165 lb |

Torsional Properties

| | |
|---|------------------------|
| St. Venant torsion constant (J x 1000) | 0.0145 in ⁴ |
| Warping constant (Cw) | 0.068 in ⁶ |
| Distance from shear center to neutral axis (Xo) | -0.873 in |
| Radii of gyration (Ro) | 1.726 in |
| Torsional flexural constant (Beta) | 0.744 |

| | |
|------------------------------|---------|
| Stud/track end reaction (Rx) | 111 lbs |
| Unbraced Length (Lu) | 31.0 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.

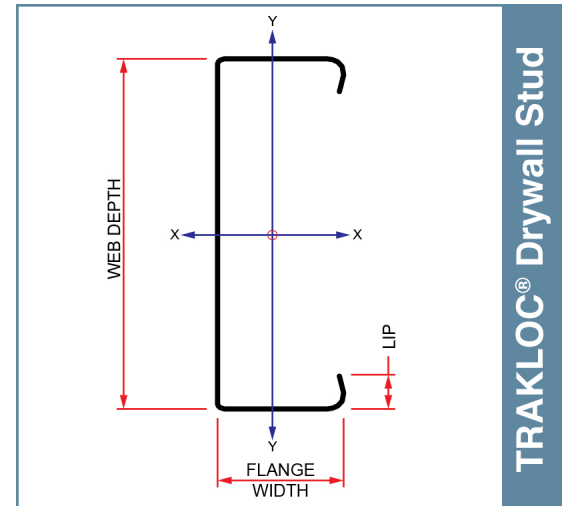
Sustainability Credits:

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)

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



Project Information

Name:
Address:

Contractor Information

Name:
Contact:
Phone:
Fax:

Architect Information

Name:
Contact:
Phone:
Fax:

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Product name: 362TLF125-18 33ksi G40 - Punched
3-5/8" TRAKLOC Stud 18 mils (25ga)

3-5/8" TRAKLOC Stud 18 mils (25ga) Drywall Stud - COMPOSITE Limiting Heights (AC86-2012)

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

| Spacing (inches) | 5 psf | | | 7.5 psf | | | 10 psf | | |
|---------------------|---------------------|---------|--------|----------------------|--------|--------|---------------------|---------------------|--------|
| | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 |
| 12 | 21'-7" | 17'-11" | 15'-8" | 18'-10" ^f | 15'-8" | 13'-8" | 16'-4" ^f | 14'-3" | 12'-5" |
| 16 | 20'-0" ^f | 16'-8" | 14'-7" | 16'-4" ^f | 14'-7" | 12'-8" | 14'-1" ^f | 13'-3" | 11'-6" |
| 24 | 16'-4" ^f | 14'-10" | 13'-0" | 13'-4" ^f | 13'-0" | 11'-2" | 11'-6" ^f | 11'-6" ^f | 9'-10" |

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.
- 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 18 mils (25ga) Drywall Stud - NON-COMPOSITE Limiting Heights (FULLY BRACED)

| Spacing (inches) | 5 psf | | | 7.5 psf | | | 10 psf | | |
|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 |
| 12 | 15'-6" ^e | 14'-9" | 12'-10" | 12'-8" ^e | 12'-8" ^e | 12'-8" ^e | 10'-11" ^e | 10'-11" ^e | 10'-11" ^e |
| 16 | 13'-5" ^e | 13'-4" ^e | 11'-8" ^e | 10'-11" ^e | 10'-11" ^e | 10'-11" ^e | 9'-6" ^e | 9'-6" ^e | 9'-6" ^e |
| 24 | 10'-11" ^e | 10'-11" ^e | 10'-2" ^e | 8'-11" ^e | 8'-11" ^e | 8'-11" ^e | 7'-9" ^e | 7'-9" ^e | 7'-9" ^e |

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.
- e: Web stiffeners are required at the stud/track connection.

Project Information

Name:
Address:

Contractor Information

Name:
Contact:
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Architect Information

Name:
Contact:
Phone:
Fax: