

**TRAKLOC® NON-COMPOSITE LIMITING HEIGHTS**  
48" O.C. BRACING

TRAKLOC Adjustable Studs (TLA)  
TRAKLOC Deflection Studs (TLD)

| Width (in) | Stud Member (TLA/TLD)                                 | Design thickness (in) | Yield strength (ksi) | Spacing (in) | 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     |
| 2-1/2      | TRAKLOC 25 (18mil)<br>250TLA/TLD125-18                | 0.0188                | 33                   | 12           | 12'-7"    | 11'-0"    | 9'-8"    | 10'-3" e  | 10'-3" e  | 9'-6"     | 8'-11" e  | 8'-11" e  | 8'-7" e   |
|            |   |                       |                      | 16           | 10'-11"   | 10'-0"    | 8'-9"    | 8'-11" e  | 8'-11" e  | 8'-7" e   | 7'-8" e   | 7'-8" e   | 7'-8" e   |
|            |   |                       |                      | 24           | 8'-11" e  | 8'-9" e   | 7'-8" e  | 7'-3" e   | 7'-3" e   | 7'-3" e   | 6'-3" e   | 6'-3" e   | 6'-3" e   |
|            | TRAKLOC 20EQ (24mil)<br>250TLA/TLD125-24              | 0.0250                | 57                   | 12           | 15'-0"    | 11'-11"   | 10'-5"   | 13'-2"    | 11'-8"    | 10'-3"    | 11'-5"    | 10'-8"    | 9'-3"     |
|            |   |                       |                      | 16           | 13'-7"    | 10'-10"   | 9'-5"    | 11'-5"    | 10'-8"    | 9'-3"     | 9'-11"    | 9'-8"     | 8'-5"     |
|            |   |                       |                      | 24           | 11'-5"    | 9'-5"     | 8'-3"    | 9'-4"     | 9'-3"     | 8'-1"     | 8'-1"     | 8'-1"     | 7'-4"     |
|            | TRAKLOC 30mil<br>250TLA/TLD125-30                     | 0.0312                | 33                   | 12           | 16'-5"    | 13'-1"    | 11'-5"   | 13'-9"    | 12'-10"   | 11'-3"    | 11'-11"   | 11'-8"    | 10'-2"    |
|            |   |                       |                      | 16           | 14'-7"    | 11'-10"   | 10'-4"   | 11'-11"   | 11'-8"    | 10'-2"    | 10'-4"    | 10'-4"    | 9'-3"     |
|            |   |                       |                      | 24           | 11'-11"   | 10'-4"    | 9'-1"    | 9'-9"     | 9'-9"     | 8'-11"    | 8'-5"     | 8'-5"     | 8'-1"     |
|            | TRAKLOC 33mil<br>250TLA/TLD125-33                     | 0.0346                | 33                   | 12           | 17'-0"    | 13'-6"    | 11'-9"   | 14'-8"    | 13'-3"    | 11'-7"    | 12'-9"    | 12'-1"    | 10'-6"    |
|            |   |                       |                      | 16           | 15'-5"    | 12'-3"    | 10'-8"   | 12'-9"    | 12'-1"    | 10'-6"    | 11'-0"    | 10'-11"   | 9'-7"     |
|            |   |                       |                      | 24           | 12'-9"    | 10'-8"    | 9'-4"    | 10'-5"    | 10'-5"    | 9'-2"     | 9'-0"     | 9'-0"     | 8'-4"     |
| 3-5/8      | TRAKLOC 25 (18mil)<br>362TLA/TLD125-18                | 0.0188                | 33                   | 12           | 14'-3"    | 14'-3"    | 12'-10"  | 11'-7" e  | 11'-7" e  | 11'-7" e  | 10'-1" e  | 10'-1" e  | 10'-1" e  |
|            |   |                       |                      | 16           | 12'-4" e  | 12'-4" e  | 11'-8" e | 10'-1" e  | 10'-1" e  | 10'-1" e  | 8'-9" e   | 8'-9" e   | 8'-9" e   |
|            |   |                       |                      | 24           | 10'-1" e  | 10'-1" e  | 10'-1" e | 8'-3" e   | 8'-3" e   | 8'-3" e   | 7'-1" e   | 7'-1" e   | 7'-1" e   |
|            | TRAKLOC 20EQ (24mil)<br>362TLA/TLD125-24              | 0.0250                | 57                   | 12           | 17'-11"   | 15'-11"   | 13'-11"  | 14'-8"    | 14'-8"    | 13'-8"    | 12'-8"    | 12'-8"    | 12'-5"    |
|            |   |                       |                      | 16           | 15'-7"    | 14'-5"    | 12'-7"   | 12'-8"    | 12'-8"    | 12'-5"    | 11'-0"    | 11'-0"    | 11'-0"    |
|            |   |                       |                      | 24           | 12'-8"    | 12'-7"    | 11'-0"   | 10'-4"    | 10'-4"    | 10'-4"    | 9'-0"     | 9'-0"     | 9'-0"     |
|            | TRAKLOC 30mil<br>362TLA/TLD125-30                     | 0.0312                | 33                   | 12           | 19'-11"   | 17'-5"    | 15'-2"   | 16'-3"    | 16'-3"    | 14'-11"   | 14'-1"    | 14'-1"    | 13'-7"    |
|            |   |                       |                      | 16           | 17'-3"    | 15'-10"   | 13'-10"  | 14'-1"    | 14'-1"    | 13'-7"    | 12'-3"    | 12'-3"    | 12'-3"    |
|            |   |                       |                      | 24           | 14'-1"    | 13'-10"   | 12'-1"   | 11'-6"    | 11'-6"    | 11'-6"    | 10'-0"    | 10'-0"    | 10'-0"    |
|            | TRAKLOC 33mil<br>362TLA/TLD125-33                     | 0.0346                | 33                   | 12           | 21'-6"    | 18'-0"    | 15'-8"   | 17'-7"    | 17'-7"    | 15'-5"    | 15'-3"    | 15'-3"    | 14'-0"    |
|            |   |                       |                      | 16           | 18'-8"    | 16'-4"    | 14'-3"   | 15'-3"    | 15'-3"    | 14'-0"    | 13'-2"    | 13'-2"    | 12'-9"    |
|            |   |                       |                      | 24           | 15'-3"    | 14'-3"    | 12'-5"   | 12'-5"    | 12'-5"    | 12'-3"    | 10'-9"    | 10'-9"    | 10'-9"    |
| 4          | TRAKLOC 25 (18mil)<br>400TLA/TLD125-18                | 0.0188                | 33                   | 12           | 15'-0"    | 15'-0"    | 13'-3"   | 12'-3" e  | 12'-3" e  | 12'-3" e  | 10'-7" e  | 10'-7" e  | 10'-7" e  |
|            |   |                       |                      | 16           | 12'-11" e | 12'-11" e | 12'-1" e | 10'-7" e  | 10'-7" e  | 10'-7" e  | 9'-2" e   | 9'-2" e   | 9'-2" e   |
|            |   |                       |                      | 24           | 10'-7" e  | 10'-7" e  | 10'-6" e | 8'-8" e   | 8'-8" e   | 8'-8" e   | 7'-6" e   | 7'-6" e   | 7'-6" e   |
|            | TRAKLOC 20EQ (24mil)<br>400TLA/TLD125-24              | 0.0250                | 57                   | 12           | 18'-10"   | 17'-2"    | 15'-0"   | 15'-4"    | 15'-4"    | 14'-9"    | 13'-4"    | 13'-4"    | 13'-4"    |
|            |   |                       |                      | 16           | 16'-4"    | 15'-8"    | 13'-8"   | 13'-4"    | 13'-4"    | 13'-4"    | 11'-6"    | 11'-6"    | 11'-6"    |
|            |   |                       |                      | 24           | 13'-4"    | 13'-4"    | 11'-11"  | 10'-10"   | 10'-10"   | 10'-10"   | 9'-5"     | 9'-5"     | 9'-5"     |
|            | TRAKLOC 30mil<br>400TLA/TLD125-30                     | 0.0312                | 33                   | 12           | 21'-0"    | 18'-9"    | 16'-5"   | 17'-2"    | 17'-2"    | 16'-2"    | 14'-10"   | 14'-10"   | 14'-8"    |
|            |   |                       |                      | 16           | 18'-2"    | 17'-1"    | 14'-11"  | 14'-10"   | 14'-10"   | 14'-8"    | 12'-10"   | 12'-10"   | 12'-10"   |
|            |   |                       |                      | 24           | 14'-10"   | 14'-10"   | 13'-0"   | 12'-1"    | 12'-1"    | 12'-1"    | 10'-6"    | 10'-6"    | 10'-6"    |
|            | TRAKLOC 33mil<br>400TLA/TLD125-33                     | 0.0346                | 33                   | 12           | 22'-8"    | 19'-5"    | 16'-11"  | 18'-6"    | 18'-6"    | 16'-8"    | 16'-0"    | 16'-0"    | 15'-2"    |
|            |   |                       |                      | 16           | 19'-8"    | 17'-8"    | 15'-5"   | 16'-0"    | 16'-0"    | 15'-2"    | 13'-11"   | 13'-11"   | 13'-9"    |
|            |   |                       |                      | 24           | 16'-0"    | 15'-5"    | 13'-5"   | 13'-1"    | 13'-1"    | 13'-1"    | 11'-4"    | 11'-4"    | 11'-4"    |
| 6          | TRAKLOC 25 (18mil)<br>600TLA/TLD125-18 <sup>2</sup>   | 0.0188                | 33                   | 12           | 19'-2" e  | 19'-2" e  | 18'-3" e | 15'-7" e  | 15'-7" e  | 15'-7" e  | 13'-6" e  | 13'-6" e  | 13'-6" e  |
|            |   |                       |                      | 16           | 16'-7" e  | 16'-7" e  | 16'-7" e | 13'-6" e  | 13'-6" e  | 13'-6" e  | 11'-9" e  | 11'-9" e  | 11'-9" e  |
|            |   |                       |                      | 24           | 13'-6" e  | 13'-6" e  | 13'-6" e | 11'-1" e  | 11'-1" e  | 11'-1" e  | 9'-7" e   | 9'-7" e   | 9'-7" e   |
|            | TRAKLOC 20EQ (24mil)<br>600TLA/TLD125-24 <sup>1</sup> | 0.0250                | 57                   | 12           | 24'-2"    | 23'-0"    | 20'-11"  | 19'-9"    | 19'-9"    | 19'-9"    | 17'-1"    | 17'-1"    | 17'-1"    |
|            |   |                       |                      | 16           | 20'-11"   | 20'-11"   | 18'-3"   | 17'-1"    | 17'-1"    | 17'-1"    | 14'-10" e | 14'-10" e | 14'-10" e |
|            |   |                       |                      | 24           | 17'-1"    | 17'-1"    | 15'-11"  | 13'-11" e | 13'-11" e | 13'-11" e | 12'-1" e  | 12'-1" e  | 12'-1" e  |
|            | TRAKLOC 30mil<br>600TLA/TLD125-30                     | 0.0312                | 33                   | 12           | 27'-7"    | 25'-8"    | 22'-5"   | 22'-7"    | 22'-7"    | 22'-1"    | 19'-6"    | 19'-6"    | 19'-6"    |
|            |   |                       |                      | 16           | 23'-11"   | 23'-4"    | 20'-5"   | 19'-6"    | 19'-6"    | 19'-6"    | 16'-11"   | 16'-11"   | 16'-11"   |
|            |   |                       |                      | 24           | 19'-6"    | 19'-6"    | 17'-10"  | 15'-11" e | 15'-11" e | 15'-11" e | 13'-10" e | 13'-10" e | 13'-10" e |
|            | TRAKLOC 33mil<br>600TLA/TLD125-33                     | 0.0346                | 33                   | 12           | 29'-11"   | 26'-7"    | 23'-3"   | 24'-5"    | 24'-5"    | 22'-11"   | 21'-2"    | 21'-2"    | 20'-9"    |
|            |   |                       |                      | 16           | 25'-11"   | 24'-2"    | 21'-2"   | 21'-2"    | 21'-2"    | 20'-9"    | 18'-4" e  | 18'-4" e  | 18'-4" e  |
|            |   |                       |                      | 24           | 21'-2"    | 21'-2"    | 18'-5"   | 17'-3" e  | 17'-3" e  | 17'-3" e  | 14'-11" e | 14'-11" e | 14'-11" e |

For SI Units: 1 inch = 25.4 mm, 1 ft = 0.3048m, 1 psf = 47.88 Pa.

**NOTES**

- Heights are based on AISI S100-07 w/S2-10 Supplement, and AISI S100-12 Specification using steel properties alone.
- Above listed Non-Composite Limiting Heights are applicable when the unbraced length is less than or equal to (Lu) as listed in section properties.
- 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.
- <sup>1</sup> Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- <sup>2</sup> Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- <sup>e</sup> Web stiffeners are required at the stud/track connection.