

ELEVATOR STUD SECTION PROPERTIES

TRAKLOC Elevator Studs (TLE)

Stud Member (TLE)	Design thickness (in)	Yield strength (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties					Effective Section Properties at F _y						
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _{sl} (in-lbs)	M _{ad} (in-lbs)	V _{a_g} (lbs)	V _{a_{net}} (lbs)
250TLE125-18	0.0188	33	0.099	0.34	0.098	0.080	0.997	0.019	0.444	0.056	0.082	0.059	1165	1123	256	197
250TLE125-24	0.0250	57	0.130	0.44	0.128	0.104	0.990	0.025	0.441	0.066	0.115	0.071	2423	2297	609	346
250TLE125-30	0.0312	33	0.161	0.55	0.156	0.128	0.982	0.031	0.438	0.113	0.163	0.125	2475	2515	832	372
250TLE125-33	0.0346	33	0.178	0.61	0.170	0.140	0.978	0.034	0.436	0.116	0.171	0.143	2824	3047	961	384
362TLE125-18	0.0188	33	0.120	0.41	0.234	0.131	1.398	0.022	0.428	0.056	0.204	0.084	1661	1687	172	164
362TLE125-24	0.0250	57	0.158	0.54	0.306	0.171	1.390	0.029	0.425	0.066	0.281	0.104	3562	3520	408	288
362TLE125-30	0.0312	33	0.196	0.67	0.375	0.211	1.382	0.035	0.422	0.114	0.372	0.179	3531	3822	799	446
362TLE125-33	0.0346	33	0.217	0.74	0.412	0.232	1.378	0.038	0.420	0.117	0.394	0.208	4116	4404	1024	512
400TLE125-18 ¹	0.0188	33	0.127	0.43	0.296	0.149	1.526	0.023	0.422	0.056	0.242	0.093	1843	1825	155	—
400TLE125-24	0.0250	57	0.168	0.57	0.387	0.196	1.518	0.029	0.419	0.067	0.356	0.120	4094	3957	368	311
400TLE125-30	0.0312	33	0.208	0.71	0.475	0.241	1.511	0.036	0.416	0.115	0.471	0.199	3930	4261	719	482
400TLE125-33	0.0346	33	0.230	0.78	0.522	0.265	1.506	0.039	0.414	0.118	0.481	0.232	4587	5195	985	591
600TLE125-18 ²	0.0188	33	0.165	0.56	0.787	0.264	2.187	0.025	0.391	0.056	0.609	0.148	2915	2744	102	—
600TLE125-24 ¹	0.0250	57	0.218	0.74	1.034	0.347	2.178	0.033	0.388	0.067	0.911	0.188	6427	5847	241	—
600TLE125-30	0.0312	33	0.270	0.92	1.274	0.429	2.170	0.040	0.384	0.117	1.195	0.352	6960	6491	470	470
600TLE125-33	0.0346	33	0.299	1.02	1.403	0.473	2.166	0.044	0.383	0.120	1.244	0.413	8164	7987	642	642

Stud Member (TLE)	Stud/Track End Reaction (R _x)	Torsional Properties						L _u (in)
	TLE (lbs)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β (Beta)	
250TLE125-18	39	0.0116	0.026	-0.946	0.568	1.445	0.571	30.1
250TLE125-24	108	0.0271	0.034	-0.940	0.564	1.435	0.570	22.8
250TLE125-30	137	0.0523	0.041	-0.934	0.561	1.425	0.570	30.0
250TLE125-33	149	0.0710	0.044	-0.931	0.559	1.419	0.570	28.5
362TLE125-18	47	0.0141	0.058	-0.823	0.511	1.677	0.759	29.6
362TLE125-24	107	0.0330	0.076	-0.817	0.508	1.667	0.760	22.4
362TLE125-30	138	0.0637	0.092	-0.811	0.504	1.657	0.760	29.4
362TLE125-33	133	0.0866	0.100	-0.808	0.503	1.651	0.761	27.9
400TLE125-18 ¹	38	0.0150	0.073	-0.789	0.495	1.769	0.801	29.4
400TLE125-24	119	0.0350	0.094	-0.783	0.492	1.759	0.802	22.3
400TLE125-30	152	0.0675	0.114	-0.778	0.488	1.749	0.802	29.2
400TLE125-33	153	0.0917	0.125	-0.774	0.487	1.744	0.803	27.7
600TLE125-18 ²	31	0.0194	0.181	-0.652	0.425	2.315	0.921	28.5
600TLE125-24 ¹	85	0.0454	0.235	-0.646	0.422	2.305	0.921	21.6
600TLE125-30	110	0.0878	0.287	-0.641	0.419	2.295	0.922	28.2
600TLE125-33	113	0.1194	0.314	-0.638	0.417	2.290	0.922	26.7

For SI Units: 1 inch = 25.4 mm, 1 lb = 4.45 N, 1 ksi = 6.89 N/m².

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 (M_{sd}) does not consider the beneficial effect of sheathing to rotational stiffness, K_φ = 0.
- For deflection calculations, use the effective moment of inertia.
- Stud/Track End Reaction (R_x) 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 wafer head screws complying with ASTM C1513.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- ² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.

TRAKLOC® COMPOSITE LIMITING HEIGHTS
 with 5/8" Type X Gypsum Board

TRAKLOC Elevator Studs (TLE)

Width (in)	Stud Member (TLE)	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) 250TLE125-18	0.0188	33	12	17'-0"	15'-1"	12'-11"	14'-11"	13'-2"	11'-4"	13'-6"	12'-0"	10'-3"
				16	15'-6"	13'-9"	11'-9"	13'-6"	12'-0"	10'-3"	12'-0" f	10'-11"	9'-0"
				24	13'-6"	12'-0"	10'-3"	11'-4" f	10'-6"	8'-6"	9'-10" f	9'-5"	—
	TRAKLOC 20EQ (24mil) 250TLE125-24	0.0250	57	12	18'-9"	15'-9"	13'-8"	16'-5"	13'-9"	12'-0"	14'-11"	12'-6"	10'-11"
				16	17'-1"	14'-4"	12'-5"	14'-11"	12'-6"	10'-11"	13'-6"	11'-4"	9'-11"
				24	14'-11"	12'-6"	10'-11"	13'-0"	10'-11"	9'-4"	11'-10"	9'-11"	7'-10"
	TRAKLOC 30mil 250TLE125-30	0.0312	33	12	20'-0"	16'-9"	14'-7"	17'-6"	14'-7"	12'-8"	15'-11"	13'-3"	11'-7"
				16	18'-2"	15'-2"	13'-3"	15'-11"	13'-3"	11'-7"	14'-5"	12'-1"	10'-6"
				24	15'-11"	13'-3"	11'-7"	13'-11"	11'-7"	10'-1"	12'-7"	10'-6"	8'-9"
	TRAKLOC 33mil 250TLE125-33	0.0346	33	12	20'-0"	16'-9"	14'-7"	17'-6"	14'-7"	12'-8"	15'-11"	13'-3"	11'-7"
				16	18'-2"	15'-2"	13'-3"	15'-11"	13'-3"	11'-7"	14'-5"	12'-1"	10'-6"
				24	15'-11"	13'-3"	11'-7"	13'-11"	11'-7"	10'-1"	12'-7"	10'-6"	8'-9"
3-5/8	TRAKLOC 25 (18mil) 362TLE125-18	0.0188	33	12	20'-7"	17'-2"	14'-6"	18'-0"	15'-0"	12'-8"	16'-1" f	13'-7"	11'-5"
				16	18'-9"	15'-7"	13'-2"	16'-1" f	13'-7"	11'-5"	13'-11" f	12'-4"	10'-2"
				24	16'-1" f	13'-7"	11'-5"	13'-2" f	11'-11"	9'-8"	11'-5" f	10'-8"	8'-7"
	TRAKLOC 20EQ (24mil) 362TLE125-24	0.0250	57	12	22'-6"	17'-10"	15'-7"	19'-8"	15'-7"	13'-7"	17'-10"	14'-2"	12'-5"
				16	20'-5"	16'-3"	14'-2"	17'-10"	14'-2"	12'-5"	16'-3"	12'-10"	11'-1"
				24	17'-10"	14'-2"	12'-5"	15'-7"	12'-5"	10'-7"	14'-2"	11'-1"	9'-5"
	TRAKLOC 30mil 362TLE125-30	0.0312	33	12	24'-5"	19'-5"	16'-11"	21'-4"	16'-11"	14'-10"	19'-5"	15'-5"	13'-5"
				16	22'-3"	17'-8"	15'-5"	19'-5"	15'-5"	13'-5"	17'-8"	14'-0"	12'-1"
				24	19'-5"	15'-5"	13'-5"	16'-11"	13'-5"	11'-7"	15'-5"	12'-1"	10'-4"
	TRAKLOC 33mil 362TLE125-33	0.0346	33	12	25'-4"	20'-1"	17'-7"	22'-2"	17'-7"	15'-4"	20'-1"	15'-11"	13'-11"
				16	23'-0"	18'-3"	15'-11"	20'-1"	15'-11"	13'-11"	18'-3"	14'-6"	12'-8"
				24	20'-1"	15'-11"	13'-11"	17'-7"	13'-11"	12'-1"	15'-11"	12'-8"	10'-11"
4	TRAKLOC 25 (18mil) 400TLE125-18	0.0188	33	12	21'-1"	18'-3"	15'-4"	18'-5"	15'-11"	13'-5"	16'-8"	14'-6"	12'-2"
				16	19'-1"	16'-7"	13'-11"	16'-8"	14'-6"	12'-2"	14'-8" f	13'-2"	10'-10"
				24	16'-8"	14'-6"	12'-2"	13'-10" f	12'-8"	10'-3"	12'-0" f	11'-5"	9'-1"
	TRAKLOC 20EQ (24mil) 400TLE125-24	0.0250	57	12	24'-9"	19'-8"	17'-2"	21'-8"	17'-2"	15'-0"	19'-8"	15'-7"	13'-8"
				16	22'-6"	17'-10"	15'-7"	19'-8"	15'-7"	13'-8"	17'-8" f	14'-2"	12'-5"
				24	19'-8"	15'-7"	13'-8"	16'-8" f	13'-8"	11'-11"	14'-5" f	12'-5"	10'-6"
	TRAKLOC 30mil 400TLE125-30	0.0312	33	12	27'-3"	21'-7"	18'-10"	23'-9"	18'-10"	16'-6"	21'-7"	17'-2"	15'-0"
				16	24'-9"	19'-8"	17'-2"	21'-7"	17'-2"	15'-0"	19'-8"	15'-7"	13'-7"
				24	21'-7"	17'-2"	15'-0"	18'-10"	15'-0"	13'-1"	17'-2"	13'-7"	11'-9"
	TRAKLOC 33mil 400TLE125-33	0.0346	33	12	27'-1"	21'-6"	18'-10"	23'-8"	18'-10"	16'-5"	21'-6"	17'-1"	14'-11"
				16	24'-8"	19'-7"	17'-1"	21'-6"	17'-1"	14'-11"	19'-7"	15'-6"	13'-7"
				24	21'-6"	17'-1"	14'-11"	18'-10"	14'-11"	13'-0"	17'-1"	13'-7"	11'-9"
6	TRAKLOC 25 (18mil) 600TLE125-18	0.0188	33	12	—	22'-7"	20'-7"	—	19'-8" f	17'-11"	—	17'-1" f	16'-4"
				16	—	20'-8"	18'-8"	—	17'-1" f	16'-4"	—	14'-9" f	14'-9" f
				24	—	17'-1" f	16'-3"	—	13'-11" f	13'-11" f	—	12'-1" f	12'-1" f
	TRAKLOC 20EQ (24mil) 600TLE125-24	0.0250	57	12	28'-9" f	25'-11"	21'-8"	23'-6" f	22'-8"	19'-11"	20'-4" f	20'-4" f	17'-5"
				16	24'-11" f	23'-6"	19'-10"	20'-4" f	20'-4" f	17'-5"	17'-7" f	17'-7" f	15'-11"
				24	20'-4" f	20'-4" f	17'-5"	16'-7" f	16'-7" f	15'-4"	14'-4" f	14'-4" f	13'-11"
	TRAKLOC 30mil 600TLE125-30	0.0312	33	12	33'-3"	27'-0"	23'-11"	27'-6" f	23'-11"	21'-1"	23'-10" f	21'-10"	19'-3"
				16	29'-2" f	24'-9"	21'-10"	23'-10" f	21'-10"	19'-3"	20'-8" f	20'-0"	17'-7"
				24	23'-10" f	21'-10"	19'-3"	19'-6" f	19'-3"	16'-11"	16'-10" f	16'-10" f	—
	TRAKLOC 33mil 600TLE125-33	0.0346	33	12	33'-3"	27'-0"	23'-11"	27'-6" f	23'-11"	21'-1"	23'-10" f	21'-10"	19'-3"
				16	29'-2" f	24'-9"	21'-10"	23'-10" f	21'-10"	19'-3"	20'-8" f	20'-0"	17'-7"
				24	23'-10" f	21'-10"	19'-3"	19'-6" f	19'-3"	16'-11"	16'-10" f	16'-10" f	—

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.

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

TRAKLOC® NON-COMPOSITE LIMITING HEIGHTS
FULLY BRACED
TRAKLOC Elevator Studs (TLE)

Width (in)	Stud Member (TLE)	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) 250TLE125-18	0.0188	33	12	12'-3"	10'-3"	9'-0"	10'-0"	10'-0"	8'-10"	8'-8" e	8'-8" e	8'-0" e
				16	10'-7"	9'-4"	8'-2"	8'-8" e	8'-8" e	8'-0" e	7'-6" e	7'-6" e	7'-3" e
				24	8'-8" e	8'-2" e	7'-1"	7'-1" e	7'-1" e	7'-0" e	6'-1" e	6'-1" e	6'-1" e
	TRAKLOC 20EQ (24mil) 250TLE125-24	0.0250	57	12	14'-5"	11'-6"	10'-0"	14'-2"	11'-3"	9'-10"	12'-4"	10'-3"	8'-11"
				16	13'-1"	10'-5"	9'-1"	12'-4"	10'-3"	8'-11"	10'-9"	9'-4"	8'-2"
				24	11'-6"	9'-1"	7'-11"	10'-1"	8'-11"	7'-10"	8'-9"	8'-2"	7'-1"
	TRAKLOC 30mil 250TLE125-30	0.0312	33	12	16'-3"	12'-10"	11'-3"	14'-10"	12'-8"	11'-1"	12'-10"	11'-6"	10'-1"
				16	14'-9"	11'-8"	10'-3"	12'-10"	11'-6"	10'-1"	11'-1"	10'-5"	9'-2"
				24	12'-10"	10'-3"	8'-11"	10'-6"	10'-1"	8'-9"	9'-1"	9'-1"	8'-0"
	TRAKLOC 33mil 250TLE125-33	0.0346	33	12	16'-6"	13'-1"	11'-5"	15'-10"	12'-10"	11'-3"	13'-9"	11'-8"	10'-3"
				16	15'-0"	11'-11"	10'-5"	13'-9"	11'-8"	10'-3"	11'-11"	10'-7"	9'-3"
				24	13'-1"	10'-5"	9'-1"	11'-2"	10'-3"	8'-11"	9'-8"	9'-3"	8'-1"
3-5/8	TRAKLOC 25 (18mil) 362TLE125-18	0.0188	33	12	14'-11"	13'-10"	12'-1"	12'-2" e	12'-2" e	11'-1" e	10'-6" e	10'-6" e	10'-6" e
				16	12'-11" e	12'-7" e	11'-0"	10'-6" e	10'-6" e	10'-6" e	9'-1" e	9'-1" e	9'-1" e
				24	10'-6" e	10'-6" e	9'-7" e	8'-7" e	8'-7" e	8'-7" e	7'-5" e	7'-5" e	7'-5" e
	TRAKLOC 20EQ (24mil) 362TLE125-24	0.0250	57	12	19'-5"	15'-5"	13'-6"	17'-8"	15'-2"	13'-3"	15'-4"	13'-10"	12'-1"
				16	17'-8"	14'-0"	12'-3"	15'-4"	13'-10"	12'-1"	13'-3"	12'-6"	10'-11"
				24	15'-4"	12'-3"	10'-8"	12'-6"	12'-1"	10'-6"	10'-10" e	10'-10" e	9'-7"
	TRAKLOC 30mil 362TLE125-30	0.0312	33	12	21'-4"	17'-0"	14'-10"	17'-9"	16'-8"	14'-7"	15'-4"	15'-2"	13'-3"
				16	18'-10"	15'-5"	13'-6"	15'-4"	15'-2"	13'-3"	13'-3"	13'-3"	12'-0"
				24	15'-4"	13'-6"	11'-9"	12'-6"	12'-6"	11'-7"	10'-10"	10'-10"	10'-6"
	TRAKLOC 33mil 362TLE125-33	0.0346	33	12	21'-9"	17'-3"	15'-1"	19'-2"	17'-0"	14'-10"	16'-7"	15'-5"	13'-6"
				16	19'-9"	15'-8"	13'-9"	16'-7"	15'-5"	13'-6"	14'-4"	14'-0"	12'-3"
				24	16'-7"	13'-9"	12'-0"	13'-6"	13'-6"	11'-9"	11'-9"	11'-9"	10'-9"
4	TRAKLOC 25 (18mil) 400TLE125-18	0.0188	33	12	15'-7" e	14'-8"	12'-10"	12'-9" e	12'-9" e	12'-8" e	11'-0" e	11'-0" e	11'-0" e
				16	13'-6" e	13'-4" e	11'-8" e	11'-0" e	11'-0" e	11'-0" e	9'-7" e	9' 7" e	9'-7" e
				24	11'-0" e	11'-0" e	10'-2" e	9'-0" e	9'-0" e	9'-0" e	7'-10" e	7'-10" e	7'-10" e
	TRAKLOC 20EQ (24mil) 400TLE125-24	0.0250	57	12	21'-1"	16'-9"	14'-7"	18'-9"	16'-5"	14'-4"	16'-3"	14'-11"	13'-1"
				16	19'-2"	15'-2"	13'-3"	16'-3"	14'-11"	13'-1"	14'-1"	13'-7"	11'-10"
				24	16'-3"	13'-3"	11'-7"	13'-3"	13'-1"	11'-5"	11'-6"	11'-6"	10'-4"
	TRAKLOC 30mil 400TLE125-30	0.0312	33	12	22'-11"	18'-4"	16'-0"	18'-8"	18'-1"	15'-9"	16'-2"	16'-2"	14'-4"
				16	19'-10"	16'-8"	14'-7"	16'-2"	16'-2"	14'-4"	14'-0"	14'-0"	13'-0"
				24	16'-2"	14'-7"	12'-9"	13'-3"	13'-3"	12'-6"	11'-5"	11'-5"	11'-4"
	TRAKLOC 33mil 400TLE125-33	0.0346	33	12	23'-3"	18'-6"	16'-2"	20'-2"	18'-2"	15'-11"	17'-6"	16'-6"	14'-5"
				16	21'-2"	16'-9"	14'-8"	17'-6"	16'-6"	14'-5"	15'-2"	15'-0"	13'-1"
				24	17'-6"	14'-8"	12'-10"	14'-3"	14'-3"	12'-7"	12'-4"	12'-4"	11'-5"
6	TRAKLOC 25 (18mil) 600TLE125-18	0.0188	33	12	19'-2" e	19'-2" e	17'-6" e	15'-8" e	15'-8" e	15' 8" e	13'-7" e	13'-7" e	13'-7" e
				16	16'-7" e	16'-7" e	15'-10" e	13'-7" e	13'-7" e	13'-7" e	11'-9" e	11'-9" e	11'-9" e
				24	13'-7" e	13'-7" e	13'-7" e	11'-1" e	11'-1" e	11'-1" e	9'-7" e	9'-7" e	9'-7" e
	TRAKLOC 20EQ (24mil) 600TLE125-24	0.0250	57	12	27'-11"	22'-10"	20'-0"	22'-10" e	22'-6"	19'-8"	19'-9" e	19'-9" e	17'-10" e
				16	24'-2"	20'-9"	18'-2"	19'-9" e	19'-9" e	17'-10" e	17'-1" e	17'-1" e	16'-3" e
				24	19'-9" e	18'-2" e	15'-10"	16'-1" e	16'-1" e	15'-7" e	14'-0" e	14'-0" e	14'-0" e
	TRAKLOC 30mil 600TLE125-30	0.0312	33	12	29'-5"	25'-0"	21'-10"	24'-0"	24'-0"	21'-6"	20'-10"	20'-10"	19'-7"
				16	25'-6"	22'-9"	19'-10"	20'-10"	20'-10"	19'-7"	18'-0" e	18'-0" e	17'-9" e
				24	20'-10"	19'-10"	17'-4"	17'-0" e	17'-0" e	17'-0" e	14'-9" e	14'-9" e	14'-9" e
	TRAKLOC 33mil 600TLE125-33	0.0346	33	12	31'-11"	25'-4"	22'-2"	26'-8"	24'-11"	21'-10"	23'-1" e	22'-8"	19'-10"
				16	28'-3"	23'-1"	20'-2"	23'-1" e	22'-8"	19'-10"	20'-0" e	20'-0" e	18'-0" e
				24	23'-1" e	20'-2"	17'-7"	18'-10" e	18'-10" e	17'-4" e	16'-4" e	16'-4" e	15'-9" e

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

- 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.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- ² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- ^e Web stiffeners are required at the stud/track connection.

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

TRAKLOC Elevator Studs (TLE)

Width (in)	Stud Member (TLE)	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) 250TLE125-18	0.0188	33	12	12'-3"	10'-3"	9'-0"	10'-0"	10'-0"	8'-10"	8'-8" e	8'-8" e	8'-0" e
				16	10'-7"	9'-4"	8'-2"	8'-8" e	8'-8" e	8'-0" e	7'-6" e	7'-6" e	7'-3" e
				24	8'-8" e	8'-2" e	7'-1"	7'-1" e	7'-1" e	7'-0" e	6'-1" e	6'-1" e	6'-1" e
	TRAKLOC 20EQ (24mil) 250TLE125-24	0.0250	57	12	14'-5"	11'-6"	10'-0"	13'-2"	11'-3"	9'-10"	11'-5"	10'-3"	8'-11"
				16	13'-1"	10'-5"	9'-1"	11'-5"	10'-3"	8'-11"	9'-11"	9'-4"	8'-2"
				24	11'-5"	9'-1"	7'-11"	9'-4"	8'-11"	7'-10"	8'-1"	8'-1"	7'-1"
	TRAKLOC 30mil 250TLE125-30	0.0312	33	12	16'-3"	12'-10"	11'-3"	13'-9"	12'-8"	11'-1"	11'-11"	11'-6"	10'-1"
				16	14'-7"	11'-8"	10'-3"	11'-11"	11'-6"	10'-1"	10'-4"	10'-4"	9'-2"
				24	11'-11"	10'-3"	8'-11"	9'-9"	9'-9"	8'-9"	8'-5"	8'-5"	8'-0"
	TRAKLOC 33mil 250TLE125-33	0.0346	33	12	16'-6"	13'-1"	11'-5"	14'-8"	12'-10"	11'-3"	12'-9"	11'-8"	10'-3"
				16	15'-0"	11'-11"	10'-5"	12'-9"	11'-8"	10'-3"	11'-0"	10'-7"	9'-3"
				24	12'-9"	10'-5"	9'-1"	10'-5"	10'-3"	8'-11"	9'-0"	9'-0"	8'-1"
3-5/8	TRAKLOC 25 (18mil) 362TLE125-18	0.0188	33	12	14'-3"	13'-10"	12'-1"	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'-0"	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	9'-7" e	8'-3" e	8'-3" e	8'-3" e	7'-1" e	7'-1" e	7'-1" e
	TRAKLOC 20EQ (24mil) 362TLE125-24	0.0250	57	12	17'-11"	15'-5"	13'-6"	14'-8"	14'-8"	13'-3"	12'-8"	12'-8"	12'-1"
				16	15'-7"	14'-0"	12'-3"	12'-8"	12'-8"	12'-1"	11'-0"	11'-0"	10'-11"
				24	12'-8"	12'-3"	10'-8"	10'-4"	10'-4"	10'-4"	9'-0"	9'-0"	9'-0"
	TRAKLOC 30mil 362TLE125-30	0.0312	33	12	19'-11"	17'-0"	14'-10"	16'-3"	16'-3"	14'-7"	14'-1"	14'-1"	13'-3"
				16	17'-3"	15'-5"	13'-6"	14'-1"	14'-1"	13'-3"	12'-3"	12'-3"	12'-0"
				24	14'-1"	13'-6"	11'-9"	11'-6"	11'-6"	11'-6"	10'-0"	10'-0"	10'-0"
	TRAKLOC 33mil 362TLE125-33	0.0346	33	12	21'-6"	17'-3"	15'-1"	17'-7"	17'-0"	14'-10"	15'-3"	15'-3"	13'-6"
				16	18'-8"	15'-8"	13'-9"	15'-3"	15'-3"	13'-6"	13'-2"	13'-2"	12'-3"
				24	15'-3"	13'-9"	12'-0"	12'-5"	12'-5"	11'-9"	10'-9"	10'-9"	10'-9"
4	TRAKLOC 25 (18mil) 400TLE125-18	0.0188	33	12	15'-0"	14'-8"	12'-10"	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	11'-8" 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'-2" e	8'-8" e	8'-8" e	8'-8" e	7'-6" e	7'-6" e	7'-6" e
	TRAKLOC 20EQ (24mil) 400TLE125-24	0.0250	57	12	18'-10"	16'-9"	14'-7"	15'-4"	15'-4"	14'-4"	13'-4"	13'-4"	13'-1"
				16	16'-4"	15'-2"	13'-3"	13'-4"	13'-4"	13'-1"	11'-6"	11'-6"	11'-6"
				24	13'-4"	13'-3"	11'-7"	10'-10"	10'-10"	10'-10"	9'-5"	9'-5"	9'-5"
	TRAKLOC 30mil 400TLE125-30	0.0312	33	12	21'-0"	18'-4"	16'-0"	17'-2"	17'-2"	15'-9"	14'-10"	14'-10"	14'-4"
				16	18'-2"	16'-8"	14'-7"	14'-10"	14'-10"	14'-4"	12'-10"	12'-10"	12'-10"
				24	14'-10"	14'-7"	12'-9"	12'-1"	12'-1"	12'-1"	10'-6"	10'-6"	10'-6"
	TRAKLOC 33mil 400TLE125-33	0.0346	33	12	22'-8"	18'-6"	16'-2"	18'-6"	18'-2"	15'-11"	16'-0"	16'-0"	14'-5"
				16	19'-8"	16'-9"	14'-8"	16'-0"	16'-0"	14'-5"	13'-11"	13'-11"	13'-1"
				24	16'-0"	14'-8"	12'-10"	13'-1"	13'-1"	12'-7"	11'-4"	11'-4"	11'-4"
6	TRAKLOC 25 (18mil) 600TLE125-18	0.0250	57	12	19'-2" e	19'-2" e	17'-6" e	15'-8" e	15'-8" e	15'-8" e	13'-7" e	13'-7" e	13'-7" e
				16	16'-7" e	16'-7" e	15'-10" e	13'-7" e	13'-7" e	13'-7" e	11'-9" e	11'-9" e	11'-9" e
				24	13'-7" e	13'-7" e	13'-7" e	11'-1" e	11'-1" e	11'-1" e	9'-7" e	9'-7" e	9'-7" e
	TRAKLOC 20EQ (24mil) 600TLE125-24	0.0312	33	12	24'-2"	22'-10"	20'-0"	19'-9"	19'-9"	19'-8"	17'-1" e	17'-1" e	17'-1" e
				16	20'-11"	20'-9"	18'-2"	17'-1" e	17'-1" e	17'-1" e	14'-10" e	14'-10" e	14'-10" e
				24	17'-1" e	17'-1" e	15'-10"	13'-11" e	13'-11" e	13'-11" e	12'-1" e	12'-1" e	12'-1" e
	TRAKLOC 30mil 600TLE125-30	0.0346	33	12	27'-7"	25'-0"	21'-10"	22'-7"	22'-7"	21'-6"	19'-6"	19'-6"	19'-6"
				16	23'-11"	22'-9"	19'-10"	19'-6"	19'-6"	19'-6"	16'-11" e	16'-11" e	16'-11" e
				24	19'-6"	19'-6"	17'-4"	15'-11" e	15'-11" e	15'-11" e	13'-10" e	13'-10" e	13'-10" e
	TRAKLOC 33mil 600TLE125-33	0.0346	33	12	29'-11"	25'-4"	22'-2"	24'-5"	24'-5"	21'-10"	21'-2"	21'-2"	19'-10"
				16	25'-11"	23'-1"	20'-2"	21'-2"	21'-2"	19'-10"	18'-4" e	18'-4" e	18'-0" e
				24	21'-2"	20'-2"	17'-7"	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 11 inches and must be connected with a minimum of (4) #8 x 9/16" long wafer head screws complying with ASTM C1513.
- 1 Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- 2 Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- e Web stiffeners are required at the stud/track connection.

TRAKLOC® SECTION PROPERTIES

Stud Member (TLF) (TLA) (TLD)	Design thickness (in)	Yield strength (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties					Effective Section Properties at F _y						
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _{al} (in-lbs)	M _{ad} (in-lbs)	V _{ag} (lbs)	V _{a_{net}} (lbs)
250TLF/TLA/TLD125-18	0.0188	33	0.102	0.35	0.106	0.084	1.017	0.022	0.467	0.056	0.102	0.070	1387	1289	252	198
250TLF/TLA/TLD125-24	0.0250	57	0.135	0.46	0.139	0.111	1.014	0.029	0.464	0.067	0.128	0.086	2921	2680	596	349
250TLF/TLA/TLD125-30	0.0312	33	0.167	0.57	0.171	0.137	1.011	0.035	0.461	0.113	0.170	0.125	2475	2515	832	388
250TLF/TLA/TLD125-33	0.0346	33	0.185	0.63	0.188	0.151	1.010	0.039	0.459	0.116	0.187	0.143	2824	3072	990	414
362TLF/TLA/TLD125-18	0.0188	33	0.123	0.42	0.248	0.137	1.419	0.025	0.451	0.056	0.243	0.091	1797	1914	170	165
362TLF/TLA/TLD125-24	0.0250	57	0.163	0.55	0.327	0.180	1.416	0.033	0.448	0.067	0.306	0.109	3710	3986	402	292
362TLF/TLA/TLD125-30	0.0312	33	0.202	0.69	0.404	0.223	1.413	0.040	0.445	0.114	0.401	0.179	3531	3822	785	453
362TLF/TLA/TLD125-33	0.0346	33	0.224	0.76	0.445	0.246	1.411	0.044	0.443	0.118	0.442	0.208	4116	4682	1024	531
400TLF/TLA/TLD125-18 ¹	0.0188	33	0.130	0.44	0.312	0.156	1.549	0.026	0.445	0.056	0.268	0.101	1881	1794	154	—
400TLF/TLA/TLD125-24	0.0250	57	0.172	0.59	0.411	0.206	1.545	0.034	0.442	0.067	0.388	0.121	4114	4416	363	313
400TLF/TLA/TLD125-30	0.0312	33	0.214	0.73	0.509	0.254	1.542	0.041	0.439	0.114	0.505	0.199	3930	4261	708	487
400TLF/TLA/TLD125-33	0.0346	33	0.237	0.81	0.561	0.281	1.540	0.045	0.437	0.118	0.557	0.232	4587	5225	967	598
600TLF/TLA/TLD125-18 ²	0.0188	33	0.168	0.57	0.821	0.274	2.212	0.029	0.414	0.057	0.692	0.156	2915	2744	101	—
600TLF/TLA/TLD125-24 ¹	0.0250	57	0.222	0.76	1.084	0.361	2.208	0.037	0.410	0.068	0.927	0.208	7114	6523	238	—
600TLF/TLA/TLD125-30	0.0312	33	0.276	0.94	1.343	0.448	2.204	0.046	0.407	0.116	1.291	0.352	6960	6491	464	464
600TLF/TLA/TLD125-33	0.0346	33	0.306	1.04	1.483	0.494	2.202	0.050	0.405	0.120	1.438	0.413	8164	7997	634	634

Stud Member (TLA) (TLD) (TLF)	Stud/Track End Reaction (R _x)			Torsional Properties						L _u (in)
	TLF (lbs)	TLA (lbs)	TLD (lbs)	J _x 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β (Beta)	
250TLF/TLA/TLD125-18	38	40	42	0.0120	0.031	-1.000	0.598	1.501	0.556	31.5
250TLF/TLA/TLD125-24	111	96	99	0.0281	0.040	-0.992	0.594	1.493	0.558	24.3
250TLF/TLA/TLD125-30	147	106	108	0.0543	0.049	-0.984	0.590	1.485	0.560	31.4
250TLF/TLA/TLD125-33	166	103	112	0.0738	0.053	-0.980	0.587	1.480	0.561	29.9
362TLF/TLA/TLD125-18	38	53	53	0.0145	0.068	-0.873	0.540	1.726	0.744	31.0
362TLF/TLA/TLD125-24	102	115	107	0.0339	0.088	-0.866	0.536	1.719	0.746	23.9
362TLF/TLA/TLD125-30	158	137	134	0.0657	0.108	-0.859	0.532	1.712	0.748	30.8
362TLF/TLA/TLD125-33	149	134	125	0.0893	0.118	-0.855	0.530	1.708	0.749	29.3
400TLF/TLA/TLD125-18 ¹	39	58	44	0.0153	0.084	-0.839	0.524	1.817	0.787	30.8
400TLF/TLA/TLD125-24	125	131	126	0.0359	0.110	-0.832	0.520	1.810	0.789	23.8
400TLF/TLA/TLD125-30	161	162	135	0.0695	0.134	-0.825	0.516	1.802	0.791	30.6
400TLF/TLA/TLD125-33	154	151	145	0.0945	0.147	-0.821	0.514	1.799	0.792	29.1
600TLF/TLA/TLD125-18 ²	31	75	74	0.0198	0.208	-0.696	0.452	2.356	0.913	30.0
600TLF/TLA/TLD125-24 ¹	87	116	118	0.0463	0.272	-0.690	0.448	2.350	0.914	23.1
600TLF/TLA/TLD125-30	114	121	114	0.0897	0.333	-0.683	0.445	2.343	0.915	29.7
600TLF/TLA/TLD125-33	124	108	106	0.1221	0.366	-0.680	0.443	2.340	0.916	28.2

NOTES

 For SI Units: 1 inch = 25.4 mm, 1 lb = 4.45 N, 1 ksi = 6.89 N/m².

- 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 (M_{al}) is based on the compression flange continuously braced.
 - The distortional buckling moment (M_{ad}) does not consider the beneficial effect of sheathing to rotational stiffness, K_φ = 0.
 - For deflection calculations, use the effective moment of inertia.
 - Stud/Track End Reaction (R_x) is the maximum end reaction (web crippling) capacity based on a minimum bearing length of 1 inch.
 - For TLA and TLD members, the minimum overlap of TSO (Outer Stud) and TSE (Inner Stud) must be 8 inches and the maximum un-lapped length of the TSE must be 4 inches.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.

TRAKLOC® TRACK SECTION PROPERTIES

Stud Member (TLF) (TLA) (TLD)	Design thickness (in)	Yield strength (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties					Effective Section Properties at F _y				
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _a (in-lbs)	V _a (lb)
250TTS137-18 ²	0.0188	33	0.099	0.34	0.110	0.085	1.057	0.019	0.444	—	—	—	—	—
250TTS137-24	0.0250	57	0.131	0.45	0.147	0.113	1.059	0.026	0.443	0.047	0.106	0.057	1946	570
250TTS137-30	0.0312	33	0.164	0.56	0.184	0.140	1.061	0.032	0.442	0.086	0.149	0.090	1775	832
250TTS137-33	0.0346	33	0.181	0.62	0.204	0.156	1.062	0.035	0.441	0.104	0.170	0.103	2043	1024
362TTS137-18 ²	0.0188	33	0.120	0.41	0.252	0.135	1.449	0.022	0.425	—	—	—	—	—
362TTS137-24	0.0250	57	0.159	0.54	0.335	0.180	1.451	0.029	0.424	0.048	0.258	0.082	2813	390
362TTS137-30	0.0312	33	0.199	0.68	0.419	0.224	1.452	0.036	0.423	0.089	0.347	0.153	3031	758
362TTS137-33	0.0346	33	0.220	0.75	0.465	0.248	1.453	0.039	0.422	0.108	0.395	0.175	3465	1024
400TTS137-18 ²	0.0188	33	0.127	0.43	0.315	0.154	1.576	0.022	0.418	—	—	—	—	—
400TTS137-24	0.0250	57	0.169	0.57	0.420	0.204	1.577	0.029	0.417	0.048	0.328	0.091	3103	353
400TTS137-30	0.0312	33	0.210	0.72	0.524	0.254	1.579	0.036	0.416	0.090	0.437	0.178	3510	686
400TTS137-33	0.0346	33	0.233	0.79	0.582	0.282	1.579	0.040	0.415	0.109	0.497	0.203	4006	935
600TTS137-18 ²	0.0188	33	0.165	0.56	0.816	0.268	2.227	0.024	0.385	—	—	—	—	—
600TTS137-24 ¹	0.0250	57	0.219	0.74	1.086	0.355	2.228	0.032	0.384	0.048	0.718	0.134	4587	234
600TTS137-30	0.0312	33	0.273	0.93	1.356	0.443	2.229	0.040	0.383	0.092	1.117	0.247	4874	455
600TTS137-33	0.0346	33	0.303	1.03	1.504	0.491	2.230	0.044	0.383	0.111	1.287	0.296	5840	621

Stud Member (TLA) (TLD) (TLF)	Torsional Properties					
	J _x 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β (Beta)
250TTS137-18 ²	0.0116	0.023	-0.875	0.519	1.442	0.632
250TTS137-24	0.0273	0.030	-0.872	0.518	1.441	0.634
250TTS137-30	0.0531	0.038	-0.868	0.516	1.440	0.636
250TTS137-33	0.0724	0.042	-0.867	0.515	1.440	0.638
362TTS137-18 ²	0.0141	0.053	-0.763	0.470	1.692	0.797
362TTS137-24	0.0332	0.070	-0.760	0.469	1.692	0.798
362TTS137-30	0.0645	0.087	-0.757	0.467	1.691	0.800
362TTS137-33	0.0879	0.097	-0.756	0.466	1.691	0.800
400TTS137-18 ²	0.0150	0.066	-0.732	0.456	1.787	0.832
400TTS137-24	0.0351	0.088	-0.730	0.454	1.787	0.833
400TTS137-30	0.0683	0.109	-0.727	0.453	1.787	0.835
400TTS137-33	0.0931	0.121	-0.725	0.452	1.787	0.835
600TTS137-18 ²	0.0194	0.168	-0.605	0.392	2.340	0.933
600TTS137-24 ¹	0.0456	0.222	-0.603	0.391	2.340	0.934
600TTS137-30	0.0885	0.276	-0.601	0.389	2.340	0.934
600TTS137-33	0.1207	0.306	-0.599	0.388	2.340	0.934

NOTES For SI Units: 1 inch = 25.4 mm, 1 lb = 4.45 N, 1 ksi = 6.89 N/m².

- 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.

- Tabulated gross properties including torsional properties are based on full-unreduced cross section of the studs, away from punch-outs.

- For deflection calculations use the effective moment of inertia.

¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.

² Web height-to-thickness ratio exceeds 260. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2. Flange width-to-thickness ratio exceeds 60. See AISI S100 Section B1.1.

TRAKLOC® COMPOSITE LIMITING HEIGHTS
 with 5/8" Type X Gypsum Board

 TRAKLOC Adjustable Studs (TLA)
 TRAKLOC Fixed Length Studs (TLF)

Width (in)	Stud Member (TLA) (TLF)	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) 250TLA/TLF125-18	0.0188	33	12	17'-2"	14'-5"	12'-7"	14'-6" f	12'-8"	11'-0"	12'-7" f	11'-6"	10'-0"
				16	15'-10" f	13'-7"	11'-10"	13'-0"	11'-10"	10'-4"	11'-3" f	10'-9" f	9'-3"
				24	13'-4" f	12'-3"	10'-8"	10'-11" f	10'-8"	9'-1"	9'-5" f	9'-5" f	7'-11"
	TRAKLOC 20EQ (24mil) 250TLA/TLF125-24	0.0250	57	12	16'-10"	14'-10"	13'-1"	15'-0"	13'-0"	11'-5"	13'-9"	11'-10"	10'-4"
				16	16'-8"	13'-9"	12'-1"	14'-7"	12'-0"	10'-7"	13'-3"	10'-11"	9'-7"
				24	14'-10"	12'-3"	10'-9"	13'-0"	10'-8"	9'-3"	11'-9"	9'-8"	8'-2"
	TRAKLOC 30mil 250TLA/TLF125-30	0.0312	33	12	18'-5"	16'-0"	14'-0"	16'-2"	14'-0"	12'-3"	14'-9"	12'-8"	11'-2"
				16	17'-6"	15'-0"	13'-2"	15'-4"	13'-1"	11'-6"	13'-11"	11'-11"	10'-6"
				24	15'-9"	13'-5"	11'-10"	13'-9"	11'-9"	10'-4"	12'-6"	10'-8"	9'-3"
	TRAKLOC 33mil 250TLA/TLF125-33	0.0346	33	12	20'-11"	16'-7"	14'-6"	18'-3"	14'-6"	12'-8"	16'-7"	13'-2"	11'-6"
				16	19'-0"	15'-1"	13'-2"	16'-7"	13'-2"	11'-6"	15'-1"	12'-0"	10'-6"
				24	16'-7"	13'-2"	11'-6"	14'-6"	11'-6"	10'-1"	13'-2"	10'-6"	9'-0"
3-5/8	TRAKLOC 25 (18mil) 362TLA/TLF125-18	0.0188	33	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"
	TRAKLOC 20EQ (24mil) 362TLA/TLF125-24	0.0250	57	12	24'-1"	19'-1"	16'-8"	21'-0"	16'-8"	14'-7"	19'-1"	15'-2"	13'-3"
				16	21'-10"	17'-4"	15'-2"	19'-1"	15'-2"	13'-3"	17'-4"	13'-9"	12'-0"
				24	19'-1"	15'-2"	13'-3"	16'-8"	13'-3"	11'-6"	15'-0" f	12'-0"	10'-4"
	TRAKLOC 30mil 362TLA/TLF125-30	0.0312	33	12	24'-7"	20'-2"	17'-10"	21'-6"	17'-8"	15'-7"	19'-6"	16'-0"	14'-2"
				16	22'-8"	18'-8"	16'-6"	19'-10"	16'-4"	14'-5"	18'-0"	14'-10"	13'-1"
				24	20'-1"	16'-7"	14'-7"	17'-7"	14'-6"	12'-9"	16'-0"	13'-2"	11'-7"
	TRAKLOC 33mil 362TLA/TLF125-33	0.0346	33	12	25'-5"	20'-2"	17'-7"	22'-2"	17'-7"	15'-4"	20'-2"	16'-0"	14'-0"
				16	23'-9"	18'-10"	16'-6"	20'-9"	16'-6"	14'-5"	18'-10"	15'-0"	13'-1"
				24	21'-4"	16'-11"	14'-10"	18'-8"	14'-10"	12'-11"	16'-11"	13'-5"	11'-8"
4	TRAKLOC 25 (18mil) 400TLA/TLF125-18	0.0188	33	12	23'-4"	18'-6"	16'-4"	19'-5" f	16'-2"	14'-3"	16'-10" f	14'-8"	12'-11"
				16	20'-7" f	17'-5"	15'-4"	16'-10" f	15'-3"	13'-5"	14'-7" f	13'-10"	12'-2"
				24	16'-10" f	15'-9"	13'-10"	13'-9" f	13'-9"	12'-1"	11'-11" f	11'-11" f	10'-9"
	TRAKLOC 20EQ (24mil) 400TLA/TLF125-24	0.0250	57	12	24'-4"	19'-4"	16'-11"	21'-3"	16'-11"	14'-9"	19'-4"	15'-4"	13'-5"
				16	23'-1"	18'-4"	16'-0"	20'-2"	16'-0"	14'-0"	18'-4"	14'-7"	12'-9"
				24	21'-0"	16'-8"	14'-7"	18'-4"	14'-7"	12'-9"	16'-0" f	13'-3"	11'-6"
	TRAKLOC 30mil 400TLA/TLF125-30	0.0312	33	12	26'-3"	20'-11"	18'-4"	23'-0"	18'-5"	16'-3"	20'-10"	16'-10"	14'-11"
				16	24'-3"	19'-11"	17'-5"	21'-2"	17'-5"	15'-3"	19'-3"	15'-10"	13'-11"
				24	21'-6"	17'-8"	15'-7"	18'-9"	15'-5"	13'-7"	17'-1"	14'-0"	12'-4"
	TRAKLOC 33mil 400TLA/TLF125-33	0.0346	33	12	27'-7"	22'-9"	19'-11"	24'-1"	19'-10"	17'-6"	21'-10"	18'-1"	15'-11"
				16	25'-0"	20'-8"	18'-2"	21'-10"	18'-1"	15'-11"	19'-10"	16'-5"	14'-5"
				24	21'-10"	18'-1"	15'-11"	19'-1"	15'-9"	13'-11"	17'-4"	14'-4"	12'-8"
6	TRAKLOC 25 (18mil) 600TLA/TLF125-18	0.0188	33	12	30'-5" f	25'-3"	22'-5"	24'-10" f	22'-0"	19'-7"	21'-6" f	20'-0"	17'-9"
				16	26'-4" f	23'-4"	20'-9"	21'-6" f	20'-5"	18'-2"	18'-7" f	18'-7" f	16'-6"
				24	21'-6" f	20'-9"	18'-5"	17'-7" f	17'-7" f	16'-1"	15'-2" f	15'-2" f	14'-5"
	TRAKLOC 20EQ (24mil) 600TLA/TLF125-24	0.0250	57	12	33'-5"	27'-4"	24'-2"	29'-2"	23'-11"	21'-1"	26'-6"	21'-8"	19'-2"
				16	30'-4"	24'-10"	21'-11"	26'-6"	21'-8"	19'-2"	24'-1"	19'-9"	17'-5"
				24	26'-6"	21'-8"	19'-2"	23'-2"	18'-11"	16'-9"	20'-1" f	17'-3"	15'-2"
	TRAKLOC 30mil 600TLA/TLF125-30	0.0312	33	12	35'-5"	28'-1"	24'-6"	30'-11"	24'-6"	21'-5"	28'-1"	22'-4"	19'-6"
				16	33'-3"	26'-4"	23'-0"	29'-0"	23'-0"	20'-1"	26'-4"	20'-11"	18'-3"
				24	29'-11"	23'-9"	20'-9"	25'-10" f	20'-9"	18'-1"	22'-4" f	18'-10"	16'-5"
	TRAKLOC 33mil 600TLA/TLF125-33	0.0346	33	12	36'-0"	28'-7"	25'-0"	31'-5"	25'-0"	21'-10"	28'-7"	22'-8"	19'-10"
				16	33'-9"	26'-9"	23'-5"	29'-5"	23'-5"	20'-5"	26'-9" f	21'-3"	18'-7"
				24	30'-3"	24'-0"	21'-0"	25'-11" f	21'-0"	18'-4"	22'-5" f	19'-1"	16'-7"

NOTES

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

- 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 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.
- † Adjacent to the height value indicates that flexural stress controls the allowable wall height.
- ‡ Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

TRAKLOC® COMPOSITE LIMITING HEIGHTS
with 5/8" Type X Gypsum Board

TRAKLOC Deflection Studs (TLD)

Width (in)	Stud Member (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) 250TLD125-18	0.0188	33	12	17'-2"	14'-5"	12'-7"	14'-6" f	12'-8"	11'-0"	12'-7" f	11'-6"	10'-0"
				16	15'-10" f	13'-7"	11'-10"	13'-0"	11'-10"	10'-4"	11'-2" s	10'-9"	9'-3"
				24	13'-4" f	12'-3"	10'-8"	9'-11" s	9'-11" s	9'-1"	—	—	—
	TRAKLOC 20EQ (24mil) 250TLD125-24	0.0250	57	12	16'-10"	14'-10"	13'-1"	15'-0"	13'-0"	11'-5"	13'-9"	11'-10"	10'-4"
				16	16'-8"	13'-9"	12'-1"	14'-7"	12'-0"	10'-7"	13'-3"	10'-11"	9'-7"
				24	14'-10"	12'-3"	10'-9"	13'-0"	10'-8"	9'-3"	11'-9"	9'-8"	8'-2"
	TRAKLOC 30mil 250TLD125-30	0.0312	33	12	18'-5"	16'-0"	14'-0"	16'-2"	14'-0"	12'-3"	14'-9"	12'-8"	11'-2"
				16	17'-6"	15'-0"	13'-2"	15'-4"	13'-1"	11'-6"	13'-11"	11'-11"	10'-6"
				24	15'-9"	13'-5"	11'-10"	13'-9"	11'-9"	10'-4"	12'-6"	10'-8"	9'-3"
	TRAKLOC 33mil 250TLD125-33	0.0346	33	12	20'-11"	16'-7"	14'-6"	18'-3"	14'-6"	12'-8"	16'-7"	13'-2"	11'-6"
				16	19'-0"	15'-1"	13'-2"	16'-7"	13'-2"	11'-6"	15'-1"	12'-0"	10'-6"
				24	16'-7"	13'-2"	11'-6"	14'-6"	11'-6"	10'-1"	13'-2"	10'-6"	9'-0"
3-5/8	TRAKLOC 25 (18mil) 362TLD125-18	0.0188	33	12	21'-7"	17'-11"	15'-8"	15'-10" s	15'-8" s	13'-8"	11'-10" s	11'-10" s	11'-10" s
				16	17'-9" s	16'-8"	14'-7"	11'-10" s	11'-10" s	11'-10" s	8'-11" s	8'-11" s	8'-11" s
				24	11'-10" s	11'-10" s	11'-10" s	7'-11" s	7'-11" s	7'-11" s	—	—	—
	TRAKLOC 20EQ (24mil) 362TLD125-24	0.0250	57	12	24'-1"	19'-1"	16'-8"	21'-0"	16'-8"	14'-7"	19'-1"	15'-2"	13'-3"
				16	21'-10"	17'-4"	15'-2"	19'-1"	15'-2"	13'-3"	17'-4"	13'-9"	12'-0"
				24	19'-1"	15'-2"	13'-3"	16'-8"	13'-3"	11'-6"	14'-11" f	12'-0"	10'-4"
	TRAKLOC 30mil 362TLD125-30	0.0312	33	12	24'-7"	20'-2"	17'-10"	21'-6"	17'-8"	15'-7"	19'-6"	16'-0"	14'-2"
				16	22'-8"	18'-8"	16'-6"	19'-10"	16'-4"	14'-5"	18'-0"	14'-10"	13'-1"
				24	20'-1"	16'-7"	14'-7"	17'-7"	14'-6"	12'-9"	16'-0"	13'-2"	11'-7"
	TRAKLOC 33mil 362TLD125-33	0.0346	33	12	25'-5"	20'-2"	17'-7"	22'-2"	17'-7"	15'-4"	20'-2"	16'-0"	14'-0"
				16	23'-9"	18'-10"	16'-6"	20'-9"	16'-6"	14'-5"	18'-10"	15'-0"	13'-1"
				24	21'-4"	16'-11"	14'-10"	18'-8"	14'-10"	12'-11"	16'-11"	13'-5"	11'-8"
4	TRAKLOC 25 (18mil) 400TLD125-18	0.0188	33	12	23'-4" f	18'-6"	16'-4"	19'-5" f	16'-2"	14'-3"	16'-10" f	14'-8"	12'-11"
				16	20'-7" f	17'-5"	15'-4"	16'-10" f	15'-3"	13'-5"	12'-9" s	12'-9" s	12'-2"
				24	16'-10" f	15'-9"	13'-10"	11'-4" s	11'-4" s	11'-4" s	8'-6" s	8'-6" s	8'-6" s
	TRAKLOC 20EQ (24mil) 400TLD125-24	0.0250	57	12	24'-4"	19'-4"	16'-11"	21'-3"	16'-11"	14'-9"	19'-4"	15'-4"	13'-5"
				16	23'-1"	18'-4"	16'-0"	20'-2"	16'-0"	14'-0"	18'-4"	14'-7"	12'-9"
				24	21'-0"	16'-8"	14'-7"	18'-4"	14'-7"	12'-9"	16'-0" f	13'-3"	11'-6"
	TRAKLOC 30mil 400TLD125-30	0.0312	33	12	26'-3"	20'-11"	18'-4"	23'-0"	18'-5"	16'-3"	20'-10"	16'-10"	14'-11"
				16	24'-3"	19'-11"	17'-5"	21'-2"	17'-5"	15'-3"	19'-3"	15'-10"	13'-11"
				24	21'-6"	17'-8"	15'-7"	18'-9"	15'-5"	13'-7"	17'-1"	14'-0"	12'-4"
	TRAKLOC 33mil 400TLD125-33	0.0346	33	12	27'-7"	22'-9"	19'-11"	24'-1"	19'-10"	17'-6"	21'-10"	18'-1"	15'-11"
				16	25'-0"	20'-8"	18'-2"	21'-10"	18'-1"	15'-11"	19'-10"	16'-5"	14'-5"
				24	21'-10"	18'-1"	15'-11"	19'-1"	15'-9"	13'-11"	17'-4"	14'-4"	12'-8"
6	TRAKLOC 25 (18mil) 600TLD125-18	0.0188	33	12	20'-8" s	20'-8" s	20'-8" s	13'-10" s	13'-10" s	13'-10" s	—	—	—
				16	15'-6" s	15'-6" s	15'-6" s	—	—	—	—	—	—
				24	—	—	—	—	—	—	—	—	—
	TRAKLOC 20EQ (24mil) 600TLD125-24	0.0250	57	12	33'-5"	27'-4"	24'-2"	29'-2"	23'-11"	21'-1"	24'-2" s	21'-8"	19'-2"
				16	30'-4"	24'-10"	21'-11"	24'-2" s	21'-8"	19'-2"	18'-1" s	18'-1" s	17'-5" s
				24	24'-2" s	21'-8"	19'-2"	16'-1" s	16'-1" s	16'-1" s	12'-1" s	12'-1" s	12'-1" s
	TRAKLOC 30mil 600TLD125-30	0.0312	33	12	35'-5"	28'-1"	24'-6"	30'-11"	24'-6"	21'-5"	28'-1"	22'-4"	19'-6"
				16	33'-3"	26'-4"	23'-0"	29'-0"	23'-0"	20'-1"	26'-4"	20'-11"	18'-3"
				24	29'-11"	23'-9"	20'-9"	23'-7" s	20'-9"	18'-1"	17'-8" s	17'-8" s	16'-5"
	TRAKLOC 33mil 600TLD125-33	0.0346	33	12	36'-0"	28'-7"	25'-0"	31'-5"	25'-0"	21'-10"	28'-7"	22'-8"	19'-10"
				16	33'-9"	26'-9"	23'-5"	29'-5"	23'-5"	20'-5"	26'-9"	21'-3"	18'-7"
				24	30'-3"	24'-0"	21'-0"	24'-8" s	21'-0"	18'-4"	18'-6" s	18'-6" s	16'-7"

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

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 or 24 inch on-center.
 - Screws spaced 16 inch on-center to the bottom track only.
- 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.

TRAKLOC® NON-COMPOSITE LIMITING HEIGHTS
FULLY BRACED
TRAKLOC Fixed Length Studs (TLF)

Width (in)	Stud Member (TLF)	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) 250TLF125-18	0.0188	33	12	13'-1"	11'-0"	9'-8"	10'-8" e	10'-8" e	9'-6"	9'-3" e	9'-3" e	8'-7" e
				16	11'-4" e	10'-0"	8'-9"	9'-3" e	9'-3" e	8'-7" e	8'-0" e	8'-0" e	7'-10" e
				24	9'-3" e	8'-9" e	7'-8" e	7'-7" e	7'-7" e	7'-6" e	6'-7" e	6'-7" e	6'-7" e
	TRAKLOC 20EQ (24mil) 250TLF125-24	0.0250	57	12	15'-0"	11'-11"	10'-5"	14'-9"	11'-8"	10'-3"	13'-4"	10'-8"	9'-3"
				16	13'-7"	10'-10"	9'-5"	13'-4"	10'-8"	9'-3"	11'-7"	9'-8"	8'-5"
				24	11'-11"	9'-5"	8'-3"	10'-11"	9'-3"	8'-1"	9'-5"	8'-5"	7'-4"
	TRAKLOC 30mil 250TLF125-30	0.0312	33	12	16'-5"	13'-1"	11'-5"	14'-10"	12'-10"	11'-3"	12'-10"	11'-8"	10'-2"
				16	14'-11"	11'-10"	10'-4"	12'-10"	11'-8"	10'-2"	11'-1"	10'-7"	9'-3"
				24	12'-10"	10'-4"	9'-1"	10'-6"	10'-2"	8'-11"	9'-1"	9'-1"	8'-1"
	TRAKLOC 33mil 250TLF125-33	0.0346	33	12	17'-0"	13'-6"	11'-9"	15'-10"	13'-3"	11'-7"	13'-9"	12'-1"	10'-6"
				16	15'-5"	12'-3"	10'-8"	13'-9"	12'-1"	10'-6"	11'-11"	10'-11"	9'-7"
				24	13'-6"	10'-8"	9'-4"	11'-2"	10'-6"	9'-2"	9'-8"	9'-7"	8'-4"
3-5/8	TRAKLOC 25 (18mil) 362TLF125-18	0.0188	33	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
	TRAKLOC 20EQ (24mil) 362TLF125-24	0.0250	57	12	20'-0"	15'-11"	13'-11"	18'-2"	15'-8"	13'-8"	15'-9"	14'-3"	12'-5"
				16	18'-2"	14'-5"	12'-7"	15'-9"	14'-3"	12'-5"	13'-7"	12'-11"	11'-3"
				24	15'-9"	12'-7"	11'-0"	12'-10"	12'-5"	10'-10"	11'-1" e	11'-1" e	9'-10"
	TRAKLOC 30mil 362TLF125-30	0.0312	33	12	21'-8"	17'-5"	15'-2"	17'-9"	17'-1"	14'-11"	15'-4"	15'-4"	13'-7"
				16	18'-10"	15'-10"	13'-10"	15'-4"	15'-4"	13'-7"	13'-3"	13'-3"	12'-4"
				24	15'-4"	13'-10"	12'-1"	12'-6"	12'-6"	11'-10"	10'-10"	10'-10"	10'-9"
	TRAKLOC 33mil 362TLF125-33	0.0346	33	12	22'-8"	18'-0"	15'-8"	19'-2"	17'-8"	15'-5"	16'-7"	16'-1"	14'-0"
				16	20'-3"	16'-4"	14'-3"	16'-7"	16'-1"	14'-0"	14'-4"	14'-4"	12'-9"
				24	16'-7"	14'-3"	12'-5"	13'-6"	13'-6"	12'-3"	11'-9"	11'-9"	11'-2"
4	TRAKLOC 25 (18mil) 400TLF125-18	0.0188	33	12	15'-6" e	15'-2"	13'-3"	12'-8" e	12'-8" e	12'-8" e	10'-11" e	10'-11" e	10'-11" e
				16	13'-5" e	13'-5" e	12'-1" 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'-6" e	8'-11" e	8'-11" e	8'-11" e	7'-9" e	7'-9" e	7'-9" e
	TRAKLOC 20EQ (24mil) 400TLF125-24	0.0250	57	12	21'-8"	17'-2"	15'-0"	19'-1"	16'-11"	14'-9"	16'-7"	15'-5"	13'-5"
				16	19'-8"	15'-8"	13'-8"	16'-7"	15'-5"	13'-5"	14'-4"	14'-0"	12'-2"
				24	16'-7"	13'-8"	11'-11"	13'-6"	13'-5"	11'-9"	11'-9"	11'-9"	10'-8"
	TRAKLOC 30mil 400TLF125-30	0.0312	33	12	22'-11"	18'-9"	16'-5"	18'-8"	18'-6"	16'-2"	16'-2"	16'-2"	14'-8"
				16	19'-10"	17'-1"	14'-11"	16'-2"	16'-2"	14'-8"	14'-0"	14'-0"	13'-4"
				24	16'-2"	14'-11"	13'-0"	13'-3"	13'-3"	12'-10"	11'-5"	11'-5"	11'-5"
	TRAKLOC 33mil 400TLF125-33	0.0346	33	12	24'-5"	19'-5"	16'-11"	20'-2"	19'-1"	16'-8"	17'-6"	17'-4"	15'-2"
				16	21'-5"	17'-8"	15'-5"	17'-6"	17'-4"	15'-2"	15'-2"	15'-2"	13'-9"
				24	17'-6"	15'-5"	13'-5"	14'-3"	14'-3"	13'-3"	12'-4"	12'-4"	12'-0"
6	TRAKLOC 25 (18mil) 600TLF125-18	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) 600TLF125-24	0.0250	57	12	27'-9"	23'-0"	20'-1"	22'-8"	22'-7"	19'-9"	19'-8" e	19'-8" e	17'-11" e
				16	24'-1"	20'-11"	18'-3"	19'-8" e	19'-8" e	17'-11" e	17'-0" e	17'-0" e	16'-4" e
				24	19'-8" e	18'-3" e	15'-11"	16'-1" e	16'-1" e	15'-8" e	13'-11" e	13'-11" e	13'-11" e
	TRAKLOC 30mil 600TLF125-30	0.0312	33	12	29'-5"	25'-8"	22'-5"	24'-0"	24'-0"	22'-1"	20'-10"	20'-10"	20'-1"
				16	25'-6"	23'-4"	20'-5"	20'-10"	20'-10"	20'-1"	18'-0" e	18'-0" e	18'-0" e
				24	20'-10"	20'-5"	17'-10"	17'-0" e	17'-0" e	17'-0" e	14'-9" e	14'-9" e	14'-9" e
	TRAKLOC 33mil 600TLF125-33	0.0346	33	12	32'-8"	26'-7"	23'-3"	26'-8"	26'-2"	22'-11"	23'-1"	23'-1"	20'-9"
				16	28'-3"	24'-2"	21'-2"	23'-1"	23'-1"	20'-9"	20'-0" e	20'-0" e	18'-11" e
				24	23'-1"	21'-2"	18'-5"	18'-10" e	18'-10" e	18'-2" e	16'-4" e	16'-4" e	16'-4" e

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.

1 Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.

2 Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.

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

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

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

TRAKLOC Fixed Length Studs (TLF)

Width (in)	Stud Member (TLF)	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) 250TLF125-18	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) 250TLF125-24	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 250TLF125-30	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 250TLF125-33	0.0346	33	12	17'-0"	13'-6"	11'-9"	14'-8"	13'-3"	11'-7"	12'-9"	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) 362TLF125-18	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) 362TLF125-24	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 362TLF125-30	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 362TLF125-33	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) 400TLF125-18	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) 400TLF125-24	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 400TLF125-30	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 400TLF125-33	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) 600TLF125-18 ²	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) 600TLF125-24 ¹	0.0250	57	12	24'-2"	23'-0"	20'-1"	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"	14'-10"	14'-10"	
				24	17'-1"	17'-1"	15'-11"	13'-11"	13'-11"	13'-11"	12'-1"	12'-1"	12'-1"	
	TRAKLOC 30mil 600TLF125-30	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 600TLF125-33	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"	18'-4"	18'-4"	
				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.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- ² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- ^e Web stiffeners are required at the stud/track connection.

TRAKLOC® NON-COMPOSITE LIMITING HEIGHTS
FULLY BRACED

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) 250TLA/TLD125-18	0.0188	33	12	13'-1"	11'-0"	9'-8"	10'-8" e	10'-8" e	9'-6"	9'-3" e	9'-3" e	8'-7" e
				16	11'-4" e	10'-0"	8'-9"	9'-3" e	9'-3" e	8'-7" e	8'-0" e	8'-0" e	7'-10" e
				24	9'-3" e	8'-9" e	7'-8" e	7'-7" e	7'-7" e	7'-6" e	6'-7" e	6'-7" e	6'-7" e
	TRAKLOC 20EQ (24mil) 250TLA/TLD125-24	0.0250	57	12	15'-0"	11'-11"	10'-5"	14'-9"	11'-8"	10'-3"	13'-4"	10'-8"	9'-3"
				16	13'-7"	10'-10"	9'-5"	13'-4"	10'-8"	9'-3"	11'-7"	9'-8"	8'-5"
				24	11'-11"	9'-5"	8'-3"	10'-11"	9'-3"	8'-1"	9'-5"	8'-5"	7'-4"
	TRAKLOC 30mil 250TLA/TLD125-30	0.0312	33	12	16'-5"	13'-1"	11'-5"	14'-10"	12'-10"	11'-3"	12'-10"	11'-8"	10'-2"
				16	14'-11"	11'-10"	10'-4"	12'-10"	11'-8"	10'-2"	11'-1"	10'-7"	9'-3"
				24	12'-10"	10'-4"	9'-1"	10'-6"	10'-2"	8'-11"	9'-1"	9'-1"	8'-1"
	TRAKLOC 33mil 250TLA/TLD125-33	0.0346	33	12	17'-0"	13'-6"	11'-9"	15'-10"	13'-3"	11'-7"	13'-9"	12'-1"	10'-6"
				16	15'-5"	12'-3"	10'-8"	13'-9"	12'-1"	10'-6"	11'-11"	10'-11"	9'-7"
				24	13'-6"	10'-8"	9'-4"	11'-2"	10'-6"	9'-2"	9'-8"	9'-7"	8'-4"
3-5/8	TRAKLOC 25 (18mil) 362TLA/TLD125-18	0.0188	33	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
	TRAKLOC 20EQ (24mil) 362TLA/TLD125-24	0.0250	57	12	20' 0"	15' 11"	13'-11"	18'-2"	15'-8"	13'-8"	15'-9"	14'-3"	12'-5"
				16	18' 2"	14' 5"	12'-7"	15'-9"	14'-3"	12'-5"	13'-7"	12'-11"	11'-3"
				24	15' 9"	12' 7"	11'-0"	12'-10"	12'-5"	10'-10"	11'-1" e	11'-1" e	9'-10"
	TRAKLOC 30mil 362TLA/TLD125-30	0.0312	33	12	21' 8"	17' 5"	15'-2"	17'-9"	17'-1"	14'-11"	15'-4"	15'-4"	13'-7"
				16	18' 10"	15' 10"	13'-10"	15'-4"	15'-4"	13'-7"	13'-3"	13'-3"	12'-4"
				24	15' 4"	13' 10"	12'-1"	12'-6"	12'-6"	11'-10"	10'-10"	10'-10"	10'-9"
	TRAKLOC 33mil 362TLA/TLD125-33	0.0346	33	12	22' 8"	18' 0"	15'-8"	19'-2"	17'-8"	15'-5"	16'-7"	16'-1"	14'-0"
				16	20' 3"	16' 4"	14'-3"	16'-7"	16'-1"	14'-0"	14'-4"	14'-4"	12'-9"
				24	16' 7"	14' 3"	12'-5"	13'-6"	13'-6"	12'-3"	11'-9"	11'-9"	11'-2"
4	TRAKLOC 25 (18mil) 400TLA/TLD125-18	0.0188	33	12	15' 6"	15' 2"	13'-3"	12'-8" e	12'-8" e	12'-8" e	10'-11" e	10'-11" e	10'-11" e
				16	13' 5" e	13' 5" e	12'-1" 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'-6" e	8'-11" e	8'-11" e	8'-11" e	7'-9" e	7'-9" e	7'-9" e
	TRAKLOC 20EQ (24mil) 400TLA/TLD125-24	0.0250	57	12	21' 8"	17' 2"	15'-0"	19'-1"	16'-11"	14'-9"	16'-7"	15'-5"	13'-5"
				16	19' 8"	15' 8"	13'-8"	16'-7"	15'-5"	13'-5"	14'-4"	14'-0"	12'-2"
				24	16' 7"	13' 8"	11'-11"	13'-6"	13'-5"	11'-9"	11'-9"	11'-9"	10'-8"
	TRAKLOC 30mil 400TLA/TLD125-30	0.0312	33	12	22' 11"	18' 9"	16'-5"	18'-8"	18'-6"	16'-2"	16'-2"	16'-2"	14'-8"
				16	19' 10"	17' 1"	14'-11"	16'-2"	16'-2"	14'-8"	14'-0"	14'-0"	13'-4"
				24	16' 2"	14' 11"	13'-0"	13'-3"	13'-3"	12'-10"	11'-5"	11'-5"	11'-5"
	TRAKLOC 33mil 400TLA/TLD125-33	0.0346	33	12	24' 5"	19' 5"	16'-11"	20'-2"	19'-1"	16'-8"	17'-6"	17'-4"	15'-2"
				16	21' 5"	17' 8"	15'-5"	17'-6"	17'-4"	15'-2"	15'-2"	15'-2"	13'-9"
				24	17' 6"	15' 5"	13'-5"	14'-3"	14'-3"	13'-3"	12'-4"	12'-4"	12'-0"
6	TRAKLOC 25 (18mil) 600TLA/TLD125-18 ²	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) 600TLA/TLD125-24 ¹	0.0250	57	12	27' 9"	23' 0"	20'-11"	22'-8"	22'-7"	19'-9"	19'-8" e	19'-8" e	17'-11" e
				16	24' 1"	20' 11"	18'-3"	19'-8" e	19'-8" e	17'-11" e	17'-0" e	17'-0" e	16'-4" e
				24	19' 8" e	18' 3" e	15'-11"	16'-1" e	16'-1" e	15'-8" e	13'-11" e	13'-11" e	13'-11" e
	TRAKLOC 30mil 600TLA/TLD125-30	0.0312	33	12	29' 5"	25' 8"	22'-5"	24'-0"	24'-0"	22'-1"	20'-10"	20'-10"	20'-1"
				16	25' 6"	23' 4"	20'-5"	20'-10"	20'-10"	20'-1"	18'-0" e	18'-0" e	18'-0" e
				24	20' 10"	20' 5"	17'-10"	17'-0" e	17'-0" e	17'-0" e	14'-9" e	14' 9" e	14'-9" e
	TRAKLOC 33mil 600TLA/TLD125-33	0.0346	33	12	32' 8"	26' 7"	23'-3"	26'-8"	26'-2"	22'-11"	23'-1" e	23'-1" e	20'-9"
				16	28' 3"	24' 2"	21'-2"	23'-1" e	23'-1" e	20'-9"	20'-0" e	20'-0" e	18'-11" e
				24	23' 1" e	21' 2"	18'-5"	18'-10" e	18'-10" e	18'-2" e	16'-4" e	16'-4" e	16'-4" 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.
- 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.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- ² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- Web stiffeners are required at the stud/track connection.

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) 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) 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 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 250TLA/TLD125-33	0.0346	33	12	17'-0"	13'-6"	11'-9"	14'-8"	13'-3"	11'-7"	12'-9"	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) 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) 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 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 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) 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) 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 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 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) 600TLA/TLD125-18 ²	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) 600TLA/TLD125-24 ¹	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 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 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.
- ¹ Web height-to-thickness ratio exceeds 200. Webs must have bearing stiffeners. See AISI S100 Section B1.2.
- ² Web height-to-thickness ratio exceeds 260 but less than 300. Webs must have bearing and intermediate stiffeners. See AISI S100 Section B1.2.
- ^e Web stiffeners are required at the stud/track connection.