Stair Solutions - Pultruded Stair Treads

Safe-T-Span® Pultruded Industrial/Pedestrian Stair Treads



Slip resistant and non conductive, Safe-T-Span pultruded stair treads offer the same level of safety, strength and corrosion resistance as other Fibergrate pultruded fiberglass products. Designed for use in industrial applications where wider support spans are required, Safe-T-Span pultruded stair treads are available in 1" and 1-1/2" depths in an I bar configuration with 40% and 60% open areas for most applications. A 2" depth T bar configuration, with either a 33% or 50% open area, is also available for applications requiring wider spans or lower deflections.

Safe-T-Span pultruded pedestrian stair treads are available in 1" and 1-1/2" depths in a T bar configuration, with 12%, 25% and 38% open areas. The application shown here utilizes Safe-T-Span pultruded industrial stair treads. These are used in conjunction with Dynarail® handrail and Dynaform® structure to construct a stairway leading from the ocean, up the rocky side of a cliff, to a research center located on Farallon Island, off the San Francisco coast.

Industrial Stair Tread Load/Deflection Information

	E Load (lbs.)	SPAN (in.)	18	24	30	36	42	48
TREAD TYPE		SPAN/150	.12	.16	.20	.24	.28	.32
1" Deep, I6010	250		.03	.08	.14	.22	.34	.46
	500		.07	.15	.28	.44	—	—
1-1/2" Deep, 16015	250		.01	.02	.04	.06	.09	.13
	500		.02	.04	.08	.11	.18	.26
2" Deep, T5020	250		.01	.02	.03	.04	.06	.09
	500		.02	.04	.06	.09	.12	.18
1" Deep, I4010	250		.02	.05	.10	.16	.24	.33
	500		.05	.11	.20	.32	.49	—
1-1/2" Deep, I4015	250		.01	.01	.03	.04	.06	.09
	500		.02	.03	.05	.07	.12	.17
2" Deep, T3320	250		.01	.01	.02	.03	.05	.07
	500		.02	.03	.04	.06	.09	.14

NOTES:

1. It is suggested that stair tread deflection be limited to SPAN/150. Deflections based on this ratio are provided at the top of the table.

2. Deflection in the body of the table are for concentrated loads of both 250 lbs. and 500 lbs. A concentrated load is applied at the center of the tread, over a width of 4" and a length of 6", starting at the nosing edge to simulate the landing of a foot.

3. Deflections are not appreciably different due to stair tread depth. Actual depth will vary depending on stair tread configuration.

Pultruded Treads & Accessories

Pedestrian Stair Tread Load/Deflection Information

TREAD TYPE	Load (lbs.)	SPAN (in.)	18	24	30	36	42	48
		SPAN/150	.12	.16	.20	.24	.28	.32
1" Deep, T1210	250		.06	.13	.19	.26	.37	.47
	500		.10	.22	.34	.46	—	—
1-1/2" Deep, T1215	250		.05	.07	.09	.11	.15	.18
	500		.08	.12	.16	.20	.28	.36
1" Deep, T2510	250		.05	.13	.20	.27	.39	.50
	500		.09	.23	.37	.50	_	—
1-1/2" Deep, T2515	250		.03	.06	.09	.12	.15	.18
	500		.05	.11	.16	.21	.28	.35
1" Deep, T3810	250		.06	.15	.23	.32	.47	—
	500		.09	.25	.41	—	—	—
1-1/2" Deep, T3815	250		.03	.06	.09	.12	.18	.23
	500		.05	.11	.17	.23	.34	.45

NOTES:

1. It is suggested that stair tread deflection be limited to SPAN/150. Deflections based on this ratio are provided at the top of the table.

2. Deflection in the body of the table are for concentrated loads of both 250 lbs. and 500 lbs. A concentrated load is applied at the center of the tread, over a width of 4" and a length of 6",

starting at the nosing edge to simulate the landing of a foot.

3. Deflections are not appreciably different due to stair tread depth. Actual depth will vary depending on stair tread configuration.

Clip Assemblies for Stair Solutions Products



TYPE M HOLD DOWN CLIPS:

Secure open mesh treads to a support using two adjacent grating bars for a secure fit. Similar in design to metal grating saddle clips.



TYPE H (TRUSS HEAD) STRUCTURAL CLIPS: Secure stair tread covers to an existing stair tread.





TYPE WLP STRUCTURAL CLIPS:

Secure covered treads to a structure or stair tread covers to an existing stair tread.

TYPE M HOLD DOWN CLIP ASSEMBLIES FOR PULTRUDED STAIR

TREADS: MI40 for I4010 and I4015 treads, MI60 for I6010 and I6015 treads, MT5020 for T5020 treads, MT3320 for T3320 treads.

Stair Tread Installation Note

All load carrying bars of both molded and pultruded stair treads (especially the nosing bar of the tread) must be fully supported at its ends to be considered properly installed.

To maintain corrosion resistance and structural integrity, all cut ends must be sealed with Fibergrate's sealing and bonding kit.

