

GripTread Deck Plate Load Tables

		Span													Max. Span (in) @ 100psf & 1/4" deflection	Max. Span (in) @ 50psf & 1/4" deflection				
		1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"						
304 Stainless Steel	0.125	284	123	67	41	27	18	13	9	6	4	3	2	1	19	22				
		0.12	0.27	0.48	0.74	1.07	1.46	1.90	2.40	2.97	3.59	4.27	5.01	5.80						
	0.188	642	281	155	96	64	45	33	24	18	14	10	8	5			26	30		
		0.08	0.18	0.32	0.50	0.71	0.97	1.27	1.60	1.98	2.39	2.85	3.34	3.87						
	0.25	1145	503	278	174	118	84	62	47	36	28	22	17	13					32	38
		0.06	0.13	0.24	0.37	0.53	0.73	0.95	1.20	1.48	1.80	2.14	2.51	2.91						
0.313	1793	789	438	276	188	134	100	76	59	47	37	30	24	37	45					
	0.05	0.11	0.19	0.30	0.43	0.58	0.76	0.96	1.19	1.44	1.71	2.01	2.33							
0.375	2584	1140	634	400	273	197	147	113	88	70	57	46	37			43	51			
	0.04	0.09	0.16	0.25	0.36	0.49	0.63	0.80	0.99	1.20	1.43	1.67	1.94							
0.5	4601	2033	1135	719	493	356	268	207	164	132	108	89	73					53	63	
	0.03	0.07	0.12	0.19	0.27	0.36	0.48	0.60	0.74	0.90	1.07	1.25	1.45							
316L Stainless Steel	0.125	311	135	74	45	30	21	15	10	7	5	4	2	1	19					22
		0.13	0.29	0.52	0.81	1.17	1.59	2.08	2.63	3.24	3.92	4.67	5.47	6.34						
	0.188	703	308	170	106	71	50	37	27	21	16	12	9	7		26	30			
		0.09	0.19	0.35	0.54	0.78	1.06	1.39	1.75	2.16	2.62	3.11	3.65	4.23						
	0.25	1253	551	305	192	130	93	69	52	40	31	25	19	15				32	38	
		0.06	0.15	0.26	0.41	0.58	0.80	1.04	1.31	1.62	1.96	2.34	2.74	3.18						
0.313	1960	864	480	303	206	148	110	84	66	52	42	34	27	37	45					
	0.05	0.12	0.21	0.32	0.47	0.64	0.83	1.05	1.30	1.57	1.87	2.19	2.54							
0.375	2826	1247	695	439	300	216	162	125	98	78	63	52	42			43	51			
	0.04	0.10	0.17	0.27	0.39	0.53	0.69	0.88	1.08	1.31	1.56	1.83	2.12							
0.5	5031	2224	1242	787	540	392	295	229	181	146	119	99	82					53	63	
	0.03	0.07	0.13	0.20	0.29	0.40	0.52	0.66	0.81	0.98	1.17	1.37	1.59							
5052-H32 Aluminum	0.125	258	113	63	40	27	19	14	11	9	7	5	4	4	15					17
		0.29	0.66	1.17	1.83	2.64	3.59	4.68	5.93	7.32	8.85	10.53	12.36	14.33						
	0.188	581	257	143	91	62	45	34	26	21	17	14	11	9		20	24			
		0.20	0.44	0.78	1.22	1.76	2.39	3.12	3.95	4.88	5.90	7.02	8.24	9.56						
	0.25	1034	457	256	162	112	81	61	48	38	31	25	21	18				25	29	
		0.15	0.33	0.59	0.92	1.32	1.79	2.34	2.96	3.66	4.43	5.27	6.18	7.17						
0.313	1616	716	401	255	176	128	97	76	60	49	41	34	29	29	35					
	0.12	0.26	0.47	0.73	1.05	1.43	1.87	2.37	2.93	3.54	4.22	4.95	5.74							
0.375	2328	1032	578	368	254	185	141	110	88	72	60	50	42			33	40			
	0.10	0.22	0.39	0.61	0.88	1.20	1.56	1.98	2.44	2.95	3.51	4.12	4.78							
0.5	4141	1837	1030	657	454	332	252	198	159	130	108	91	78					41	49	
	0.07	0.16	0.29	0.46	0.66	0.90	1.17	1.48	1.83	2.21	2.63	3.09	3.59							
6061-T651 Aluminum	0.125	369	163	91	58	39	28	21	17	13	10	9	7	6	15					17
		0.43	0.96	1.71	2.67	3.84	5.23	6.83	8.64	10.66	12.90	15.35	18.01	20.89						
	0.188	831	368	206	131	90	65	49	39	31	25	21	17	14		20	23			
		0.28	0.64	1.14	1.78	2.56	3.48	4.55	5.76	7.11	8.60	10.24	12.01	13.93						
	0.25	1478	655	367	234	161	117	89	70	56	45	38	32	27				24	29	
		0.21	0.48	0.85	1.33	1.92	2.61	3.41	4.32	5.33	6.45	7.68	9.01	10.45						
0.313	2310	1024	574	366	253	185	140	110	88	72	60	50	43	29	34					
	0.17	0.38	0.68	1.07	1.54	2.09	2.73	3.46	4.27	5.16	6.14	7.21	8.36							
0.375	3328	1476	828	528	365	267	203	159	128	105	87	74	63			33	39			
	0.14	0.32	0.57	0.89	1.28	1.74	2.28	2.88	3.56	4.30	5.12	6.01	6.97							
0.5	5919	2627	1474	941	651	477	363	286	230	189	158	133	114					41	49	
	0.11	0.24	0.43	0.67	0.96	1.31	1.71	2.16	2.67	3.23	3.84	4.51	5.23							

- Table displays maximum load in pounds per square foot and maximum displacement in inches for a given span and thickness, based off of the yield stress of the material with a factor of safety of 2.25
- Calculations derived from a model of a simply supported beam
- Material weight is included in the calculations, and has been removed from the displayed values
- Note: These values are theoretical. Actual practice always varies from empirical solutions. Consult GripTread about load ratings in your specific application.