

Aluminum Plank Load Table

Allowable uniform load and load at deflection limits for RPS 5" x 6" interlocking and 2" x 7" low-profile aluminum cover planks (6005A-T5 extruded aluminum).

Span (ft)	5" x 6" interlocking plank				2" x 7" low-profile plank			
	Allowable load	L/180	L/240	L/360	Allowable load	L/180	L/240	L/360
2	12,681	44,392	33,294	22,196	2,327	3,443	2,582	1,721
3	5,636	13,153	9,865	6,577	1,034	1,020	765	510
4	3,170	5,549	4,162	2,774	582	430	323	215
5	2,029	2,841	2,131	1,421	372	220	165	110
6	1,409	1,644	1,233	822	259	128	96	64
7	1,035	1,035	777	518	190	80	60	40
8	793	694	520	347	145	54	40	27
9	626	487	365	244	115	38	28	19
10	507	355	266	178	93	28	21	14
11	419	267	200	133	77	21	16	10
12	352	206	154	103	65	16	12	8
13	300	162	121	81	55	13	9	6
14	259	129	97	65	47	10	8	5
15	225	105	79	53	41	8	6	4
16	198	87	65	43	36	7	5	3
17	176	72	54	36	32	6	4	3
18	157	61	46	30	29	5	4	2
19	141	52	39	26	26	4	3	2
20	127	44	33	22	23	3	3	2
21	115	38	29	19	21	3	2	1
22	105	33	25	17	19	3	2	1
23	96	29	22	15	18	2	2	1
24	88	26	19	13	16	2	1	1
25	81	23	17	11	15	2	1	1
26	75	20	15	10	14	2	1	1
27	70	18	14	9	13	1	1	1
28	65	16	12	8	12	1	1	1
29	60	15	11	7	11	1	1	1
30	56	13	10	7	10	1	1	1
31	53	12	9	6	10	1	1	0

All loads in pounds per square foot (psf). **Allowable load** is based on a factor of safety of 1.65. **L/180, L/240, L/360** columns give the uniform load at which plank deflection reaches that limit (L = span).

Use the lower of the allowable load and the load at your required deflection limit. Example: a 100 psf live load at L/240 is met by the 2" x 7" plank up to about 5 ft of span and by the 5" x 6" plank up to 13 ft.

Values assume a uniformly distributed load on a single simple span. For preliminary selection only; RPS confirms final plank selection, framing and loads for each project. Contact gina-wwtp@rpsengineering.com or 847-931-1950.