

Notes for the following Allowable PLF Load Tables (pages 5-7):

1. Floor Systems are designed using $LDF=1.0$. The Live Load Deflection Limit is $1/360$ and the Total Load Deflection Limit is $1/240$.
2. Roof Systems are designed using $LDF=1.15$ or 1.25 . The Live Load Deflection Limit is $1/240$ and the Total Load Deflection Limit is $1/180$.
3. The top line of each table indicates the allowable load carrying capacity in pounds per lineal foot (plf) with a deflection limit based on the total load and includes the weight of the member. (blue)
4. The middle line of each table indicates the allowable load carrying capacity in pounds per lineal foot (plf) with a deflection limit based on the live load. (green)
5. The bottom line of each table indicates the bearing length in inches: 1.5 is one trimmer, 3.0 is two trimmers, 4.5 is three trimmers, etc. (red)
6. Each table shows spans from 6 to 32 feet and includes information for 1-ply, 2-ply and 3-ply conditions.
7. Values provided are the maximum uniform loads in pounds per lineal foot (plf) that can be applied to the beam in addition to its own weight. Allowable plf loads are based on the minimum bearing length required to carry the load. This required bearing length is then converted to the least number of 1.5"-wide trimmers that can be used.
8. Interpolation between clear openings is permitted.
9. For live load deflection factors of $L/180$ and $L/360$, multiply the Maximum Live Load figure (row 2) by 1.333 and 0.667, respectively. The result shall not exceed the total load.
10. Design span is assumed to be the clear opening plus $1/2$ the actual required bearing length at each end.
11. The bearing lengths show the number of trimmers required at each end of the header or beam based on the maximum plf loads. Shorter bearing lengths may be required with lighter loads, and longer bearing lengths may be required because of the material the header or beam is bearing on.
12. These tables are for gravity loads only. Consult a professional engineer for wind and seismic load analysis and design.
13. All tables are based on uniform load conditions. Any concentrated load applications must be analyzed separately or converted to an equivalent uniform load.
14. The compression edge of the header or beam must be laterally supported at intervals of 24" or less. In addition, lateral support must be provided at bearing points.
15. Allowable total and live plf loads used to select a header or beam must be equal to or greater than the actual plf loads applied.

Allowable Loads for Master Plank in Pounds per Lineal Foot - Load Duration Factor of 1.00 for Floor Load Conditions

Clear Opening	1 1/2" - 1 Ply										3" - 2 Ply										5" - 3 Ply										
	Depth (in.)										Depth (in.)										Depth (in.)										
	7/4	8	9/4	9/2	11/4	11/8	14	16	18	24	7/4	8	9/4	9/2	11/4	11/8	14	16	18	24	7/4	8	9/4	9/2	11/4	11/8	14	16	18	24	
6'	703	857	1146	1208	1695	1886	2439	3067	3834	6944	1409	1716	2294	2420	3395	3776	4883	6139	7674	13896	2432	2962	3960	4127	5233	5666	7326	9535	11919	23842	
	621	834	1146	1208	1695	1886	2439	3067	3834	6944	1242	1668	2294	2420	3395	3776	4883	6139	7674	13896	1862	2502	3868	4127	5233	5666	7326	9535	11919	23842	
	3	3	3	3	4.5	6	7.5	9	10.5	21	3	3	3	3	4.5	6	7.5	9	10.5	21	3	3	3	3	4.5	4.5	6	7.5	9	10.5	24
7'	516	629	841	887	1245	1386	1880	2358	2874	5100	1034	1260	1685	1777	2493	2775	3764	4721	5754	10207	1757	2175	2909	3068	4211	4537	5755	7333	8938	15892	
	391	525	812	880	1245	1386	1880	2358	2874	5100	782	1050	1624	1759	2493	2775	3764	4721	5754	10207	1173	1576	2436	2639	4211	4537	5755	7333	8938	15892	
	1.5	3	3	3	4.5	4.5	6	7.5	9	16.5	1.5	3	3	3	4.5	4.5	6	7.5	9	16.5	3	3	3	3	4.5	4.5	6	7.5	9	18	
8'	390	481	643	678	952	1060	1438	1842	2291	3832	783	964	1289	1360	1908	2124	2881	3689	4587	7672	1176	1581	2226	2348	3294	3667	4739	5957	7149	11917	
	262	352	544	589	952	1060	1438	1842	2291	3832	524	704	1088	1178	1908	2124	2881	3689	4587	7672	786	1056	1632	1768	2935	3452	4739	5957	7149	11917	
	1.5	1.5	3	3	4.5	4.5	6	6	9	13.5	1.5	3	3	3	4.5	4.5	6	6	9	13.5	1.5	3	3	3	4.5	4.5	6	7.5	9	15	
9'	273	368	507	535	751	837	1135	1454	1809	3064	549	739	1018	1074	1507	1677	2275	2913	3623	6136	825	1109	1716	1855	2602	2896	3928	5016	5956	9532	
	184	247	382	414	687	808	1135	1454	1809	3064	368	494	764	828	1374	1616	2275	2913	3623	6136	552	741	1146	1241	2062	2425	3928	5016	5956	9532	
	1.5	1.5	3	3	3	4.5	6	7.5	12	1.5	1.5	3	3	3	4.5	6	7.5	12	1.5	1.5	3	3	4.5	4.5	6	7.5	15	13.5			
10'	199	268	410	433	608	677	919	1177	1464	2495	400	538	824	869	1220	1358	1842	2359	2934	4997	601	808	1250	1354	2107	2345	3181	4331	5105	7942	
	134	180	278	302	501	589	919	1177	1464	2495	268	360	557	603	1002	1178	1842	2359	2934	4997	402	540	835	905	1503	1768	2896	4331	5105	7942	
	1.5	1.5	3	3	3	4.5	6	6	10.5	1.5	1.5	3	3	3	3	4.5	6	6	10.5	1.5	1.5	3	3	3	4.5	4.5	6	7.5	12		
11'	149	200	311	337	502	559	758	971	1209	2060	300	403	625	677	1007	1121	1521	1948	2423	4129	451	606	938	1017	1690	1937	2628	3811	4466	6806	
	101	135	209	227	376	443	725	971	1209	2060	201	271	418	453	753	885	1451	1948	2423	4129	302	406	628	680	1129	1328	2176	3811	4466	6806	
	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	10.5	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	10.5	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	10.5	
12'	114	154	239	259	421	469	636	815	1015	1730	230	310	480	520	846	942	1278	1636	2035	3468	347	466	722	782	1301	1530	2207	3402	3969	5954	
	78	104	161	175	290	341	559	815	1015	1730	155	209	322	349	580	682	1117	1636	2035	3468	233	313	483	524	870	1023	1676	3402	3969	5954	
	1.5	1.5	1.5	1.5	3	3	4.5	6	9	1.5	1.5	1.5	1.5	3	3	3	4.5	6	9	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	10.5		
13'	89	120	187	203	338	398	542	694	864	1473	181	243	377	409	680	801	1088	1393	1733	2954	272	366	567	615	1022	1203	1880	3011	3571	5292	
	61	82	127	137	228	268	439	656	864	1473	122	164	254	275	456	536	879	1312	1733	2954	183	246	380	412	684	805	1318	2952	3571	5292	
	1.5	1.5	1.5	1.5	3	3	4.5	4.5	9	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	9	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	10.5		
14'	71	96	149	162	270	318	466	598	744	1269	144	194	301	327	544	640	937	1201	1494	2546	217	293	454	491	818	962	1579	2595	3228	4762	
	49	66	101	110	183	215	352	525	744	1269	98	131	203	220	365	429	704	1050	1494	2546	147	197	304	330	548	644	1056	2363	3228	4762	
	1.5	1.5	1.5	1.5	3	3	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
15'	57	77	121	131	219	258	406	520	647	1104	117	157	244	265	441	520	816	1045	1300	2217	176	237	368	399	664	782	1283	2260	2811	4328	
	40	53	83	89	148	175	286	427	608	1104	79	107	165	179	297	349	572	854	1216	2217	119	160	248	268	445	524	858	1922	2736	4328	
	1.5	1.5	1.5	1.5	1.5	3	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
16'	47	63	99	107	180	212	349	456	568	969	65	129	201	218	363	428	702	918	1142	1947	145	195	303	328	547	643	1056	1986	2470	3967	
	33	44	68	74	122	144	236	352	501	969	96	88	136	147	245	288	471	704	1002	1947	98	132	204	221	367	432	707	1583	2254	3967	
	1.5	1.5	1.5	1.5	1.5	3	3	4.5	7.5	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
17'	38	52	82	89	149	176	290	404	502	858	79	107	167	181	302	356	585	813	1011	1724	120	162	252	273	455	536	880	1755	2187	3661	
	27	37	57	61	102	120	197	293	418	858	55	73	113	123	204	240	393	587	835	1724	82	110	170	184	306	360	590	1320	1880	3661	
	1.5	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
18'	32	44	68	74	125	148	244	359	448	764	67	90	140	152	254	299	492	724	901	1537	101	136	212	230	383	451	740	1477	1950	3323	
	23	31	48	52	86	101	166	247	352	764	46	62	95	103	172	202	331	494	704	1537	69	93	143	155	258	303	497	1112	1583	3323	
	1.5	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
19'	27	37	58	63	106	125	206	310	401	685	56	76	119	129	215	254	418	625	808	1378	86	115	180	195	325	383	629	1255	1750	2982	
	20	26	41	44	73	86	141	210	299	685	39	53	81	88	146	172	282	420	598	1378	59	79	122	132	219	258	422	946	1346	2982	
	1.5	1.5	1.5	1.5	1.5	3	3	3	6	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
20'	23	31	49	53	90	106	176	265	361	618	48	65	101	110	184	217	357	535	729	1243	73	99	153	166	278	327	538	1075	1533	2690	
	17	23	35	38	63	74	121	180	257	608	34	45	70	75	125	147	241	360	513	1216	50	68	104	113	188	221	362	811	1154	2690	
	1.5	1.5	1.5	1.5	1.5	3	3	3	6	1.5	1.5	1.5	1.5	3	3	3	4.5	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	9		
21'	19	26	42	46	77	91	152	228	326	559	41	56	87	94	158	187	308	461	659	1127	63	85	132	143	240	282	464	928	1323	2439	
	14	19	30	33	54	64	104	156	222	525	29	39	60	65	108	127	209	311	443	1050	43	58	90	98	162	191	313	700	997	2363	
	1.5	1.5	1.5	1.5	1.5	3	3	3	6	1.5	1.5	1.																			