

## 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 1.15 Snow 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'	809	986	1318	1391	1951	2170	2806	3528	4411	7988	1621	1974	2639	2784	3905	4344	5616	7061	8827	15983	2798	3407	4555	4747	6019	6518	8426	9535	11919	23842
	809	986	1318	1391	1951	2170	2806	3528	4411	7988	1621	1974	2639	2784	3905	4344	5616	7061	8827	15983	2793	3407	4555	4747	6019	6518	8426	9535	11919	23842
	3	3	4.5	4.5	6	6	7.5	10.5	12	24	3	3	4.5	4.5	6	6	7.5	10.5	12	24	3	3	4.5	4.5	6	6	7.5	9	10.5	24
7'	594	724	968	1021	1432	1595	2163	2713	3307	5867	1190	1450	1938	2045	2868	3193	4330	5430	6619	11741	2055	2502	3346	3529	4844	5219	6620	7333	8938	15892
	586	724	968	1021	1432	1595	2163	2713	3307	5867	1173	1450	1938	2045	2868	3193	4330	5430	6619	11741	1759	2363	3346	3529	4844	5219	6620	7333	8938	15892
	3	3	3	3	4.5	4.5	7.5	9	10.5	19.5	3	3	3	3	4.5	6	7.5	9	10.5	19.5	3	3	4.5	4.5	6	6	7.5	7.5	9	18
8'	454	554	740	781	1096	1220	1655	2119	2636	4409	911	1109	1484	1565	2195	2444	3314	4243	5277	8825	1569	1915	2561	2701	3789	4218	5451	5957	7149	11917
	393	528	740	781	1096	1220	1655	2119	2636	4409	786	1056	1484	1565	2195	2444	3314	4243	5277	8825	1178	1583	2448	2651	3789	4218	5451	5957	7149	11917
	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	6	6	7.5	9	15
9'	359	437	584	617	865	963	1307	1674	2082	3526	719	876	1172	1236	1734	1930	2618	3352	4168	7059	1101	1480	2023	2134	2993	3332	4519	5016	5956	9532
	276	371	573	617	865	963	1307	1674	2082	3526	552	741	1146	1236	1734	1930	2618	3352	4168	7059	828	1112	1719	1862	2993	3332	4519	5016	5956	9532
	1.5	3	3	3	4.5	4.5	6	7.5	9	15	1.5	3	3	3	4.5	4.5	6	7.5	9	15	1.5	3	3	3	4.5	4.5	6	7.5	7.5	13.5
10'	266	353	473	499	700	780	1058	1355	1685	2871	534	709	948	1001	1404	1563	2120	2714	3375	5749	802	1079	1638	1728	2424	2698	3659	4331	5105	7942
	201	270	418	453	700	780	1058	1355	1685	2871	402	540	835	905	1404	1563	2120	2714	3375	5749	603	811	1253	1358	2254	2651	3659	4331	5105	7942
	1.5	1.5	3	3	3	4.5	4.5	6	7.5	13.5	1.5	1.5	3	3	4.5	4.5	6	7.5	9	13.5	1.5	1.5	3	3	4.5	4.5	6	6	7.5	12
11'	199	268	390	412	578	644	873	1119	1392	2372	401	539	783	826	1159	1291	1751	2242	2789	4750	602	810	1253	1357	2002	2229	3024	3811	4466	6806
	151	203	314	340	565	644	873	1119	1392	2372	302	406	628	680	1129	1291	1751	2242	2789	4750	453	609	941	1020	1694	1992	3024	3811	4466	6806
	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	9	12	1.5	1.5	3	3	3	4.5	4.5	6	7.5	10.5	
12'	153	206	320	346	485	540	733	939	1169	1992	308	415	642	694	974	1084	1471	1883	2342	3990	463	623	964	1045	1682	1873	2540	3402	3969	5954
	116	156	242	262	435	511	733	939	1169	1992	233	313	483	524	870	1023	1471	1883	2342	3990	349	469	725	786	1305	1534	2514	3402	3969	5954
	1.5	1.5	1.5	3	3	4.5	4.5	6	10.5	1.5	1.5	1.5	3	3	4.5	4.5	6	10.5	1.5	1.5	1.5	3	3	3	4.5	6	7.5	10.5		
13'	120	162	251	272	413	460	624	800	995	1696	242	326	504	546	829	923	1253	1604	1995	3399	364	490	758	821	1365	1595	2164	3011	3571	5292
	92	123	190	206	342	402	624	800	995	1696	183	246	380	412	684	805	1253	1604	1995	3399	275	369	570	618	1026	1207	1978	2952	3571	5292
	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	9	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	9	1.5	1.5	1.5	1.5	3	3	4.5	6	7.5	10.5
14'	96	129	200	217	356	396	538	689	857	1461	193	260	403	437	715	796	1079	1382	1720	2930	291	392	606	657	1092	1285	1865	2595	3228	4762
	73	98	152	165	274	322	528	689	857	1461	147	197	304	330	548	644	1056	1382	1720	2930	220	295	457	495	822	966	1583	2363	3228	4762
	1.5	1.5	1.5	1.5	3	3	4.5	6	9	1.5	1.5	1.5	1.5	3	3	4.5	6	9	1.5	1.5	1.5	1.5	3	3	4.5	6	6	9		
15'	77	104	162	176	294	345	468	600	746	1272	157	211	327	355	590	693	940	1204	1497	2551	236	318	492	534	887	1044	1624	2260	2811	4328
	60	80	124	134	223	262	429	600	746	1272	119	160	248	268	445	524	858	1204	1497	2551	179	240	371	402	668	786	1287	1922	2736	4328
	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	4.5	4.5	9	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	9		
16'	63	86	133	145	241	284	411	526	655	1117	129	174	269	292	486	572	825	1057	1315	2242	194	262	405	439	731	860	1410	1986	2470	3967
	49	66	102	110	183	216	354	526	655	1117	98	132	204	221	367	432	707	1056	1315	2242	147	198	306	331	550	647	1061	1583	2254	3967
	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	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	4.5	6	9		
17'	52	71	111	120	201	236	363	466	580	989	107	144	224	243	405	476	731	936	1165	1985	162	218	337	366	609	716	1175	1755	2187	3661
	41	55	85	92	153	180	295	440	580	989	82	110	170	184	306	360	590	880	1165	1985	123	165	255	276	459	540	884	1320	1880	3661
	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	4.5	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	6	6	9		
18'	44	59	93	101	169	199	324	415	516	881	90	121	188	204	340	401	651	834	1038	1770	136	183	284	308	512	603	989	1477	1950	3323
	34	46	72	78	129	152	248	371	516	881	69	93	143	155	258	303	497	741	1038	1770	103	139	215	233	387	455	745	1112	1583	3323
	1.5	1.5	1.5	1.5	3	3	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	7.5	1.5	1.5	1.5	1.5	3	3	4.5	6	6	9				
19'	37	50	79	85	143	168	277	372	463	790	76	103	160	173	289	340	559	748	931	1588	115	155	241	261	435	512	840	1255	1750	2982
	29	39	61	66	110	129	211	315	449	790	59	79	122	132	219	258	422	630	898	1588	88	118	183	198	329	387	633	946	1346	2982
	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	4.5	7.5					
20'	31	43	67	73	122	144	237	335	417	713	65	88	137	148	247	291	479	675	840	1432	98	133	206	223	372	438	720	1075	1533	2690
	25	34	52	57	94	110	181	270	385	713	50	68	104	113	188	221	362	540	770	1432	75	101	157	170	282	331	543	811	1154	2690
	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3	4.5	6						
21'	27	37	57	62	105	124	204	304	378	646	56	75	118	128	213	251	413	612	761	1298	85	114	178	193	321	378	621	928	1323	2439
	22	29	45	49	81	95	156	233	332	646	43	58	90	98	162	191	313	467	665	1298	65	88	135	147	243	286	469	700	997	2363
	1.5	1.5	1.5	1.5	3	3	4.5	6	1.5	1.5	1.5	1.5	3	3																