

## 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 1.25 Construction Loads

Clear Opening	1 1/2" - 1 Ply										3" - 2 Ply										5" - 3 Ply																			
											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'	880	1071	1433	1511	2120	2359	3050	3835	4794	8682	1762	2145	2869	3026	4244	4721	6104	7675	9594	17372	3041	3703	4951	5159	6542	7084	9159	9535	11919	23842										
	880	1071	1433	1511	2120	2359	3050	3835	4794	8682	1762	2145	2869	3026	4244	4721	6104	7675	9594	17372	2793	3703	4951	5159	6542	7084	9159	9535	11919	23842										
7'	646	786	1052	1110	1557	1733	2351	2948	3594	6376	1294	1576	2107	2222	3117	3470	4706	5902	7194	12761	2233	2720	3637	3836	5264	5672	7195	7333	8938	15892										
	586	786	1052	1110	1557	1733	2351	2948	3594	6376	1173	1576	2107	2222	3117	3470	4706	5902	7194	12761	1759	2363	3637	3836	5264	5672	7195	7333	8938	15892										
8'	494	601	805	849	1191	1326	1799	2303	2865	4792	990	1206	1612	1701	2386	2656	3602	4612	5736	9592	1569	2082	2783	2936	4118	4584	5925	5957	7149	11917										
	393	528	805	849	1191	1326	1799	2303	2865	4792	786	1056	1612	1701	2386	2656	3602	4612	5736	9592	1178	1583	2448	2651	4118	4584	5925	5957	7149	11917										
9'	365	475	635	670	940	1047	1420	1819	2262	3832	733	952	1273	1343	1884	2098	2845	3643	4531	7672	1101	1480	2199	2319	3253	3621	4911	5016	5956	9532										
	276	371	573	621	940	1047	1420	1819	2262	3832	552	741	1146	1241	1884	2098	2845	3643	4531	7672	828	1112	1719	1862	3092	3621	4911	5016	5956	9532										
10'	266	358	514	542	761	847	1149	1472	1831	3120	534	718	1031	1087	1525	1698	2304	2950	3669	6249	802	1078	1668	1807	2634	2932	3977	4331	5105	7942										
	201	270	418	453	751	847	1149	1472	1831	3120	402	540	835	905	1503	1698	2304	2950	3669	6249	603	811	1253	1358	2254	2651	3977	4331	5105	7942										
11'	199	268	415	447	628	699	949	1216	1512	2577	400	539	834	898	1260	1403	1903	2437	3031	5163	602	809	1252	1357	2176	2423	3286	3811	4466	6806										
	151	203	314	340	565	664	949	1216	1512	2577	302	406	628	680	1129	1328	1903	2437	3031	5163	453	609	941	1020	1694	1992	3264	3811	4466	6806										
12'	153	206	319	346	527	587	797	1021	1270	2164	308	414	641	695	1058	1178	1598	2047	2546	4337	463	623	964	1044	1736	2035	2760	3402	3969	5954										
	116	156	242	262	435	511	797	1021	1270	2164	233	313	483	524	870	1023	1598	2047	2546	4337	349	469	725	786	1305	1534	2514	3402	3969	5954										
13'	120	161	250	271	449	500	678	869	1081	1843	242	325	504	546	901	1003	1361	1743	2168	3694	364	489	757	821	1364	1605	2351	3011	3571	5292										
	92	123	190	206	342	402	659	869	1081	1843	183	246	380	412	684	805	1318	1743	2168	3694	275	369	570	618	1026	1207	1978	2952	3571	5292										
14'	95	129	200	217	361	425	584	748	931	1588	193	260	403	437	726	855	1173	1502	1869	3184	291	391	606	656	1092	1284	2027	2595	3228	4762										
	73	98	152	165	274	322	528	748	931	1588	147	197	304	330	548	644	1056	1502	1869	3184	220	295	457	495	822	966	1583	2363	3228	4762										
15'	77	104	162	176	293	345	508	651	810	1382	156	211	327	354	590	694	1021	1308	1627	2773	236	318	492	533	887	1043	1712	2260	2811	4328										
	60	80	124	134	223	262	429	641	810	1382	119	160	248	268	445	524	858	1281	1627	2773	179	240	371	402	668	786	1287	1922	2736	4328										
16'	63	85	133	144	241	284	446	572	712	1214	128	173	269	291	485	571	897	1149	1429	2436	194	261	405	439	730	859	1410	1986	2470	3967										
	49	66	102	110	183	216	354	528	712	1214	98	132	204	221	367	432	707	1056	1429	2436	147	198	306	331	550	647	1061	1583	2254	3967										
17'	52	71	110	120	200	236	388	506	630	1074	107	144	224	242	404	476	781	1017	1265	2157	161	217	337	365	608	716	1174	1755	2187	3661										
	41	55	85	92	153	180	295	440	627	1074	82	110	170	184	306	360	590	880	1253	2157	123	165	255	276	459	540	884	1320	1880	3661										
18'	44	59	92	100	168	198	326	451	561	957	89	121	188	204	340	400	657	907	1128	1923	135	183	283	307	512	602	989	1477	1950	3323										
	34	46	72	78	129	152	248	371	528	957	69	93	143	155	258	303	497	741	1056	1923	103	139	215	233	387	455	745	1112	1583	3323										
19'	37	50	78	85	142	168	277	404	503	858	76	102	159	173	288	340	558	813	1012	1725	115	155	240	261	434	511	840	1255	1750	2982										
	29	39	61	66	110	129	211	315	449	858	59	79	122	132	219	258	422	630	898	1725	88	118	183	198	329	387	633	946	1346	2982										
20'	31	42	66	72	121	143	237	355	453	774	65	87	136	148	247	291	478	715	913	1556	98	132	206	223	372	438	719	1075	1533	2690										
	25	34	52	57	94	110	181	270	385	774	50	68	104	113	188	221	362	540	770	1556	75	101	157	170	282	331	543	811	1154	2690										
21'	26	36	57	62	104	123	204	306	411	701	55	75	117	127	213	250	412	617	827	1411	84	114	177	192	321	378	621	928	1323	2439										
	22	29	45	49	81	95	156	233	332	701	43	58	90	98	162	191	313	467	665	1411	65	88	135	147	243	286	469	700	997	2363										
22'	23	31	49	53	90	107	177	265	373	638	48	65	101	110	184	217	358	536	753	1285	73	99	154	167	278	328	539	807	1150	2222										
	19	25	39	42	71	83	136	203	289	638	38	51	78	85	141	166	272	406	578	1285	57	76	118	127	212	249	408	609	867	2056										
23'	20	27	43	46	79	93	154	231	331	583	42	57	88	96	161	190	313	468	668	1175	64	86	134	146	243	287	471	705	1006	2032										
	17	22	34	37	62	73	119	178	253	583	33	44	69	74	124	145	238	355	506	1175	50	67	103	112	185	218	357	533	759	1799										
24'	17	23	37	40	69	81	135	203	291	535	36	49	77	84	141	166	275	412	588	1078	56	75	118	128	214	252	414	620	885	1866										
	15	20	30	33	54	64	105	156	223	528	29	39	60	65	109	128	210	313	445	1056	44	59	91	98	163	192	314	469	668	1583										
25'	15	20	32	35	60	71	119	179	257	492	32	43	68	74	124	147	242	363	519	993	49	66	104	113	189	222	366	548	782	1719										
	13	17	27	29	48	57	93	138	197	467	26	35	53	58	96	113	185	277	394	934	39	52	80	87	144	170	278	415	591	1401										
26'	13	18	29	31	53	63	105	159	227	455	28	38	60	65	110	130	215	323	461	917	43	59	92	100	167	197	325	487	694	1588										
	11	15	24	26	43	50	82	123	175	415	23	31	48	51	86	101	165	246	350	830	34	46	71	77	128	151	247	369	525	1245										
27'	11	16	25	27	47	56	93	141	202	421	25	34	53	58	98	116	191	287	411	850	38	52	82	89	149	176	290	434	619	1472										
	10	14	21	23	38	45	74	110	156	371	20	27	42	46	76	90	147	220	313	741	31	41	64	69	115	135	221	329	469	1112										
28'	10	14	22	24	42	50	83	126	181	391	22	30	48	52	87	103	171	257	368	790	34	47	73	79	133	157	259	388	555	1321										
	9	12	19	21	34	40	66	98	140	332	18	25	38	41	68	81	132	197	280	665	27	37	57	62	103	121														