

Notes for the following Allowable PLF Load Tables (pages 13-15):

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 on which the header or beam is bearing.
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	3-1/2" - 1 Ply											5-1/4" - 2 Ply [3-1/2" with 1-3/4"]											7" - 2 Ply																					
												Depth (in.)																						Depth (in.)										
	7-1/4	8	9-1/4	9-1/2	11-1/4	11-7/8	14	16	18	24		7-1/4	8	9-1/4	9-1/2	11-1/4	11-7/8	14	16	18	24		7-1/4	8	9-1/4	9-1/2	11-1/4	11-7/8	14	16	18	24		7-1/4	8	9-1/4	9-1/2	11-1/4	11-7/8	14	16	18	24	
6'	2032 2032 3	2439 2439 3	3191 3191 4.5	3352 3352 4.5	4585 4585 6	5064 5064 6	6548 6548 7.5	8232 8232 10.5	10292 10292 12	18639 18639 24		3048 3048 3	3658 3658 3	4786 4786 4.5	5029 5029 4.5	6877 6877 6	7596 7596 6	9821 9821 7.5	12348 12348 10.5	15438 15438 12	27958 27958 24		4676 4345 3	5611 5611 3	7114 7114 4.5	7375 7375 4.5	9352 9352 6	10128 10128 6	13095 13095 7.5	13631 13631 7.5	17042 17042 10.5	34099 34099 21												
7'	1492 1368 3	1790 1790 3	2343 2343 3	2461 2461 3	3366 3366 4.5	3721 3721 4.5	5047 5047 7.5	6330 6330 9	7716 7716 10.5	13689 13689 19.5		2238 2052 3	2685 2685 3	3514 3514 3	3692 3692 3	5049 5049 4.5	5581 5581 4.5	7570 7570 7.5	9495 9495 9	11574 11574 10.5	20534 20534 19.5		3433 2736 3	4119 3676 3	5390 5390 4.5	5663 5663 4.5	7524 7524 6	8107 8107 6	10285 10285 7.5	10480 10480 7.5	12775 12775 9	22722 22722 16.5												
8'	1141 917 3	1369 1231 3	1792 1792 3	1883 1883 3	2576 2576 4.5	2847 2847 4.5	3862 3862 7.5	4945 4945 9	6151 6151 10.5	10288 10288 16.5		1711 1375 3	2054 1847 3	2688 2688 3	2824 2824 3	3863 3863 4.5	4270 4270 4.5	5793 5793 6	7418 7418 7.5	9226 9226 9	15432 15432 16.5		2434 1833 3	3151 2463 3	4124 3807 3	4333 4124 3	5926 5926 4.5	6550 6550 4.5	8467 8467 6	8511 8511 6	10215 10215 7.5	17033 17033 13.5												
9'	853 644 1.5	1081 865 3	1415 1337 3	1486 1448 3	2033 2033 4.5	2248 2248 4.5	3049 3049 7.5	3905 3905 9	4857 4857 12	8227 8227 15		1280 966 1.5	1621 1297 3	2122 2005 3	2230 2173 3	3050 3050 4.5	3372 3372 4.5	4574 4574 6	5858 5858 7.5	7286 7286 9	12340 12340 15		1707 1287 1.5	2296 1730 3	3256 2674 3	3421 2897 3	4679 4679 4.5	5172 5172 4.5	7016 7016 6	7164 7164 6	8509 8509 7.5	13620 13620 12												
10'	621 469 1.5	835 631 1.5	1145 975 3	1203 1056 3	1646 1646 4.5	1819 1819 4.5	2468 2468 7.5	3161 3161 9	3932 3932 12	6699 6699 13.5		931 704 1.5	1253 946 3	1717 1462 3	1804 1584 3	2468 2468 4.5	2729 2729 4.5	3702 3702 6	4742 4742 7.5	5898 5898 9	10049 10049 15		1242 939 1.5	1670 1261 3	2587 1949 3	2768 2112 3	3787 3507 4.5	4186 4186 4.5	5680 5680 6	6184 6184 6	7290 7290 7.5	11345 11345 10.5												
11'	465 353 1.5	626 474 1.5	945 732 3	993 793 3	1359 1317 3	1502 1502 3	2038 2038 4.5	2611 2611 6	3247 3247 7.5	5534 5534 12		698 529 1.5	939 711 3	1417 1098 3	1489 1190 3	2038 1976 3	2253 2253 4.5	3057 3057 6	3916 3916 7.5	4871 4871 9	8301 8301 15		930 705 1.5	1252 947 3	1940 1465 3	2102 1587 3	3127 2635 3	3457 3099 4.5	4691 4691 4.5	5221 5221 6	6375 6375 7.5	9719 9719 10.5												
12'	357 272 1.5	481 365 1.5	746 564 3	808 611 3	1140 1015 3	1261 1193 3	1711 1711 4.5	2192 2192 6	2727 2727 10.5	4647 4647 15		536 407 1.5	722 547 3	1119 846 3	1212 917 3	1711 1522 3	1891 1790 3	2567 2567 4.5	3288 3288 6	4090 4090 7.5	6971 6971 10.5		714 543 1.5	962 730 3	1492 1128 3	1616 1222 3	2625 2029 3	2902 2902 4.5	3938 3911 6	4384 4384 6	5454 5454 7.5	8500 8500 9												
13'	280 214 1.5	377 287 1.5	585 444 1.5	634 481 1.5	971 798 3	1073 939 3	1457 1457 4.5	1866 1866 6	2322 2322 9	3957 3957 15		420 320 1.5	566 430 3	878 665 3	951 721 3	1456 1197 3	1610 1408 3	2185 2185 4.5	2799 2799 6	3482 3482 7.5	5936 5936 10.5		560 427 1.5	754 574 3	1170 887 3	1269 961 3	2113 1596 3	2471 1877 4.5	3353 3076 6	3732 3732 7.5	4643 4643 9	7552 7552 15												
14'	223 171 1.5	301 230 1.5	467 355 1.5	507 385 1.5	836 639 3	924 752 3	1255 1231 3	1607 1607 4.5	2000 2000 6	3410 3410 9		335 257 1.5	451 345 3	701 533 3	760 577 3	1254 959 3	1386 1127 3	1882 1847 3	2411 2411 4.5	3000 3000 6	5115 5115 9		446 342 1.5	602 460 3	935 710 3	1013 770 3	1689 1278 3	1988 1503 4.5	2888 2463 6	3215 3215 7.5	4000 4000 9	6794 6794 15												
15'	180 139 1.5	244 187 1.5	379 289 1.5	411 313 1.5	685 520 3	804 611 3	1092 1001 3	1399 1399 4.5	1741 1741 6	2968 2968 9		271 209 1.5	365 280 3	568 433 3	616 469 3	1028 779 3	1206 917 3	1637 1502 3	2098 2098 4.5	2611 2611 6	4453 4453 9		361 278 1.5	487 374 3	758 578 3	821 626 3	1370 1039 3	1613 1222 3	2514 2002 4.5	2798 2798 6	3481 3481 7.5	5937 5937 10.5												
16'	148 115 1.5	200 154 1.5	311 238 1.5	337 258 1.5	563 428 3	663 503 3	958 825 3	1228 1228 4.5	1528 1528 6	2607 2607 9		222 172 1.5	300 231 3	466 357 3	506 387 3	845 642 3	995 755 3	1437 1237 3	1842 1842 4.5	2293 2293 6	3911 3911 9		296 229 1.5	400 308 3	622 476 3	674 516 3	1126 856 3	1326 1007 3	2181 1650 4.5	2456 2456 6	3057 3057 7.5	5214 5214 10.5												
17'	122 96 1.5	166 128 1.5	258 198 1.5	280 215 1.5	468 357 1.5	552 420 3	848 688 3	1087 1027 3	1353 1353 4.5	2307 2307 7.5		184 143 1.5	249 193 3	387 298 3	420 322 3	702 535 3	827 630 3	1272 1032 3	1630 1540 3	2029 2029 4.5	3461 3461 7.5		245 191 1.5	331 257 3	516 397 3	560 430 3	936 714 3	1103 839 3	1815 1376 4.5	2173 2053 6	2705 2705 7.5	4615 4615 10.5												
18'	102 80 1.5	139 108 1.5	217 167 1.5	235 181 1.5	393 301 1.5	463 354 1.5	755 579 3	968 865 3	1205 1205 4.5	2056 2056 7.5		154 121 1.5	208 162 3	325 251 3	352 272 3	590 451 3	695 530 3	1133 869 3	1452 1297 3	1808 1808 4.5	3085 3085 6		205 161 1.5	277 216 3	433 334 3	470 362 3	786 601 3	927 707 3	1526 1159 4.5	1936 1730 6	2410 2410 7.5	4113 4113 10.5												
19'	86 68 1.5	117 92 1.5	183 142 1.5	199 154 1.5	333 256 1.5	393 301 1.5	647 493 3	868 735 3	1080 1047 4.5	1844 1844 7.5		129 103 1.5	176 138 3	275 213 3	298 231 3	500 383 3	589 451 3	971 739 3	1302 1103 3	1620 1571 4.5	2766 2766 7.5		173 137 1.5	234 184 3	366 284 3	398 308 3	666 611 3	786 601 3	1295 985 4.5	1736 1471 6	2161 2094 7.5	3688 3688 10.5												
20'	73 59 1.5	100 79 1.5	156 122 1.5	170 132 1.5	285 219 1.5	336 258 1.5	554 422 3	782 631 3	974 974 4.5	1663 1663 7.5		110 88 1.5	149 118 3	234 183 3	254 198 3	427 329 3	503 387 3	831 634 3	1173 946 3	1461 1347 4.5	2494 2494 7.5		147 117 1.5	199 158 3	312 244 3	339 264 3	569 438 3	671 516 3	1107 845 4.5	1564 1261 6	1948 1796 7.5	3325 3325 10.5												
21'	63 51 1.5	85 68 1.5	134 105 1.5	146 114 1.5	245 189 1.5	289 223 1.5	477 365 3	708 545 3	882 776 4.5	1507 1507 7.5		94 76 1.5	128 102 3	201 158 3	218 178 3	367 284 3	433 334 3	715 547 3	1063 817 3	1323 1163 4.5	2260 2260 7.5		125 101 1.5	171 136 3	268 210 3	291 228 3	490 445 3	578 530 4.5	954 730 6	1417 1089 7.5	1764 1551 9	3013 3013 10.5												
22'	54 44 1.5	74 59 1.5	116 92 1.5	126 99 1.5	212 165 1.5	250 194 1.5	414 317 3	621 474 3	803 674 4.5	1371 1371 7.5		81 66 1.5	110 89 3	174 137 3	189 149 3	318 247 3	375 291 3	620 476 3	931 711 3	1204 1012 3	2057 2057 4.5		108 88 1.5	147 118 3	232 183 3	251 198 3	424 329 3	500 387 3	827 635 4.5	1241 947 6	1605 1349 7.5	2742 2742 10.5												
23'	46 39 1.5	64 52 1.5	101 80 1.5	109 87 1.5	184 144 1.5	218 169 1.5	361 278 3	542 415 3	733 590 4.5	1253 1253 7.5		70 58 1.5	95 78 3	151 120 3	164 130 3	277 216 3	327 254 3	541 417 3	813 622 3	1100 885 3	1880 1880 4.5		93 77 1.5	127 104 3	201 160 3	218 174 3	369 288 3	436 339 3	722 555 4.5	1084 829 6	1467 1181 7.5	2506 2506 10.5												
24'	40 34 1.5	55 46 1.5	88 71 1.5	95 76 1.5	161 127 1.5	191 149 1.5	316 244 3	476 365 3	673 520 3	1150 1150 4.5		60 51 1.5	83 68 3	132 106 3	143 115 3	242 190 3	286 224 3	475 367 3	713 547 3	1009 779 3	1724 1724 4.5		81 68 1.5	111 91 3	175 141 3	191 153 3	323 254 3	382 298 3	633 489 4.5	951 730 6	1345 1039 7.5	2299 2299 10.5												
25'	35 30 1.5	48 40 1.5	77 62 1.5	84 68 1.5	142 112 1.5	168 132 1.5	279 216 3	420 323 3	601 601 4.5	1058 1058 7.5		53 45 1.5	73 61 3	115 94 3	125 101 3	213 168 3	252 198 3	418 324 3	629 484 3	901 689 3																								