

Allowable Total Loads for Beams Supporting Floors

1.8 Microllam™ LVL

| Span in feet | 1 3/4" X 9 1/2" | | | | | | 1 3/4" X 11 1/4" | | | | | | 1 3/4" X 11 7/8" | | | | | | 1 3/4" X 14" | | | | | |
|--------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|
| | Number of members | | | | | | Number of members | | | | | | Number of members | | | | | | Number of members | | | | | |
| | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | |
| | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. | L.L. L/360 | L.L. + D.L. |
| 6 | | 6378 F | | 12756 J | | 19134 L | | 7944 F | | 15888 M | | 23832 P | | 8544 K | | 17088 O | | 25632 R | | 10770 N | | 21540 S | | 32310 Y |
| 7 | 5684 C | 6139 F | 11368 G | 12278 J | 17052 K | 18417 L | | 7574 F | | 15148 M | | 22722 P | | 8120 K | | 16240 O | | 24360 R | | 10108 N | | 20216 S | | 30324 W |
| 8 | 4528 C | 5848 C | 9056 E | 11696 G | 13584 F | 17544 K | 7144 F | 7320 F | 14288 M | 14640 M | 21432 N | 21960 N | | 7832 F | | 15664 M | | 23496 P | | 9656 K | | 19312 Q | | 28968 U |
| 9 | 3681 A | 5184 C | 7362 E | 10368 G | 11043 D | 15552 H | 5859 C | 7119 F | 11718 G | 14238 M | 17577 K | 21357 N | 6777 F | 7614 F | 13554 J | 15228 M | 20331 N | 22842 P | | 9333 K | | 18666 Q | | 27999 S |
| 10 | 3040 A | 4510 C | 6080 B | 9020 E | 9120 C | 13530 F | 4880 C | 6390 F | 9760 E | 12788 J | 14640 H | 19170 L | 5660 C | 7080 F | 11320 G | 14160 M | 16980 K | 21240 N | 8830 K | 9090 K | 17660 O | 18180 Q | 26490 S | 27270 S |
| 11 | 2552 A | 3773 A | 5104 A | 7546 B | 7656 A | 11319 D | 4114 C | 5795 C | 8228 E | 11594 G | 12342 F | 17391 K | 4785 C | 6424 F | 9570 E | 12848 J | 14355 H | 19272 L | 7524 F | 8745 K | 15048 M | 17490 O | 22572 P | 26235 S |
| 12 | 2172 A | 3192 A | 4344 A | 6384 B | 6516 C | 9576 C | 3516 A | 5196 C | 7032 B | 10392 G | 10548 D | 15588 H | 4092 C | 5880 C | 8184 E | 11760 G | 12276 F | 17640 K | 6468 F | 8004 K | 12936 J | 16008 O | 19404 L | 24012 R |
| 13 | 1872 A | 2730 A | 3744 A | 5460 A | 5616 A | 8190 C | 3029 A | 4472 C | 6058 B | 8944 E | 9087 C | 13416 F | 3536 A | 5226 C | 7072 B | 10452 G | 10608 D | 15678 H | 5616 C | 7371 F | 11232 G | 14742 M | 16848 K | 22113 P |
| 14 | 1624 A | 2366 A | 3248 A | 4110 A | 4872 A | 7098 A | 2646 A | 3878 A | 5292 A | 7756 B | 7938 A | 11634 D | 3080 A | 4550 C | 6160 B | 9100 E | 9240 C | 13650 F | 4914 C | 6832 F | 9828 E | 13664 J | 14742 H | 20496 N |
| 15 | 1425 A | 2055 A | 2850 A | 4110 A | 4275 A | 6165 A | 2325 A | 3390 A | 4650 A | 6780 B | 6975 A | 10170 D | 2715 A | 3975 A | 5430 A | 7950 B | 8145 C | 11925 D | 4335 C | 6360 F | 8670 E | 12720 J | 13005 F | 19080 L |
| 16 | 1248 A | 1808 A | 2496 A | 3616 A | 3744 A | 5424 A | 2048 A | 2992 A | 4096 A | 5984 A | 6144 A | 8976 C | 2400 A | 3504 A | 4800 A | 7008 B | 7200 A | 10512 D | 3856 A | 5664 C | 7712 B | 11328 G | 11568 D | 16992 K |
| 17 | 1122 A | 1598 A | 2244 A | 3196 A | 3366 A | 4797 A | 1836 A | 2652 A | 3672 A | 5304 A | 5508 A | 7956 A | 2142 A | 3111 A | 4284 A | 6222 B | 6426 A | 9333 C | 3451 A | 5049 C | 6902 B | 10098 G | 10353 D | 15147 H |
| 18 | 1008 A | 1404 A | 2016 A | 2808 A | 3024 A | 4212 A | 1638 A | 2358 A | 3276 A | 4716 A | 4914 A | 7074 A | 1926 A | 2772 A | 3852 A | 5544 A | 5778 A | 8316 C | 3096 A | 4518 C | 6192 B | 9036 E | 9288 C | 13554 F |
| 19 | 893 A | 1254 A | 1786 A | 2508 A | 2679 A | 3762 A | 1482 A | 2109 A | 2964 A | 4218 A | 4446 A | 6327 A | 1729 A | 2489 A | 3458 A | 4978 A | 5187 A | 7467 A | 2793 A | 4066 A | 5586 A | 8132 B | 8379 A | 12198 D |
| 20 | 820 A | 1120 A | 1640 A | 2240 A | 2460 A | 3360 A | 1340 A | 1880 A | 2680 A | 3760 A | 4020 A | 5640 A | 1560 A | 2240 A | 3120 A | 4480 A | 4680 A | 6720 A | 2540 A | 3660 A | 5080 A | 7320 B | 7620 A | 10980 C |
| 21 | 735 A | 1008 A | 1470 A | 2016 A | 2205 A | 3024 A | 1218 A | 1701 A | 2436 A | 3402 A | 3654 A | 5103 A | 1428 A | 2016 A | 2856 A | 4032 A | 4284 A | 6048 A | 2310 A | 3318 A | 4620 A | 6636 B | 6930 A | 9954 C |
| 22 | 682 A | 902 A | 1364 A | 1804 A | 2046 A | 2706 A | 1122 A | 1540 A | 2244 A | 3080 A | 3366 A | 4620 A | 1298 A | 1826 A | 2596 A | 3652 A | 3894 A | 5478 A | 2112 A | 3014 A | 4224 A | 6028 A | 6336 A | 9042 C |
| 23 | 621 A | 805 A | 1242 A | 1610 A | 1863 A | 2415 A | 1012 A | 1403 A | 2024 A | 2806 A | 3036 A | 4209 A | 1196 A | 1656 A | 2392 A | 3312 A | 3588 A | 4968 A | 1932 A | 2760 A | 3864 A | 5520 A | 5796 A | 8280 A |
| 24 | 576 A | 744 A | 1152 A | 1488 A | 1728 A | 2232 A | 936 A | 1272 A | 1872 A | 2544 A | 2808 A | 3816 A | 1104 A | 1512 A | 2208 A | 3024 A | 3312 A | 4536 A | 1776 A | 2520 A | 3552 A | 5040 A | 5328 A | 7560 A |
| 25 | 525 A | 675 A | 1050 A | 1350 A | 1575 A | 2025 A | 875 A | 1150 A | 1750 A | 2300 A | 2625 A | 3450 A | 1025 A | 1375 A | 2050 A | 2750 A | 3075 A | 4125 A | 1650 A | 2300 A | 3300 A | 4600 A | 4950 A | 6900 A |

Notes

- This table is for guidelines only. Refer to *TJM Specifier's Guide* for complete design information
- Chart assumes beams are simple span supporting uniformly distributed loads only.
- Two and three member beams must be properly fastened together. For top loaded beams use two

rows of 16d nails @ 12" O.C. (Use three rows of 16d nails @ 12" O.C. for 14" beams.) For side loaded beams refer to *TJM Residential Applications Specifier's Guide*.

- L.L. = Live Load; D.L. = Dead Load

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Minimum bearing in inches at each end of beam, [#] Number of 1 1/2" trimmers required

A = 1.50 [1] F = 2.75 [2] L = 4.00 [3] Q = 5.25 [4] V = 6.50 [5]
 B = 1.75 [2] G = 3.00 [2] M = 4.25 [3] R = 5.50 [4] W = 6.75 [5]
 C = 2.00 [2] H = 3.25 [3] N = 4.50 [3] S = 5.75 [4] X = 7.00 [5]
 D = 2.25 [2] J = 3.50 [3] O = 4.75 [4] T = 6.00 [4] Y = 7.25 [5]
 E = 2.50 [2] K = 3.75 [3] P = 5.00 [4] U = 6.24 [5] Z = 7.50 [5]

Allowable Total Loads for Beams Supporting Roofs

1.8 Microllam™ LVL

| Span in feet | 1 3/4" X 9 1/2" | | | | | | 1 3/4" X 11 1/4" | | | | | | 1 3/4" X 11 7/8" | | | | | | 1 3/4" X 14" | | | | | |
|--------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|
| | Number of members | | | | | | Number of members | | | | | | Number of members | | | | | | Number of members | | | | | |
| | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | | 1 | | 2 | | 3 | |
| | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. | L.L. L/240 | L.L. + D.L. |
| 6 | | 7338 F | | 14676 M | | 22014 P | | 9144 K | | 18288 Q | | 27432 S | | 9834 K | | 19668 Q | | 29502 U | | 12390 R | | 24780 X | | 37170 8" |
| 7 | | 7063 F | | 14126 M | | 21189 N | | 8715 K | | 17430 O | | 26145 S | | 9366 K | | 18732 Q | | 28098 U | | 11634 N | | 23268 V | | 34902 Z |
| 8 | | 6728 F | | 13456 J | | 20184 N | | 8424 K | | 16848 O | | 25272 R | | 9008 K | | 18016 Q | | 27024 S | | 11120 N | | 22240 V | | 33360 Y |
| 9 | 5517 C | 5976 C | 11034 G | 11952 G | 16551 K | 17928 K | | 8190 K | | 16380 O | | 24570 R | | 8766 K | | 17532 O | | 26298 S | | 10746 N | | 21492 S | | 32238 Y |
| 10 | 4560 C | 5370 C | 9120 E | 10740 G | 13680 F | 16110 K | 7320 F | 7360 F | 14640 M | 14720 M | 21960 N | 22080 P | | 8150 K | | 16300 O | | 24450 R | | 1046 N | | 20920 S | | 31380 W |
| 11 | 3828 A | 4873 C | 7656 B | 9746 E | 11484 D | 14619 H | 6171 F | 6677 F | 12342 J | 13354 J | 18513 E | 20031 N | 7183 F | 7403 F | 14366 M | 14806 M | 21549 N | 22209 P | | 10065 N | | 20130 S | | 30195 W |
| 12 | 3252 A | 4284 C | 6504 B | 8568 E | 9756 C | 12852 F | 5268 C | 6108 F | 10536 G | 12216 J | 15804 H | 18324 L | 6144 F | 6768 F | 12288 J | 13536 J | 18432 E | 20304 N | | 9216 K | | 18432 Q | | 27648 S |
| 13 | 2795 A | 3666 A | 5590 A | 7332 B | 8385 C | 10998 D | 4550 C | 5629 C | 9100 E | 11258 G | 13650 F | 16887 K | 5304 C | 6240 F | 10608 G | 12480 J | 15912 H | 18720 L | 8424 K | 8489 K | 16848 O | 16978 O | 25272 R | 25467 R |
| 14 | 2436 A | 3178 A | 4872 A | 6356 B | 7308 A | 9534 C | 3962 A | 5208 C | 7924 B | 10416 G | 11886 D | 15624 H | 4634 C | 5782 C | 9268 E | 11564 G | 13902 F | 17346 K | 7378 F | 7868 F | 14756 M | 15736 M | 22134 P | 23604 P |
| 15 | 2130 A | 2760 A | 4260 A | 5520 A | 6390 A | 8280 C | 3480 A | 4560 C | 6960 B | 9120 E | 10440 D | 13680 F | 4065 C | 5340 C | 8130 E | 10680 G | 12195 F | 16020 K | 6510 F | 7335 F | 13020 J | 14670 M | 19530 L | 22005 P |
| 16 | 1888 A | 2432 A | 3776 A | 4864 A | 5664 A | 7296 A | 3088 A | 4016 C | 6176 B | 8032 E | 9264 C | 12048 F | 3600 A | 4704 C | 7200 B | 9408 E | 10800 D | 14112 H | 5776 C | 6864 F | 11552 G | 13728 J | 17328 K | 20592 N |
| 17 | 1683 A | 2142 A | 3366 A | 4284 A | 5049 A | 6426 A | 2754 A | 3553 A | 5508 A | 7106 B | 8262 C | 10659 D | 3213 A | 4182 C | 6426 B | 8364 E | 9639 C | 12546 F | 5168 C | 6443 F | 10336 G | 12886 J | 15504 H | 19329 L |
| 18 | 1494 A | 1908 A | 2988 A | 3816 A | 4482 A | 5724 A | 2466 A | 3168 A | 4932 A | 6336 B | 7398 A | 9504 C | 2880 A | 3726 A | 5760 A | 7452 B | 8640 C | 11178 D | 4644 C | 6066 F | 9288 E | 12132 J | 13932 F | 18198 L |
| 19 | 1349 A | 1710 A | 2698 A | 3420 A | 4047 A | 5130 A | 2223 A | 2850 A | 4446 A | 5700 A | 6669 A | 8550 C | 2603 A | 3344 A | 5206 A | 6688 B | 7809 A | 10032 D | 4199 C | 5453 C | 8398 E | 10906 G | 12597 F | 16359 K |
| 20 | 1220 A | 1520 A | 2440 A | 3040 A | 3660 A | 4560 A | 2000 A | 2560 A | 4000 A | 5120 A | 6000 A | 7680 A | 2360 A | 3020 A | 4720 A | 6040 B | 7080 A | 9060 C | 3800 A | 4940 C | 7600 B | 9880 E | 11400 D | 14820 H |
| 21 | 1113 A | 1365 A | 2226 A | 2730 A | 3339 A | 4095 A | 1827 A | 2310 A | 3654 A | 4620 A | 5481 A | 6930 A | 2142 A | 2730 A | 4284 A | 5460 A | 6426 A | 8190 C | 3465 A | 4473 C | 6930 B | 8946 E | 10395 D | 13419 F |
| 22 | 1012 A | 1232 A | 2024 A | 2464 A | 3036 A | 3696 A | 1672 A | 2090 A | 3344 A | 4180 A | 5016 A | 6270 A | 1958 A | 2486 A | 3916 A | 4972 A | 5874 A | 7458 A | 3168 A | 4070 A | 6336 B | 8140 E | 9504 C | 12210 F |
| 23 | 920 A | 1127 A | 1840 A | 2254 A | 2760 A | 3381 A | 1541 A | 1909 A | 3082 A | 3818 A | 4623 A | 5727 A | 1794 A | 2254 A | 3588 A | 4508 A | 5382 A | 6762 A | 2921 A | 3726 A | 5842 A | 7452 B | 8763 C | 11178 D |
| 24 | 864 A | 1008 A | 1728 A | 2016 A | 2592 A | 3024 A | 1416 A | 1728 A | 2832 A | 3456 A | 4248 A | 5184 A | 1656 A | 2064 A | 3312 A | 4128 A | 4968 A | 6192 A | 2688 A | 3408 A | 5376 A | 6816 B | 8064 C | 10224 D |
| 25 | 800 A | 925 A | 1600 A | 1850 A | 2400 A | 2775 A | 1300 A | 1575 A | 2600 A | 3150 A | 3900 A | 4725 A | 1525 A | 1875 A | 3050 A | 3750 A | 4575 A | 5625 A | 2475 A | 3125 A | 4950 A | 6250 B | 7425 A | 9375 C |

Notes

- This table is for guidelines only. Refer to *TJM Specifier's Guide* for complete design information
- Chart assumes beams are simple span supporting uniformly distributed loads only.
- Two and three member beams must be properly fastened together. For top loaded beams use two rows of 16d nails

@ 12" O.C. (Use three rows of 16d nails @ 12" O.C. for 14" beams.) For side loaded beams refer to *TJM Residential Applications Specifier's Guide*.

- For deflection limits of L/180, multiply actual total live load on beam by 0.75 and refer to L/240 column.
- L.L. = Live Load; D.L. = Dead Load

Minimum bearing in inches at each end of beam, [#] Number of 1 1/2" trimmers required

| | | | | |
|----------------|----------------|----------------|----------------|----------------|
| A = 1.50 [1] | F = 2.75 [2] | L = 4.00 [3] | Q = 5.25 [4] | V = 6.50 [5] |
| B = 1.75 [2] | G = 3.00 [2] | M = 4.25 [3] | R = 5.50 [4] | W = 6.75 [5] |
| C = 2.00 [2] | H = 3.25 [3] | N = 4.50 [3] | S = 5.75 [4] | X = 7.00 [5] |
| D = 2.25 [2] | J = 3.50 [3] | O = 4.75 [4] | T = 6.00 [4] | Y = 7.25 [5] |
| E = 2.50 [2] | K = 3.75 [3] | P = 5.00 [4] | U = 6.24 [5] | Z = 7.50 [5] |