

Allowable Uniform Loads

2.1E Beam-Roof Non-Snow 125%

ALLOWABLE UNIFORM LOADS* - POUNDS PER LINEAL FOOT

ONE x 1 3/4" 2.1E PWLVL

| Span (ft) | Key | 3 1/2" | 5 1/2" | 7 1/4" | 9 1/4" | 9 1/2" | 11 1/4" | 11 1/2" | 14" |
|-----------|-----|--------|--------|---------|---------|---------|---------|---------|----------|
| 6 | LL | 129 | 499 | - | - | - | - | - | - |
| | TL | 132 | 518 | 955 | 1286 | 1330 | 1657 | 1783 | 2246 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.6/6.5 | 2.7/6.7 | 3.4/8.4 | 3.6/9 | 4.5/11.4 |
| 7 | LL | - | - | - | - | - | - | - | - |
| | TL | 71 | 278 | 640 | 1062 | 1098 | 1355 | 1452 | 1807 |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.5/6.3 | 2.6/6.5 | 3.2/8 | 3.4/8.6 | 4.3/10.7 |
| 8 | LL | - | - | - | - | - | - | - | - |
| | TL | 162 | 374 | 905 | 934 | 1146 | 1225 | 1512 | 1512 |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3 | 2.4/6.1 | 2.5/6.3 | 3.1/7.7 | 3.3/8.3 | 4.1/10.2 |
| 9 | LL | - | - | - | 704 | 762 | - | - | - |
| | TL | 100 | 232 | 788 | 813 | 992 | 1059 | 1299 | 1299 |
| | BRG | 1.5/3 | 1.5/3 | 2.4/6 | 2.5/6.2 | 3/7.5 | 3.2/8.1 | 3.9/9.9 | 3.9/9.9 |
| 10 | LL | - | - | - | 513 | 556 | - | - | - |
| | TL | 65 | 151 | 675 | 708 | 875 | 933 | 1138 | 1138 |
| | BRG | 1.5/3 | 1.5/3 | 2.3/5.7 | 2.4/6 | 3/7.4 | 3.2/7.9 | 3.8/9.6 | 3.8/9.6 |
| 11 | LL | - | - | - | 385 | 418 | 693 | 815 | - |
| | TL | 44 | 102 | 510 | 552 | 782 | 833 | 1013 | 1013 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.1/5.1 | 2.9/7.3 | 3.1/7.8 | 3.8/9.4 | 3.8/9.4 |
| 12 | LL | - | - | - | 297 | 322 | 534 | 628 | - |
| | TL | - | 71 | 392 | 424 | 666 | 734 | 912 | 912 |
| | BRG | - | 1.5/3 | 1.6/4 | 1.7/4.3 | 2.7/6.8 | 3/7.5 | 3.7/9.3 | 3.7/9.3 |
| 13 | LL | - | - | - | 233 | 253 | 420 | 494 | 810 |
| | TL | - | 51 | 307 | 333 | 555 | 625 | 830 | 830 |
| | BRG | - | 1.5/3 | 1.5/3.4 | 1.5/3.7 | 2.4/6.1 | 2.8/6.9 | 3.7/9.1 | 3.7/9.1 |
| 14 | LL | - | - | - | 187 | 203 | 336 | 396 | 648 |
| | TL | - | 37 | 245 | 266 | 443 | 522 | 724 | 724 |
| | BRG | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 2.1/5.3 | 2.5/6.2 | 3.4/8.6 | 3.4/8.6 |
| 15 | LL | - | - | - | 152 | 165 | 273 | 322 | 527 |
| | TL | - | - | - | 198 | 215 | 359 | 423 | 630 |
| | BRG | - | - | - | 1.5/3 | 1.5/3 | 1.8/4.6 | 2.2/5.4 | 3.2/8 |
| 16 | LL | - | - | - | 125 | 136 | 225 | 265 | 434 |
| | TL | - | - | - | 163 | 177 | 295 | 348 | 553 |
| | BRG | - | - | - | 1.5/3 | 1.5/3 | 1.6/4 | 1.9/4.8 | 3/7.5 |
| 17 | LL | - | - | - | 104 | 113 | 188 | 221 | 362 |
| | TL | - | - | - | 135 | 146 | 245 | 289 | 476 |
| | BRG | - | - | - | 1.5/3 | 1.5/3 | 1.5/3.6 | 1.7/4.2 | 2.8/6.9 |
| 18 | LL | - | - | - | 88 | 95 | 158 | 186 | 305 |
| | TL | - | - | - | 113 | 123 | 206 | 243 | 400 |
| | BRG | - | - | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 1.5/3.8 | 2.5/6.2 |
| 19 | LL | - | - | - | - | 81 | 135 | 158 | 259 |
| | TL | - | - | - | - | 104 | 174 | 206 | 339 |
| | BRG | - | - | - | - | 1.5/3 | 1.5/3 | 1.5/3.4 | 2.2/5.5 |
| 20 | LL | - | - | - | - | - | 115 | 136 | 222 |
| | TL | - | - | - | - | - | 149 | 175 | 290 |
| | BRG | - | - | - | - | - | 1.5/3 | 1.5/3 | 2/5 |
| 21 | LL | - | - | - | - | - | 100 | 117 | 192 |
| | TL | - | - | - | - | - | 128 | 151 | 250 |
| | BRG | - | - | - | - | - | 1.5/3 | 1.5/3 | 1.8/4.5 |
| 22 | LL | - | - | - | - | - | 87 | 102 | 167 |
| | TL | - | - | - | - | - | 110 | 131 | 216 |
| | BRG | - | - | - | - | - | 1.5/3 | 1.5/3 | 1.6/4.1 |
| 23 | LL | - | - | - | - | - | - | 89 | 146 |
| | TL | - | - | - | - | - | - | 114 | 189 |
| | BRG | - | - | - | - | - | - | 1.5/3 | 1.5/3.8 |
| 24 | LL | - | - | - | - | - | - | - | 129 |
| | TL | - | - | - | - | - | - | - | 165 |
| | BRG | - | - | - | - | - | - | - | 1.5/3.5 |
| 25 | LL | - | - | - | - | - | - | - | 114 |
| | TL | - | - | - | - | - | - | - | 145 |
| | BRG | - | - | - | - | - | - | - | 1.5/3.2 |
| 26 | LL | - | - | - | - | - | - | - | 101 |
| | TL | - | - | - | - | - | - | - | 129 |
| | BRG | - | - | - | - | - | - | - | 1.5/3 |
| 27 | LL | - | - | - | - | - | - | - | 90 |
| | TL | - | - | - | - | - | - | - | 114 |
| | BRG | - | - | - | - | - | - | - | 1.5/3 |
| 28 | LL | - | - | - | - | - | - | - | 81 |
| | TL | - | - | - | - | - | - | - | 102 |
| | BRG | - | - | - | - | - | - | - | 1.5/3 |
| 29 | LL | - | - | - | - | - | - | - | - |
| | TL | - | - | - | - | - | - | - | - |
| | BRG | - | - | - | - | - | - | - | - |
| 30 | LL | - | - | - | - | - | - | - | - |
| | TL | - | - | - | - | - | - | - | - |
| | BRG | - | - | - | - | - | - | - | - |

* Can be applied to the beam in addition to its own weight.
Simple or multiple beam spans.

2 plies minimum for depths greater than 14 inches.

Wax-based sealer applied to mitigate moisture issues associated with wood products during storage and construction.

Key to Table:

LL = Maximum live load - limits deflection to L/240

TL = Maximum total load - limits deflections to L/180 (or a maximum of 0.3125" for beams 7 1/4" deep or less)

BRG = Required end / intermediate bearing length (inches), based on bearing stress of 850 psi.

Allowable Uniform Loads

2.1E Beam-Roof Non-Snow 125%

ALLOWABLE UNIFORM LOADS* - POUNDS PER LINEAL FOOT

TWO x 1 3/4" 2.1E PWLVL

| Span (ft) | Key | 3 1/2" | 5 1/2" | 7 1/4" | 9 1/4" | 9 1/2" | 11 1/4" | 11 1/2" | 14" | 16" | 18" | 20" | 22" | 24" |
|-----------|-----|--------|--------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|-----------|
| 6 | LL | 257 | 998 | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 265 | 1035 | 1909 | 2573 | 2661 | 3315 | 3565 | 4492 | 5489 | 6634 | 7962 | 9521 | 11252 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.6/6.5 | 2.7/6.7 | 3.4/8.4 | 3.6/9 | 4.5/11.4 | 5.5/13.9 | 6.7/16.8 | 8/20.1 | 9.6/24.1 | 11.4/28.4 |
| 7 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 141 | 556 | 1279 | 2125 | 2195 | 2710 | 2905 | 3615 | 4358 | 5188 | 6120 | 7175 | 8298 |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.5/6.3 | 2.6/6.5 | 3.2/8 | 3.4/8.6 | 4.3/10.7 | 5.1/12.9 | 6.1/15.3 | 7.2/18.1 | 8.5/21.2 | 9.8/24.5 |
| 8 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | - | 324 | 747 | 1810 | 1868 | 2292 | 2451 | 3023 | 3613 | 4259 | 4969 | 5755 | 6571 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.4/6.1 | 2.5/6.3 | 3.1/7.7 | 3.3/8.3 | 4.1/10.2 | 4.9/12.2 | 5.7/14.4 | 6.7/16.8 | 7.8/19.4 | 8.9/22.2 |
| 9 | LL | - | - | - | 1407 | 1525 | - | - | - | - | - | - | - | - |
| | TL | - | 200 | 464 | 1576 | 1625 | 1985 | 2119 | 2598 | 3084 | 3611 | 4182 | 4803 | 5437 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.4/6 | 2.5/6.2 | 3/7.5 | 3.2/8.1 | 3.9/9.9 | 4.7/11.7 | 5.5/13.7 | 6.4/15.9 | 7.3/18.2 | 8.3/20.6 |
| 10 | LL | - | - | - | 1026 | 1111 | - | - | - | - | - | - | - | - |
| | TL | - | 130 | 302 | 1350 | 1416 | 1750 | 1866 | 2277 | 2691 | 3134 | 3609 | 4121 | 4637 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.3/5.7 | 2.4/6 | 3/7.4 | 3.2/7.9 | 3.8/9.6 | 4.5/11.4 | 5.3/13.2 | 6.1/15.2 | 7/17.4 | 7.8/19.6 |
| 11 | LL | - | - | - | 771 | 835 | 1387 | 1631 | - | - | - | - | - | - |
| | TL | - | 87 | 204 | 1019 | 1105 | 1565 | 1666 | 2026 | 2385 | 2767 | 3174 | 3607 | 4041 |
| | BRG | - | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.1/5.1 | 2.9/7.3 | 3.1/7.8 | 3.8/9.4 | 4.4/11.1 | 5.1/12.9 | 5.9/14.8 | 6.7/16.8 | 7.5/18.8 |
| 12 | LL | - | - | - | 594 | 643 | 1068 | 1256 | - | - | - | - | - | - |
| | TL | - | - | 142 | 783 | 849 | 1331 | 1468 | 1825 | 2142 | 2477 | 2832 | 3207 | 3580 |
| | BRG | - | 1.5/3 | 1.6/4 | 1.7/4.3 | 1.7/4.3 | 2.7/6.8 | 3/7.5 | 3.7/9.3 | 4.3/10.9 | 5/12.6 | 5.7/14.4 | 6.5/16.3 | 7.3/18.2 |
| 13 | LL | - | - | - | 467 | 506 | 840 | 988 | 1619 | - | - | - | - | - |
| | TL | - | - | 102 | 614 | 666 | 1110 | 1249 | 1660 | 1944 | 2242 | 2556 | 2887 | 3213 |
| | BRG | - | 1.5/3 | 1.5/3.4 | 1.5/3.7 | 1.5/3.7 | 2.4/6.1 | 2.8/6.9 | 3.7/9.1 | 4.3/10.7 | 4.9/12.3 | 5.6/14.1 | 6.4/15.9 | 7.1/17.7 |
| 14 | LL | - | - | - | 374 | 405 | 673 | 791 | 1296 | - | - | - | - | - |
| | TL | - | 74 | 490 | 531 | 887 | 1044 | 1448 | 1779 | 2047 | 2329 | 2624 | 2914 | - |
| | BRG | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 2.1/5.3 | 2.5/6.2 | 3.4/8.6 | 4.2/10.5 | 4.9/12.1 | 5.5/13.8 | 6.2/15.6 | 6.9/17.3 | - |
| 15 | LL | - | - | - | 304 | 329 | 547 | 643 | 1054 | 1573 | - | - | - | - |
| | TL | - | - | 397 | 430 | 719 | 847 | 1260 | 1604 | 1884 | 2139 | 2405 | 2665 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.8/4.6 | 2.2/5.4 | 3.2/8 | 4.1/10.2 | 4.8/12 | 5.4/13.6 | 6.1/15.3 | 6.8/16.9 | - |
| 16 | LL | - | - | - | 250 | 271 | 451 | 530 | 868 | 1296 | - | - | - | - |
| | TL | - | - | 326 | 353 | 591 | 696 | 1106 | 1408 | 1742 | 1977 | 2219 | 2456 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.6/4 | 1.9/4.8 | 3/7.5 | 3.8/9.6 | 4.7/11.8 | 5.4/13.4 | 6/15.1 | 6.7/16.7 | - |
| 17 | LL | - | - | - | 209 | 226 | 376 | 442 | 724 | 1081 | 1539 | - | - | - |
| | TL | - | - | 270 | 293 | 491 | 578 | 953 | 1246 | 1541 | 1838 | 2060 | 2276 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.6 | 1.7/4.2 | 2.8/6.9 | 3.6/9 | 4.5/11.1 | 5.3/13.3 | 5.9/14.9 | 6.6/16.4 | - |
| 18 | LL | - | - | - | 176 | 191 | 316 | 372 | 610 | 910 | 1296 | - | - | - |
| | TL | - | - | 226 | 245 | 412 | 485 | 800 | 1110 | 1373 | 1662 | 1922 | 2121 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 1.5/3.8 | 2.5/6.2 | 3.4/8.5 | 4.2/10.5 | 5.1/12.7 | 5.9/14.7 | 6.5/16.2 | - |
| 19 | LL | - | - | - | 162 | 269 | 316 | 519 | 774 | 1102 | - | - | - | - |
| | TL | - | - | 207 | 349 | 411 | 679 | 994 | 1231 | 1489 | 1770 | 1986 | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.4 | 1.5/3.4 | 2.2/5.5 | 3.2/8.1 | 4/10 | 4.8/12 | 5.7/14.3 | 6.4/16 | - |
| 20 | LL | - | - | - | 231 | 271 | 445 | 664 | 945 | 1296 | - | - | - | - |
| | TL | - | - | 297 | 351 | 580 | 870 | 1109 | 1342 | 1595 | 1850 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3 | 2/5 | 3/7.4 | 3.8/9.5 | 4.6/11.4 | 5.4/13.6 | 6.3/15.7 | - | - |
| 21 | LL | - | - | - | 199 | 234 | 384 | 573 | 816 | 1120 | - | - | - | - |
| | TL | - | - | 255 | 302 | 499 | 750 | 1005 | 1216 | 1445 | 1676 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.8/4.5 | 2.7/6.7 | 3.6/9 | 4.4/10.9 | 5.2/12.9 | 6/15 | - | - | - |
| 22 | LL | - | - | - | 173 | 204 | 334 | 499 | 710 | 974 | 1296 | - | - | - |
| | TL | - | - | 221 | 261 | 433 | 650 | 914 | 1106 | 1315 | 1525 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.6/4.1 | 2.5/6.1 | 3.4/8.6 | 4.2/10.4 | 4.9/12.3 | 5.7/14.3 | - | - | - |
| 23 | LL | - | - | - | 178 | 292 | 436 | 621 | 852 | 1134 | - | - | - | - |
| | TL | - | - | 227 | 377 | 567 | 812 | 1011 | 1201 | 1393 | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.2/5.6 | 3.2/8 | 4/9.9 | 4.7/11.8 | 5.5/13.7 | - | - | - |
| 24 | LL | - | - | - | 257 | 384 | 547 | 750 | 998 | 1276 | - | - | - | - |
| | TL | - | - | 330 | 498 | 713 | 927 | 1102 | 1278 | - | - | - | - | - |
| | BRG | - | - | 1.5/3.5 | 2.1/5.2 | 2.9/7.4 | 3.8/9.5 | 4.5/11.3 | 5.2/13.1 | - | - | - | - | - |
| 25 | LL | - | - | - | 228 | 340 | 484 | 664 | 883 | 1129 | - | - | - | - |
| | TL | - | - | 291 | 439 | 629 | 853 | 1014 | 1176 | - | - | - | - | - |
| | BRG | - | - | 1.5/3.2 | 1.9/4.8 | 2.7/6.8 | 3.7/9.1 | 4.3/10.9 | 5/12.6 | - | - | - | - | - |
| 26 | LL | - | - | - | 202 | 302 | 430 | 590 | 785 | 1004 | - | - | - | - |
| | TL | - | - | 257 | 388 | 557 | 769 | 936 | 1086 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.8/4.4 | 2.5/6.3 | 3.4/8.6 | 4.2/10.4 | 4.8/12.1 | - | - | - | - | - |
| 27 | LL | - | - | - | 181 | 270 | 384 | 527 | 701 | 896 | - | - | - | - |
| | TL | - | - | 228 | 345 | 496 | 684 | 866 | 1005 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.6/4.1 | 2.3/5.8 | 3.2/8 | 4/10.1 | 4.7/11.6 | - | - | - | - | - |
| 28 | LL | - | - | - | 162 | 242 | 344 | 472 | 629 | 804 | - | - | - | - |
| | TL | - | - | 203 | 308 | 443 | 612 | 804 | 933 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3.8 | 2.2/5.4 | 3/7.4 | 3.9/9.7 | 4.5/11.2 | - | - | - | - | - |
| 29 | LL | - | - | - | 218 | 310 | 425 | 566 | 723 | - | - | - | - | - |
| | TL | - | - | 276 | 397 | 549 | 735 | 868 | - | - | - | - | - | - |
| | BRG | - | - | 1.5/3.5 | 2/5 | 2.8/6.9 | 3.7/9.2 | 4.3/10.8 | - | - | - | - | - | - |
| 30 | LL | - | - | - | 197 | 280 | 384 | 511 | 653 | - | - | - | - | - |
| | TL | - | - | 248 | 357 | 494 | 662 | 810 | - | - | - | - | - | - |
| | BRG | - | - | 1.5/3.3 | 1.9/4.7 | 2.6/6.5 | 3.4/8.6 | 4.2/10.5 | - | - | - | - | - | - |

* Can be applied to the beam in addition to its own weight. Simple or multiple beam spans.

Key to Table:

LL = Maximum live load - limits deflection to L/240

TL = Maximum total load - limits deflections to L/180 (or a maximum of 0.3125" for beams 7 1/4" deep or less)

BRG = Required end / intermediate bearing length (inches), based on bearing stress of 850 psi.

Allowable Uniform Loads

2.1E Beam-Roof Non-Snow 125%

ALLOWABLE UNIFORM LOADS* - POUNDS PER LINEAL FOOT

THREE x 1 3/4" 2.1E PWLVL

| Span (ft) | Key | 3 1/2" | 5 1/2" | 7 1/4" | 9 1/4" | 9 1/2" | 11 1/4" | 11 1/2" | 14" | 16" | 18" | 20" | 22" | 24" |
|-----------|-----|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 6 | LL | 386 | 1498 | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 397 | 1553 | 2864 | 3859 | 3991 | 4972 | 5348 | 6738 | 8233 | 9950 | 11943 | 14282 | 16878 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.6/6.5 | 2.7/6.7 | 3.4/8.4 | 3.6/9 | 4.5/11.4 | 5.5/13.9 | 6.7/16.8 | 8/20.1 | 9.6/24.1 | 11.4/28.4 |
| 7 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 212 | 835 | 1919 | 3187 | 3293 | 4065 | 4357 | 5422 | 6537 | 7782 | 9180 | 10763 | 12447 |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.5/6.3 | 2.6/6.5 | 3.2/8 | 3.4/8.6 | 4.3/10.7 | 5.1/12.9 | 6.1/15.3 | 7.2/18.1 | 8.5/21.2 | 9.8/24.5 |
| 8 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 486 | 1121 | 2715 | 2802 | 3438 | 3676 | 4535 | 5419 | 6388 | 7454 | 8632 | 9856 | - |
| | BRG | 1.5/3 | 1.5/3 | 2.4/6.1 | 2.5/6.3 | 3.1/7.7 | 3.3/8.3 | 4.1/10.2 | 4.9/12.2 | 5.7/14.4 | 6.7/16.8 | 7.8/19.4 | 8.9/22.2 | - |
| 9 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 301 | 696 | 2363 | 2438 | 2977 | 3178 | 3896 | 4627 | 5416 | 6273 | 7205 | 8156 | - |
| | BRG | 1.5/3 | 1.5/3 | 2.4/6 | 2.5/6.2 | 3/7.5 | 3.2/8.1 | 3.9/9.9 | 4.7/11.7 | 5.5/13.7 | 6.4/15.9 | 7.3/18.2 | 8.3/20.6 | - |
| 10 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 195 | 453 | 2025 | 2125 | 2625 | 2799 | 3415 | 4036 | 4700 | 5414 | 6181 | 6955 | - |
| | BRG | 1.5/3 | 1.5/3 | 2.3/5.7 | 2.4/6 | 3/7.4 | 3.2/7.9 | 3.8/9.6 | 4.5/11.4 | 5.3/13.2 | 6.1/15.2 | 7/17.4 | 7.8/19.6 | - |
| 11 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 131 | 306 | 1156 | 1253 | 2080 | 2446 | 2500 | 3039 | 3578 | 4151 | 4761 | 5411 | 6061 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.1/5.1 | 2.9/7.3 | 3.1/7.8 | 3.8/9.4 | 4.4/11.1 | 5.1/12.9 | 5.9/14.8 | 6.7/16.8 | 7.5/18.8 | - |
| 12 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 213 | 1175 | 1273 | 1997 | 2202 | 2737 | 3213 | 3716 | 4248 | 4811 | 5370 | - | - |
| | BRG | 1.5/3 | 1.6/4 | 1.7/4.3 | 2.7/6.8 | 3/7.5 | 3.7/9.3 | 4.3/10.9 | 5/12.6 | 5.7/14.4 | 6.5/16.3 | 7.3/18.2 | - | - |
| 13 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 700 | 759 | 1260 | 1482 | 2429 | 2916 | 3363 | 3834 | 4330 | 4819 | - | - | - |
| | BRG | 1.5/3 | 1.5/3.4 | 1.5/3.7 | 2.4/6.1 | 2.8/6.9 | 3.7/9.1 | 4.3/10.7 | 4.9/12.3 | 5.6/14.1 | 6.4/15.9 | 7.1/17.7 | - | - |
| 14 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 561 | 608 | 1009 | 1187 | 1944 | 2173 | 2668 | 3071 | 3493 | 3936 | 4371 | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.2 | 2.1/5.3 | 2.5/6.2 | 3.4/8.6 | 4.2/10.5 | 4.9/12.1 | 5.5/13.8 | 6.2/15.6 | 6.9/17.3 | - | - |
| 15 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 456 | 494 | 820 | 965 | 1581 | 2360 | 2916 | 3363 | 3834 | 4330 | 4819 | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3 | 1.8/4.6 | 2.2/5.4 | 3.2/8 | 4.1/10.2 | 4.8/12 | 5.4/13.6 | 6.1/15.3 | 6.8/16.9 | - | - |
| 16 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 376 | 407 | 676 | 795 | 1303 | 1944 | 2112 | 2613 | 2965 | 3329 | 3684 | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3 | 1.6/4 | 1.9/4.8 | 3/7.5 | 3.8/9.6 | 4.7/11.8 | 5.4/13.4 | 6/15.1 | 6.7/16.7 | - | - |
| 17 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 313 | 339 | 564 | 663 | 1086 | 1621 | 2308 | 2756 | 3090 | 3415 | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.6 | 1.7/4.2 | 2.8/6.9 | 3.6/9 | 4.5/11.1 | 5.3/13.3 | 5.9/14.9 | 6.6/16.4 | - | - | - |
| 18 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 264 | 286 | 475 | 558 | 915 | 1366 | 1944 | 2492 | 2883 | 3182 | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.2 | 1.5/3.8 | 2.5/6.2 | 3.4/8.5 | 4.2/10.5 | 5.1/12.7 | 5.9/14.7 | 6.5/16.2 | - | - | - |
| 19 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 243 | 404 | 475 | 778 | 1161 | 1653 | 2234 | 2655 | 2979 | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.4 | 2.2/5.5 | 3.2/8.1 | 4/10 | 4.8/12 | 5.7/14.3 | 6.4/16 | - | - | - | - |
| 20 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 346 | 407 | 667 | 996 | 1418 | 1944 | 2014 | 2393 | 2775 | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3 | 2/5 | 3/7.4 | 3.8/9.5 | 4.6/11.4 | 5.4/13.6 | 6.3/15.7 | - | - | - | - |
| 21 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 299 | 352 | 576 | 860 | 1224 | 1680 | 1824 | 2168 | 2514 | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.8/4.5 | 2.7/6.7 | 3.6/9 | 4.4/10.9 | 5.2/12.9 | 6/15 | - | - | - | - | - |
| 22 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 260 | 306 | 501 | 748 | 1065 | 1461 | 1944 | 2287 | 2687 | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.6/4.1 | 2.5/6.1 | 3.4/8.6 | 4.2/10.4 | 4.9/12.3 | 5.7/14.3 | 6.4/16.4 | - | - | - | - |
| 23 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 268 | 439 | 655 | 932 | 1279 | 1702 | 2188 | 2690 | 3215 | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.2/5.6 | 3.2/8 | 4/9.9 | 4.7/11.8 | 5.5/13.7 | 6.3/15.7 | - | - | - | - |
| 24 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 386 | 576 | 820 | 1125 | 1498 | 1914 | 2393 | 2775 | - | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.5 | 2.1/5.2 | 2.9/7.4 | 3.8/9.5 | 4.5/11.3 | 5.2/13.1 | 5.9/14.7 | - | - | - | - |
| 25 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 436 | 658 | 943 | 1279 | 1521 | 1764 | 2168 | 2514 | - | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.2 | 1.9/4.8 | 2.7/6.8 | 3.7/9.1 | 4.3/10.9 | 5/12.6 | - | - | - | - | - |
| 26 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 304 | 453 | 645 | 885 | 1178 | 1506 | 1628 | - | - | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3 | 1.8/4.4 | 2.5/6.3 | 3.4/8.6 | 4.2/10.4 | 4.8/12.1 | 5.4/13.6 | 6.0/15.2 | - | - | - | - |
| 27 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 271 | 405 | 576 | 790 | 1052 | 1344 | 1508 | - | - | - | - | - | - |
| | BRG | 1.5/3 | 1.6/4.1 | 2.3/5.8 | 3.2/8 | 4/10.1 | 4.7/11.6 | - | - | - | - | - | - | - |
| 28 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 243 | 363 | 517 | 709 | 943 | 1205 | 1400 | - | - | - | - | - | - |
| | BRG | 1.5/3 | 1.5/3.8 | 2.2/5.4 | 3/7.4 | 3.9/9.7 | 4.5/11.2 | - | - | - | - | - | - | - |
| 29 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 327 | 465 | 638 | 849 | 1085 | 1303 | - | - | - | - | - | - | - |
| | BRG | 1.5/3.5 | 2/5 | 2.8/6.9 | 3.7/9.2 | 4.3/10.8 | - | - | - | - | - | - | - | - |
| 30 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 295 | 420 | 576 | 767 | 980 | - | - | - | - | - | - | - | - |
| | BRG | 1.5/3.3 | 1.9/4.7 | 2.6/6.5 | 3.4/8.6 | 4.2/10.5 | - | - | - | - | - | - | - | - |

* Can be applied to the beam in addition to its own weight. Simple or multiple beam spans.

Key to Table:

LL = Maximum live load - limits deflection to L/240

TL = Maximum total load - limits deflections to L/180 (or a maximum of 0.3125" for beams 7 1/4" deep or less)

BRG = Required end / intermediate bearing length (inches), based on bearing stress of 850 psi.

Allowable Uniform Loads

2.1E Beam-Roof Non-Snow 125%

ALLOWABLE UNIFORM LOADS* - POUNDS PER LINEAL FOOT

FOUR x 1 3/4" 2.1E PWLVL

| Span (ft) | Key | 3 1/2" | 5 1/2" | 7 1/4" | 9 1/4" | 9 1/2" | 11 1/4" | 11 1/2" | 14" | 16" | 18" | 20" | 22" | 24" |
|-----------|-----|--------|--------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|-----------|
| 6 | LL | 515 | 1997 | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 530 | 2070 | 3818 | 5145 | 5321 | 6630 | 7130 | 8984 | 10978 | 13267 | 15924 | 19043 | 22504 |
| | BRG | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.6/6.5 | 2.7/6.7 | 3.4/8.4 | 3.6/9 | 4.5/11.4 | 5.5/13.9 | 6.7/16.8 | 8/20.1 | 9.6/24.1 | 11.4/28.4 |
| 7 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | 283 | 1113 | 2559 | 4250 | 4390 | 5420 | 5810 | 7229 | 8716 | 10376 | 12241 | 14350 | 16596 |
| | BRG | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.5/6.3 | 2.6/6.5 | 3.2/8 | 3.4/8.6 | 4.3/10.7 | 5.1/12.9 | 6.1/15.3 | 7.2/18.1 | 8.5/21.2 | 9.8/24.5 |
| 8 | LL | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | TL | - | 648 | 1494 | 3619 | 3736 | 4583 | 4901 | 6046 | 7225 | 8517 | 9939 | 11510 | 13142 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.4/6.1 | 2.5/6.3 | 3.1/7.7 | 3.3/8.3 | 4.1/10.2 | 4.9/12.2 | 5.7/14.4 | 6.7/16.8 | 7.8/19.4 | 8.9/22.2 |
| 9 | LL | - | - | - | 2815 | 3049 | - | - | - | - | - | - | - | - |
| | TL | - | 401 | 928 | 3151 | 3250 | 3970 | 4237 | 5195 | 6169 | 7222 | 8364 | 9606 | 10875 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.4/6 | 2.5/6.2 | 3/7.5 | 3.2/8.1 | 3.9/9.9 | 4.7/11.7 | 5.5/13.7 | 6.4/15.9 | 7.3/18.2 | 8.3/20.6 |
| 10 | LL | - | - | - | 2052 | 2223 | - | - | - | - | - | - | - | - |
| | TL | - | 260 | 604 | 2700 | 2833 | 3500 | 3731 | 4553 | 5381 | 6267 | 7218 | 8241 | 9273 |
| | BRG | - | 1.5/3 | 1.5/3 | 2.3/5.7 | 2.4/6 | 3/7.4 | 3.2/7.9 | 3.8/9.6 | 4.5/11.4 | 5.3/13.2 | 6.1/15.2 | 7/17.4 | 7.8/19.6 |
| 11 | LL | - | - | - | 1542 | 1670 | 2773 | 3262 | - | - | - | - | - | - |
| | TL | - | 174 | 409 | 2039 | 2209 | 3130 | 3333 | 4052 | 4771 | 5535 | 6348 | 7215 | 8081 |
| | BRG | - | 1.5/3 | 1.5/3 | 1.9/4.8 | 2.1/5.1 | 2.9/7.3 | 3.1/7.8 | 3.8/9.4 | 4.4/11.1 | 5.1/12.9 | 5.9/14.8 | 6.7/16.8 | 7.5/18.8 |
| 12 | LL | - | - | - | 1187 | 1286 | 2136 | 2512 | - | - | - | - | - | - |
| | TL | - | - | 285 | 1566 | 1698 | 2663 | 2936 | 3650 | 4284 | 4955 | 5664 | 6414 | 7160 |
| | BRG | - | 1.5/3 | 1.6/4 | 1.7/4.3 | 1.7/4.3 | 2.7/6.8 | 3/7.5 | 3.7/9.3 | 4.3/10.9 | 5/12.6 | 5.7/14.4 | 6.5/16.3 | 7.3/18.2 |
| 13 | LL | - | - | - | 934 | 1012 | 1680 | 1976 | 3238 | - | - | - | - | - |
| | TL | - | - | 203 | 1228 | 1332 | 2220 | 2499 | 3319 | 3887 | 4484 | 5112 | 5773 | 6426 |
| | BRG | - | 1.5/3 | 1.5/3.4 | 1.5/3.7 | 1.5/3.7 | 2.4/6.1 | 2.8/6.9 | 3.7/9.1 | 4.3/10.7 | 4.9/12.3 | 5.6/14.1 | 6.4/15.9 | 7.1/17.7 |
| 14 | LL | - | - | - | 748 | 810 | 1345 | 1582 | 2593 | - | - | - | - | - |
| | TL | - | 148 | 980 | 1063 | 1773 | 2088 | 2897 | 3557 | 4095 | 4658 | 5248 | 5828 | - |
| | BRG | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 2.1/5.3 | 2.5/6.2 | 3.4/8.6 | 4.2/10.5 | 4.9/12.1 | 5.5/13.8 | 6.2/15.6 | 6.9/17.3 | - |
| 15 | LL | - | - | - | 608 | 659 | 1094 | 1286 | 2108 | 3146 | - | - | - | - |
| | TL | - | - | 794 | 861 | 1438 | 1694 | 2520 | 3208 | 3767 | 4277 | 4810 | 5331 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3 | 1.8/4.6 | 2.2/5.4 | 3.2/8 | 4.1/10.2 | 4.8/12 | 5.4/13.6 | 6.1/15.3 | 6.8/16.9 |
| 16 | LL | - | - | - | 501 | 543 | 901 | 1060 | 1737 | 2593 | - | - | - | - |
| | TL | - | - | 651 | 706 | 1181 | 1392 | 2212 | 2816 | 3485 | 3954 | 4439 | 4912 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.6/4 | 1.9/4.8 | 3/7.5 | 3.8/9.6 | 4.7/11.8 | 5.4/13.4 | 6/15.1 | 6.7/16.7 | - |
| 17 | LL | - | - | - | 418 | 452 | 751 | 884 | 1448 | 2161 | 3078 | - | - | - |
| | TL | - | - | 540 | 586 | 981 | 1157 | 1905 | 2491 | 3083 | 3675 | 4120 | 4553 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.6 | 1.7/4.2 | 2.8/6.9 | 3.6/9 | 4.5/11.1 | 5.3/13.3 | 5.9/14.9 | 6.6/16.4 | - |
| 18 | LL | - | - | - | 352 | 381 | 633 | 744 | 1220 | 1821 | 2593 | - | - | - |
| | TL | - | - | 452 | 491 | 823 | 971 | 1601 | 2219 | 2746 | 3323 | 3844 | 4243 | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.2 | 1.5/3.8 | 2.5/6.2 | 3.4/8.5 | 4.2/10.5 | 5.1/12.7 | 5.9/14.7 | 6.5/16.2 | - |
| 19 | LL | - | - | - | 324 | 538 | 633 | 1037 | 1548 | 2204 | - | - | - | - |
| | TL | - | - | 415 | 697 | 822 | 1357 | 1989 | 2462 | 2979 | 3539 | 3972 | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.4 | 2.2/5.5 | 3.2/8.1 | 4/10 | 4.8/12 | 5.7/14.3 | 6.4/16 | - | - |
| 20 | LL | - | - | - | 461 | 543 | 889 | 1327 | 1890 | 2593 | - | - | - | - |
| | TL | - | - | 595 | 702 | 1160 | 1741 | 2218 | 2685 | 3190 | 3699 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3 | 1.5/3 | 2/5 | 3/7.4 | 3.8/9.5 | 4.6/11.4 | 5.4/13.6 | 6.3/15.7 | - |
| 21 | LL | - | - | - | 399 | 469 | 768 | 1147 | 1633 | 2240 | - | - | - | - |
| | TL | - | - | 511 | 603 | 999 | 1500 | 2009 | 2432 | 2890 | 3351 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3 | 1.8/4.5 | 2.7/6.7 | 3.6/9 | 4.4/10.9 | 5.2/12.9 | 6/15 | - | - |
| 22 | LL | - | - | - | 347 | 408 | 668 | 997 | 1420 | 1948 | 2593 | - | - | - |
| | TL | - | - | 442 | 522 | 865 | 1301 | 1828 | 2213 | 2630 | 3050 | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3 | 1.6/4.1 | 2.5/6.1 | 3.4/8.6 | 4.2/10.4 | 4.9/12.3 | 5.7/14.3 | - | - |
| 23 | LL | - | - | - | 357 | 585 | 873 | 1243 | 1705 | 2269 | - | - | - | - |
| | TL | - | - | 454 | 754 | 1135 | 1624 | 2021 | 2403 | 2787 | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3 | 1.5/3.8 | 2.2/5.6 | 3.2/8 | 4/9.9 | 4.7/11.8 | 5.5/13.7 | - | - | - |
| 24 | LL | - | - | - | 515 | 768 | 1094 | 1500 | 1997 | 2552 | - | - | - | - |
| | TL | - | - | 661 | 995 | 1426 | 1853 | 2203 | 2556 | - | - | - | - | - |
| | BRG | - | - | 1.5/3.5 | 2.1/5.2 | 2.9/7.4 | 3.8/9.5 | 4.5/11.3 | 5.2/13.1 | - | - | - | - | - |
| 25 | LL | - | - | - | 455 | 680 | 968 | 1327 | 1767 | 2258 | - | - | - | - |
| | TL | - | - | 582 | 877 | 1258 | 1705 | 2027 | 2352 | - | - | - | - | - |
| | BRG | - | - | 1.5/3.2 | 1.9/4.8 | 2.7/6.8 | 3.7/9.1 | 4.3/10.9 | 5/12.6 | - | - | - | - | - |
| 26 | LL | - | - | - | 405 | 604 | 860 | 1180 | 1571 | 2007 | - | - | - | - |
| | TL | - | - | 514 | 776 | 1114 | 1537 | 1872 | 2171 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.8/4.4 | 2.5/6.3 | 3.4/8.6 | 4.2/10.4 | 4.8/12.1 | - | - | - | - | - |
| 27 | LL | - | - | - | 361 | 540 | 768 | 1054 | 1403 | 1793 | - | - | - | - |
| | TL | - | - | 456 | 690 | 992 | 1369 | 1733 | 2010 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.6/4.1 | 2.3/5.8 | 3.2/8 | 4/10.1 | 4.7/11.6 | - | - | - | - | - |
| 28 | LL | - | - | - | 324 | 484 | 689 | 945 | 1258 | 1607 | - | - | - | - |
| | TL | - | - | 407 | 616 | 886 | 1223 | 1608 | 1866 | - | - | - | - | - |
| | BRG | - | - | 1.5/3 | 1.5/3.8 | 2.2/5.4 | 3/7.4 | 3.9/9.7 | 4.5/11.2 | - | - | - | - | - |
| 29 | LL | - | - | - | 435 | 620 | 850 | 1132 | 1447 | - | - | - | - | - |
| | TL | - | - | 551 | 794 | 1098 | 1469 | 1737 | - | - | - | - | - | - |
| | BRG | - | - | 1.5/3.5 | 2/5 | 2.8/6.9 | 3.7/9.2 | 4.3/10.8 | - | - | - | - | - | - |
| 30 | LL | - | - | - | 393 | 560 | 768 | 1022 | 1307 | - | - | - | - | - |
| | TL | - | - | 495 | 714 | 988 | 1323 | 1620 | - | - | - | - | - | - |
| | BRG | - | - | 1.5/3.3 | 1.9/4.7 | 2.6/6.5 | 3.4/8.6 | 4.2/10.5 | - | - | - | - | - | - |

* Can be applied to the beam in addition to its own weight. Simple or multiple beam spans.

Key to Table:

LL = Maximum live load - limits deflection to L/240

TL = Maximum total load - limits deflections to L/180 (or a maximum of 0.3125" for beams 7 1/4" deep or less)

BRG = Required end / intermediate bearing length (inches), based on bearing stress of 850 psi.