# 2.0E LVL Joist

## Allowable Loads & Minimum Bearing Lengths. Deflection limited to L/360 or ¼" Max.

### 2.0E LVL JOIST ALLOWABLE LOADS AND MINIMUM BEARING LENGTHS

| Span (ft) | Thickness (in) | | 1½" JOIST | | | | | | | 1¾" JOIST | | | | | | | 2¼" JOIST | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Depth (in) | | 3½ | 4½ | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 3½ | 4½ | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 3½ | 4½ | 5½ | 6½ | 7¼ | 9¼ | 11¼ |
| 4 | Simple Span | Conc + DL [plf] | 222 | 473 | 864 | 1428 | 1856 | 2115 | 2114 | 259 | 552 | 1008 | 1666 | 2165 | 2467 | 2466 | 333 | 709 | 1297 | 2142 | 2783 | 3172 | 3171 |
| | | Total Load [plf] | 591 | 928 | 1215 | 1555 | 1856 | 2115 | 2114 | 689 | 1082 | 1417 | 1814 | 2165 | 2467 | 2466 | 886 | 1392 | 1822 | 2332 | 2783 | 3172 | 3171 |
| | Continuous Spans | Conc + DL [plf] | 420 | 727 | 933 | 1186 | 1418 | 2105 | 2905 | 490 | 848 | 1088 | 1384 | 1654 | 2456 | 3390 | 630 | 1091 | 1399 | 1779 | 2126 | 3158 | 4358 |
| | | Total Load [plf] | 543 | 727 | 933 | 1186 | 1418 | 2105 | 2905 | 633 | 848 | 1088 | 1384 | 1654 | 2456 | 3390 | 814 | 1091 | 1399 | 1779 | 2126 | 3158 | 4358 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 2¼ | 3 | 3½ | 4 | 4 | 1¾ | 1¾ | 2¼ | 3 | 3½ | 4 | 4 | 1¾ | 1¾ | 2¼ | 3 | 3½ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3¾ | 5 | 6¼ | 7¾ | 7¾ | 3½ | 3½ | 3¾ | 5 | 6¼ | 7¾ | 7¾ | 3½ | 3½ | 3¾ | 5 | 6¼ | 7¾ | 7¾ |
| 5 | Simple Span | Conc + DL [plf] | 113 | 241 | 442 | 730 | 1013 | 1718 | 1717 | 132 | 281 | 515 | 851 | 1182 | 2004 | 2003 | 169 | 362 | 662 | 1095 | 1520 | 2576 | 2575 |
| | | Total Load [plf] | 378 | 594 | 853 | 1123 | 1310 | 1718 | 1717 | 441 | 693 | 995 | 1310 | 1528 | 2004 | 2003 | 566 | 891 | 1279 | 1684 | 1965 | 2576 | 2575 |
| | Continuous Spans | Conc + DL [plf] | 214 | 457 | 697 | 866 | 1006 | 1456 | 1930 | 250 | 533 | 814 | 1010 | 1174 | 1699 | 2252 | 322 | 685 | 1046 | 1298 | 1509 | 2185 | 2895 |
| | | Total Load [plf] | 378 | 552 | 697 | 866 | 1006 | 1456 | 1930 | 441 | 644 | 814 | 1010 | 1174 | 1699 | 2252 | 566 | 828 | 1046 | 1298 | 1509 | 2185 | 2895 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 2 | 2¾ | 3¼ | 4 | 4 | 1¾ | 1¾ | 2 | 2¾ | 3¼ | 4 | 4 | 1¾ | 1¾ | 2 | 2¾ | 3¼ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4½ | 5¼ | 7¾ | 7¾ | 3½ | 3½ | 3½ | 4½ | 5¼ | 7¾ | 7¾ | 3½ | 3½ | 3½ | 4½ | 5¼ | 7¾ | 7¾ |
| 6 | Simple Span | Conc + DL [plf] | 65 | 139 | 255 | 421 | 585 | 1218 | 1445 | 76 | 162 | 297 | 491 | 683 | 1421 | 1686 | 97 | 208 | 382 | 632 | 878 | 1827 | 2168 |
| | | Total Load [plf] | 262 | 412 | 592 | 799 | 973 | 1433 | 1445 | 305 | 481 | 690 | 933 | 1136 | 1672 | 1686 | 393 | 618 | 887 | 1199 | 1460 | 2150 | 2168 |
| | Continuous Spans | Conc + DL [plf] | 123 | 264 | 482 | 684 | 787 | 1104 | 1444 | 144 | 308 | 563 | 798 | 918 | 1288 | 1685 | 185 | 395 | 724 | 1026 | 1180 | 1656 | 2167 |
| | | Total Load [plf] | 262 | 412 | 558 | 684 | 787 | 1104 | 1444 | 305 | 481 | 651 | 798 | 918 | 1288 | 1685 | 393 | 618 | 838 | 1026 | 1180 | 1656 | 2167 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 1¾ | 2¼ | 2¾ | 4 | 4 | 1¾ | 1¾ | 1¾ | 2¼ | 2¾ | 4 | 4 | 1¾ | 1¾ | 1¾ | 2¼ | 2¾ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4¼ | 5 | 7¼ | 7¾ | 3½ | 3½ | 3½ | 4¼ | 5 | 7¼ | 7¾ | 3½ | 3½ | 3½ | 4¼ | 5 | 7¼ | 7¾ |
| 7 | Simple Span | Conc + DL [plf] | | 87 | 160 | 264 | 368 | 766 | 1247 | | 101 | 186 | 308 | 429 | 893 | 1455 | 60 | 130 | 239 | 397 | 551 | 1148 | 1871 |
| | | Total Load [plf] | | 302 | 434 | 587 | 714 | 1108 | 1247 | | 353 | 506 | 684 | 833 | 1293 | 1455 | 288 | 453 | 651 | 880 | 1072 | 1663 | 1871 |
| | Continuous Spans | Conc + DL [plf] | 77 | 165 | 303 | 501 | 647 | 890 | 1154 | 90 | 193 | 353 | 585 | 754 | 1038 | 1346 | 116 | 248 | 454 | 752 | 970 | 1335 | 1731 |
| | | Total Load [plf] | 192 | 302 | 434 | 566 | 647 | 890 | 1154 | 224 | 353 | 506 | 660 | 754 | 1038 | 1346 | 288 | 453 | 651 | 848 | 970 | 1335 | 1731 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 1¾ | 2 | 2¼ | 3¾ | 4 | 1¾ | 1¾ | 1¾ | 2 | 2¼ | 3¾ | 4 | 1¾ | 1¾ | 1¾ | 2 | 2¼ | 3¾ | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4 | 4¾ | 7 | 7¾ | 3½ | 3½ | 3½ | 4 | 4¾ | 7 | 7¾ | 3½ | 3½ | 3½ | 4 | 4¾ | 7 | 7¾ |
| 8 | Simple Span | Conc + DL [plf] | | 54 | 99 | 165 | 230 | 479 | 865 | | 63 | 116 | 193 | 268 | 559 | 1009 | | 81 | 149 | 248 | 345 | 719 | 1297 |
| | | Total Load [plf] | | 231 | 332 | 449 | 546 | 848 | 1097 | | 269 | 387 | 523 | 637 | 989 | 1280 | | 346 | 498 | 673 | 819 | 1272 | 1646 |
| | Continuous Spans | Conc + DL [plf] | | 103 | 189 | 314 | 436 | 746 | 960 | 56 | 120 | 221 | 366 | 509 | 870 | 1120 | 72 | 155 | 284 | 471 | 654 | 1119 | 1440 |
| | | Total Load [plf] | | 231 | 332 | 449 | 546 | 746 | 960 | 171 | 269 | 387 | 523 | 637 | 870 | 1120 | 220 | 346 | 498 | 673 | 819 | 1119 | 1440 |
| | Minimum End Bearing [in] | | | 1¾ | 1¾ | 1¾ | 2 | 3¼ | 4 | 1¾ | 1¾ | 1¾ | 1¾ | 2 | 3¼ | 4 | 1¾ | 1¾ | 1¾ | 1¾ | 2 | 3¼ | 4 |
| | Minimum Intermediate Bearing [in] | | | 3½ | 3½ | 3¾ | 4½ | 6¾ | 7¾ | 3½ | 3½ | 3½ | 3¾ | 4½ | 6¾ | 7¾ | 3½ | 3½ | 3½ | 3¾ | 4½ | 6¾ | 7¾ |
| 9 | Simple Span | Conc + DL [plf] | | | 61 | 102 | 142 | 298 | 538 | | | 71 | 119 | 166 | 348 | 628 | | | 92 | 153 | 214 | 447 | 807 |
| | | Total Load [plf] | | | 262 | 354 | 431 | 669 | 952 | | | 305 | 413 | 503 | 781 | 1111 | | | 393 | 531 | 647 | 1004 | 1429 |
| | Continuous Spans | Conc + DL [plf] | | 64 | 117 | 195 | 271 | 565 | 822 | | 74 | 137 | 227 | 316 | 660 | 959 | | 96 | 176 | 292 | 407 | 848 | 1233 |
| | | Total Load [plf] | | 182 | 262 | 354 | 431 | 642 | 822 | | 212 | 305 | 413 | 503 | 750 | 959 | | 273 | 393 | 531 | 647 | 964 | 1233 |
| | Minimum End Bearing [in] | | | 1¾ | 1¾ | 1¾ | 1¾ | 2¾ | 4 | | 1¾ | 1¾ | 1¾ | 1¾ | 2¾ | 4 | | 1¾ | 1¾ | 1¾ | 1¾ | 2¾ | 4 |
| | Minimum Intermediate Bearing [in] | | | 3½ | 3½ | 3½ | 4 | 6½ | 7¾ | | 3½ | 3½ | 3½ | 4 | 6½ | 7¾ | | 3½ | 3½ | 4 | 6½ | 7¾ |
| 10 | Simple Span | Conc + DL [plf] | | | | 66 | 92 | 194 | 352 | | | | 77 | 108 | 227 | 410 | | | 59 | 99 | 139 | 291 | 527 |
| | | Total Load [plf] | | | | 286 | 349 | 541 | 771 | | | | 334 | 407 | 631 | 899 | | | 317 | 429 | 523 | 812 | 1156 |
| | Continuous Spans | Conc + DL [plf] | | | 76 | 127 | 177 | 370 | 667 | | | 89 | 148 | 206 | 431 | 779 | | 62 | 115 | 191 | 265 | 555 | 1001 |
| | | Total Load [plf] | | | 212 | 286 | 349 | 541 | 719 | | | 247 | 334 | 407 | 631 | 838 | | 221 | 317 | 429 | 523 | 812 | 1078 |
| | Minimum End Bearing [in] | | | | 1¾ | 1¾ | 1¾ | 2½ | 3½ | | | 1¾ | 1¾ | 1¾ | 2½ | 3½ | | 1¾ | 1¾ | 1¾ | 1¾ | 2½ | 3½ |
| | Minimum Intermediate Bearing [in] | | | | 3½ | 3½ | 3½ | 5¾ | 7¾ | | | 3½ | 3½ | 3½ | 5¾ | 7¾ | | 3½ | 3½ | 3½ | 3½ | 5¾ | 7¾ |
| 11 | Simple Span | Conc + DL [plf] | | | | | 62 | 132 | 239 | | | | 52 | 73 | 153 | 279 | | | | 67 | 93 | 197 | 358 |
| | | Total Load [plf] | | | | | 288 | 447 | 636 | | | | 275 | 336 | 521 | 742 | | | | 354 | 431 | 670 | 954 |
| | Continuous Spans | Conc + DL [plf] | | | 51 | 86 | 120 | 251 | 454 | | | 60 | 100 | 140 | 293 | 530 | | | 77 | 129 | 180 | 377 | 682 |
| | | Total Load [plf] | | | 174 | 236 | 288 | 447 | 636 | | | 204 | 275 | 336 | 521 | 742 | | | 262 | 354 | 431 | 670 | 954 |
| | Minimum End Bearing [in] | | | | 1¾ | 1¾ | 1¾ | 2¼ | 3¼ | | | 1¾ | 1¾ | 1¾ | 2¼ | 3¼ | | | 1¾ | 1¾ | 1¾ | 2¼ | 3¼ |
| | Minimum Intermediate Bearing [in] | | | | 3½ | 3½ | 3½ | 5¼ | 7½ | | | 3½ | 3½ | 3½ | 5¼ | 7½ | | | 3½ | 3½ | 3½ | 5¼ | 7½ |
| 12 | Simple Span | Conc + DL [plf] | | | | | | 92 | 167 | | | | | 50 | 107 | 195 | | | | | 65 | 138 | 251 |
| | | Total Load [plf] | | | | | | 375 | 534 | | | | | 281 | 437 | 623 | | | | | 362 | 562 | 801 |
| | Continuous Spans | Conc + DL [plf] | | | | 60 | 84 | 176 | 320 | | | | 70 | 98 | 206 | 373 | | | 54 | 90 | 126 | 265 | 479 |
| | | Total Load [plf] | | | | 198 | 241 | 375 | 534 | | | | 231 | 281 | 437 | 623 | | | 219 | 297 | 362 | 562 | 801 |
| | Minimum End Bearing [in] | | | | | 1¾ | 1¾ | 2¼ | 3 | | | | 1¾ | 1¾ | 2¼ | 3 | | | 1¾ | 1¾ | 1¾ | 2¼ | 3 |
| | Minimum Intermediate Bearing [in] | | | | | 3½ | 3½ | 4¾ | 6¾ | | | | 3½ | 3½ | 4¾ | 6¾ | | | 3½ | 3½ | 3½ | 4¾ | 6¾ |
| 13 | Simple Span | Conc + DL [plf] | | | | | | 66 | 120 | | | | | | 77 | 140 | | | | | | 99 | 180 |
| | | Total Load [plf] | | | | | | 319 | 454 | | | | | | 372 | 530 | | | | | | 478 | 681 |
| | Continuous Spans | Conc + DL [plf] | | | | | 60 | 127 | 231 | | | | 50 | 70 | 148 | 269 | | | | 64 | 90 | 191 | 346 |
| | | Total Load [plf] | | | | | 205 | 319 | 454 | | | | 196 | 239 | 372 | 530 | | | | 252 | 308 | 478 | 681 |
| | Minimum End Bearing [in] | | | | | | 1¾ | 2 | 2¾ | | | | 1¾ | 1¾ | 2 | 2¾ | | | | 1¾ | 1¾ | 2 | 2¾ |
| | Minimum Intermediate Bearing [in] | | | | | | 3½ | 4¼ | 6¼ | | | | 3½ | 3½ | 4¼ | 6¼ | | | | 3½ | 3½ | 4¼ | 6¼ |
| 14 | Simple Span | Conc + DL [plf] | | | | | | | 88 | | | | | | 56 | 103 | | | | | | 72 | 132 |
| | | Total Load [plf] | | | | | | | 391 | | | | | | 320 | 456 | | | | | | 412 | 587 |
| | Continuous Spans | Conc + DL [plf] | | | | | | 94 | 170 | | | | | 51 | 109 | 199 | | | | | 66 | 140 | 256 |
| | | Total Load [plf] | | | | | | 274 | 391 | | | | | 206 | 320 | 456 | | | | | 265 | 412 | 587 |
| | Minimum End Bearing [in] | | | | | | | 1¾ | 2½ | | | | | 1¾ | 1¾ | 2½ | | | | | 1¾ | 1¾ | 2½ |
| | Minimum Intermediate Bearing [in] | | | | | | | 4 | 5¾ | | | | | 3½ | 4 | 5¾ | | | | | 3½ | 4 | 5¾ |

**Notes:**

1. Table values are for beam orientation except for shaded cells.
2. Span is measured from center to center of supports.
3. Table values for Conc + DL (concrete plus dead load) are limited by deflection equal to the lesser of ¼ inch or span/360.
4. Table values have been adjusted by $C_M$ = 0.90 for unprotected use. Total Load has also been adjusted by $C_D$ = 1.25 for construction load duration.
5. Table values are for joist spacings of 24 inches on center or less.
6. Continuous Spans values are based on the worst case of 2 or 3 equal, continuous spans. Use sizing software or consult a professional engineer when a continuous span is less than half the length of an adjacent span, when loading is not uniform, or when design conditions are otherwise outside the scope of this table.

## How To Use These Tables:

1. Determine the Conc + DL (concrete plus dead load) and Total Load in pounds per lineal foot (plf) that must be supported by the formwork. Neglect joist weight.
2. Select a table that matches the width of the joist under consideration.
3. Select a span from the first column.
4. Select Simple Span or Continuous Spans from the second column.
5. Scan across the table for a pair of Conc + DL and Total Load values that exceed the design requirements identified in Step 1.
6. Support across the full width of each joist is required. Verify that the required Minimum End/ Intermediate Bearing length can be provided. If not, consider wider joists and return to Step 2.
7. Select the joist depth at the top of the column that satisfies the criteria provided by Steps 5 and 6.

# 2.0E LVL Joist

## Allowable Loads & Minimum Bearing Lengths. Deflection limited to L/360 or ¼" Max.

### 2.0E LVL JOIST ALLOWABLE LOADS AND MINIMUM BEARING LENGTHS

| Span (ft) | Thickness (in) | | 2½" JOIST | | | | | | | 3½" JOIST | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Depth (in) | | 3½ | 4½ | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 3½ | 4½ | 5½ | 6½ | 7¼ | 9¼ | 11¼ |
| 4 | Simple | Conc + DL [plf] | 370 | 788 | 1441 | 2380 | 3093 | 3525 | 3523 | 518 | 1103 | 2017 | 3332 | 4330 | 4935 | 4933 |
| | Span | Total Load [plf] | 985 | 1546 | 2025 | 2591 | 3093 | 3525 | 3523 | 839 | 2165 | 2834 | 3628 | 4330 | 4935 | 4933 |
| | Continuous | Conc + DL [plf] | 700 | 1212 | 1555 | 1977 | 2363 | 3509 | 4842 | 665 | 1697 | 2177 | 2768 | 3308 | 4913 | 6779 |
| | Spans | Total Load [plf] | 905 | 1212 | 1555 | 1977 | 2363 | 3509 | 4842 | 665 | 1697 | 2177 | 2768 | 3308 | 4913 | 6779 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 2¼ | 3 | 3½ | 4 | 4 | 1¾ | 1¾ | 2¼ | 3 | 3½ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3¾ | 5 | 6¼ | 7¾ | 7¾ | 3½ | 3½ | 3¾ | 5 | 6¼ | 7¾ | 7¾ |
| 5 | Simple | Conc + DL [plf] | 188 | 402 | 736 | 1216 | 1689 | 2863 | 2861 | 264 | 563 | 1030 | 1703 | 2365 | 4008 | 4006 |
| | Span | Total Load [plf] | 629 | 990 | 1421 | 1871 | 2183 | 2863 | 2861 | 546 | 1386 | 1990 | 2620 | 3057 | 4008 | 4006 |
| | Continuous | Conc + DL [plf] | 357 | 761 | 1162 | 1443 | 1677 | 2427 | 3217 | 500 | 1066 | 1627 | 2020 | 2348 | 3398 | 4504 |
| | Spans | Total Load [plf] | 629 | 920 | 1162 | 1443 | 1677 | 2427 | 3217 | 510 | 1289 | 1627 | 2020 | 2348 | 3398 | 4504 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 2 | 2¾ | 3¼ | 4 | 4 | 1¾ | 1¾ | 2 | 2¾ | 3¼ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4½ | 5¼ | 7¾ | 7¾ | 3½ | 3½ | 3½ | 4½ | 5¼ | 7¾ | 7¾ |
| 6 | Simple | Conc + DL [plf] | 108 | 231 | 424 | 702 | 975 | 2030 | 2408 | 151 | 324 | 594 | 983 | 1366 | 2841 | 3372 |
| | Span | Total Load [plf] | 436 | 687 | 986 | 1332 | 1622 | 2389 | 2408 | 378 | 961 | 1380 | 1865 | 2271 | 3344 | 3372 |
| | Continuous | Conc + DL [plf] | 206 | 439 | 804 | 1140 | 1311 | 1840 | 2407 | 288 | 615 | 1126 | 1596 | 1836 | 2576 | 3370 |
| | Spans | Total Load [plf] | 436 | 687 | 931 | 1140 | 1311 | 1840 | 2407 | 378 | 961 | 1303 | 1596 | 1836 | 2576 | 3370 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 1¾ | 2¼ | 2¾ | 4 | 4 | 1¾ | 1¾ | 1¾ | 2¼ | 2¾ | 4 | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4¼ | 5 | 7¼ | 7¾ | 3½ | 3½ | 3½ | 4¼ | 5 | 7¼ | 7¾ |
| 7 | Simple | Conc + DL [plf] | 67 | 145 | 266 | 441 | 613 | 1276 | 2079 | 94 | 203 | 372 | 617 | 858 | 1786 | 2911 |
| | Span | Total Load [plf] | 320 | 504 | 723 | 978 | 1191 | 1847 | 2079 | 277 | 705 | 1013 | 1369 | 1667 | 2586 | 2911 |
| | Continuous | Conc + DL [plf] | 129 | 276 | 505 | 835 | 1078 | 1483 | 1923 | 180 | 386 | 707 | 1169 | 1509 | 2076 | 2692 |
| | Spans | Total Load [plf] | 320 | 504 | 723 | 943 | 1078 | 1483 | 1923 | 277 | 705 | 1013 | 1320 | 1509 | 2076 | 2692 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 1¾ | 2 | 2¼ | 3¾ | 4 | 1¾ | 1¾ | 1¾ | 2 | 2¼ | 3¾ | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 4 | 4¾ | 7 | 7¾ | 3½ | 3½ | 3½ | 4 | 4¾ | 7 | 7¾ |
| 8 | Simple | Conc + DL [plf] | | 90 | 166 | 275 | 383 | 799 | 1441 | 58 | 126 | 232 | 385 | 536 | 1119 | 2018 |
| | Span | Total Load [plf] | | 385 | 553 | 748 | 910 | 1413 | 1829 | 211 | 539 | 774 | 1047 | 1275 | 1978 | 2560 |
| | Continuous | Conc + DL [plf] | 80 | 172 | 316 | 523 | 727 | 1243 | 1600 | 112 | 241 | 442 | 732 | 1018 | 1740 | 2240 |
| | Spans | Total Load [plf] | 244 | 385 | 553 | 748 | 910 | 1243 | 1600 | 211 | 539 | 774 | 1047 | 1275 | 1740 | 2240 |
| | Minimum End Bearing [in] | | 1¾ | 1¾ | 1¾ | 1¾ | 2 | 3¼ | 4 | 1¾ | 1¾ | 1¾ | 1¾ | 2 | 3¼ | 4 |
| | Minimum Intermediate Bearing [in] | | 3½ | 3½ | 3½ | 3¾ | 4½ | 6¾ | 7¾ | 3½ | 3½ | 3½ | 3¾ | 4½ | 6¾ | 7¾ |
| 9 | Simple | Conc + DL [plf] | | 55 | 102 | 170 | 237 | 497 | 897 | | 77 | 143 | 238 | 332 | 695 | 1256 |
| | Span | Total Load [plf] | | 304 | 436 | 590 | 718 | 1115 | 1587 | | 425 | 611 | 826 | 1006 | 1561 | 2222 |
| | Continuous | Conc + DL [plf] | | 106 | 196 | 325 | 452 | 942 | 1370 | 69 | 149 | 274 | 455 | 633 | 1319 | 1918 |
| | Spans | Total Load [plf] | | 304 | 436 | 590 | 718 | 1071 | 1370 | 166 | 425 | 611 | 826 | 1006 | 1499 | 1918 |
| | Minimum End Bearing [in] | | | 1¾ | 1¾ | 1¾ | 1¾ | 2¾ | 4 | 1¾ | 1¾ | 1¾ | 1¾ | 1¾ | 2¾ | 4 |
| | Minimum Intermediate Bearing [in] | | | 3½ | 3½ | 3½ | 4 | 6½ | 7¾ | 3½ | 3½ | 3½ | 3½ | 4 | 6½ | 7¾ |
| 10 | Simple | Conc + DL [plf] | | | 66 | 110 | 154 | 324 | 586 | | | 92 | 154 | 216 | 453 | 820 |
| | Span | Total Load [plf] | | | 353 | 477 | 581 | 902 | 1284 | | | 494 | 668 | 813 | 1263 | 1798 |
| | Continuous | Conc + DL [plf] | | 69 | 127 | 212 | 295 | 616 | 1112 | | 96 | 178 | 296 | 413 | 863 | 1557 |
| | Spans | Total Load [plf] | | 245 | 353 | 477 | 581 | 902 | 1198 | | 343 | 494 | 668 | 813 | 1263 | 1677 |
| | Minimum End Bearing [in] | | | 1¾ | 1¾ | 1¾ | 1¾ | 2½ | 3½ | | 1¾ | 1¾ | 1¾ | 1¾ | 2½ | 3½ |
| | Minimum Intermediate Bearing [in] | | | 3½ | 3½ | 3½ | 3½ | 5¾ | 7¾ | | 3½ | 3½ | 3½ | 3½ | 5¾ | 7¾ |
| 11 | Simple | Conc + DL [plf] | | | | 74 | 104 | 219 | 398 | | | 61 | 104 | 145 | 307 | 557 |
| | Span | Total Load [plf] | | | | 393 | 479 | 744 | 1060 | | | 407 | 551 | 671 | 1042 | 1484 |
| | Continuous | Conc + DL [plf] | | | 86 | 143 | 200 | 419 | 757 | | 64 | 120 | 201 | 280 | 587 | 1060 |
| | Spans | Total Load [plf] | | | 291 | 393 | 479 | 744 | 1060 | | 283 | 407 | 551 | 671 | 1042 | 1484 |
| | Minimum End Bearing [in] | | | | 1¾ | 1¾ | 1¾ | 2¼ | 3¼ | | 1¾ | 1¾ | 1¾ | 1¾ | 2¼ | 3¼ |
| | Minimum Intermediate Bearing [in] | | | | 3½ | 3½ | 3½ | 5¼ | 7½ | | 3½ | 3½ | 3½ | 3½ | 5¼ | 7½ |
| 12 | Simple | Conc + DL [plf] | | | | 51 | 72 | 153 | 279 | | | | 71 | 101 | 214 | 390 |
| | Span | Total Load [plf] | | | | 330 | 402 | 625 | 890 | | | | 462 | 563 | 874 | 1246 |
| | Continuous | Conc + DL [plf] | | | 60 | 100 | 140 | 294 | 533 | | | 83 | 140 | 196 | 412 | 746 |
| | Spans | Total Load [plf] | | | 244 | 330 | 402 | 625 | 890 | | | 341 | 462 | 563 | 874 | 1246 |
| | Minimum End Bearing [in] | | | | 1¾ | 1¾ | 1¾ | 2¼ | 3 | | | 1¾ | 1¾ | 1¾ | 2¼ | 3 |
| | Minimum Intermediate Bearing [in] | | | | 3½ | 3½ | 3½ | 4¾ | 6¾ | | | 3½ | 3½ | 3½ | 4¾ | 6¾ |
| 13 | Simple | Conc + DL [plf] | | | | | 51 | 109 | 200 | | | | 50 | 71 | 153 | 281 |
| | Span | Total Load [plf] | | | | | 342 | 531 | 757 | | | | 393 | 479 | 744 | 1060 |
| | Continuous | Conc + DL [plf] | | | | 71 | 100 | 212 | 385 | | | 59 | 100 | 140 | 297 | 539 |
| | Spans | Total Load [plf] | | | | 281 | 342 | 531 | 757 | | | 290 | 393 | 479 | 744 | 1060 |
| | Minimum End Bearing [in] | | | | | 1¾ | 1¾ | 2 | 2¾ | | | 1¾ | 1¾ | 1¾ | 2 | 2¾ |
| | Minimum Intermediate Bearing [in] | | | | | 3½ | 3½ | 4¼ | 6¼ | | | 3½ | 3½ | 3½ | 4¼ | 6¼ |
| 14 | Simple | Conc + DL [plf] | | | | | | 80 | 147 | | | | | 51 | 112 | 206 |
| | Span | Total Load [plf] | | | | | | 457 | 652 | | | | | 412 | 640 | 912 |
| | Continuous | Conc + DL [plf] | | | | 52 | 73 | 156 | 284 | | | | 73 | 103 | 218 | 398 |
| | Spans | Total Load [plf] | | | | 241 | 294 | 457 | 652 | | | | 338 | 412 | 640 | 912 |
| | Minimum End Bearing [in] | | | | | 1¾ | 1¾ | 1¾ | 2½ | | | | 1¾ | 1¾ | 1¾ | 2½ |
| | Minimum Intermediate Bearing [in] | | | | | 3½ | 3½ | 4 | 5¾ | | | | 3½ | 3½ | 4 | 5¾ |

Notes:

1. Table values are for beam orientation except for shaded cells.
   Values in shaded cells are for either plank or beam orientation.
2. Span is measured from center to center of supports.
3. Table values for Conc + DL (concrete plus dead load) are limited by deflection equal to the lesser of ¼ inch or span/360.
4. Table values have been adjusted by $C_M$ = 0.90 for unprotected use. Total Load has also been adjusted by $C_D$ = 1.25 for construction load duration.
5. Table values are for joist spacings of 24 inches on center or less.
6. Continuous Spans values are based on the worst case of 2 or 3 equal, continuous spans. Use sizing software or consult a professional engineer when a continuous span is less than half the length of an adjacent span, when loading is not uniform, or when design conditions are otherwise outside the scope of this table.

## How To Use These Tables:

1. Determine the Conc + DL (concrete plus dead load) and Total Load in pounds per lineal foot (plf) that must be supported by the formwork. Neglect joist weight.
2. Select a table that matches the width of the joist under consideration.
3. Select a span from the first column.
4. Select Simple Span or Continuous Spans from the second column.
5. Scan across the table for a pair of Conc + DL and Total Load values that exceed the design requirements identified in Step 1.
6. Support across the full width of each joist is required. Verify that the required Minimum End/Intermediate Bearing length can be provided. If not, consider wider joists and return to Step 2.
7. Select the joist depth at the top of the column that satisfies the criteria provided by Steps 5 and 6.

# 2.0E LVL Double Ledger

## Allowable Loads and Minimum Bearing Lengths. Deflection limited to L/360 or ¼" Max.

### 2.0E LVL ALLOWABLE LOADS AND MINIMUM BEARING LENGTHS–DOUBLE LEDGER

| Span [ft] | Condition | DOUBLE 1½" LEDGER | | | | | DOUBLE 1¾" LEDGER | | | | | DOUBLE 2¼" LEDGER | | | | | DOUBLE 2½" LEDGER | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Depth [in] | | | | | Depth [in] | | | | | Depth [in] | | | | | Depth [in] | | | | |
| | | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 5½ | 6½ | 7¼ | 9¼ | 11¼ | 5½ | 6½ | 7¼ | 9¼ | 11¼ |
| 6 | Conc + DL [plf] | 509 | 843 | 1171 | 2436 | 3568 | 594 | 983 | 1366 | 2841 | 4162 | 764 | 1264 | 1756 | 3653 | 5352 | 849 | 1404 | 1951 | 4059 | 5946 |
| | Total Load [plf] | 1137 | 1537 | 1872 | 2867 | 3568 | 1327 | 1793 | 2184 | 3344 | 4162 | 1706 | 2306 | 2807 | 4300 | 5352 | 1896 | 2562 | 3119 | 4778 | 5946 |
| | Min. Bearing [in] | 3 | 3 | 3 | 4 | 5 | 3 | 3 | 3 | 4 | 5 | 3 | 3 | 3 | 4 | 5 | 3 | 3 | 3 | 4 | 5 |
| 7 | Conc + DL [plf] | 319 | 529 | 735 | 1531 | 2759 | 372 | 617 | 858 | 1786 | 3218 | 479 | 793 | 1103 | 2297 | 4138 | 532 | 881 | 1225 | 2552 | 4598 |
| | Total Load [plf] | 835 | 1128 | 1374 | 2131 | 3033 | 974 | 1316 | 1603 | 2486 | 3538 | 1252 | 1692 | 2060 | 3197 | 4549 | 1391 | 1880 | 2289 | 3552 | 5055 |
| | Min. Bearing [in] | 3 | 3 | 3 | 3½ | 5 | 3 | 3 | 3 | 3½ | 5 | 3 | 3 | 3 | 3½ | 5 | 3 | 3 | 3 | 3½ | 5 |
| 8 | Conc + DL [plf] | | 330 | 460 | 959 | 1729 | 232 | 385 | 536 | 1119 | 2018 | 298 | 495 | 689 | 1438 | 2594 | 331 | 550 | 766 | 1598 | 2882 |
| | Total Load [plf] | | 862 | 1050 | 1630 | 2320 | 744 | 1006 | 1225 | 1902 | 2707 | 957 | 1294 | 1575 | 2445 | 3480 | 1063 | 1437 | 1751 | 2717 | 3867 |
| | Min. Bearing [in] | | 3 | 3 | 3 | 4-1/4 | 3 | 3 | 3 | 3 | 4-1/4 | 3 | 3 | 3 | 3 | 4-1/4 | 3 | 3 | 3 | 3 | 4-1/4 |
| 9 | Conc + DL [plf] | | 204 | 285 | 596 | 1076 | | 238 | 332 | 695 | 1256 | | 306 | 427 | 894 | 1614 | 204 | 340 | 475 | 993 | 1794 |
| | Total Load [plf] | | 680 | 829 | 1286 | 1831 | | 794 | 967 | 1501 | 2136 | | 1021 | 1243 | 1930 | 2747 | 839 | 1134 | 1381 | 2144 | 3052 |
| | Min. Bearing [in] | | 3 | 3 | 3 | 3-3/4 | | 3 | 3 | 3 | 3-3/4 | | 3 | 3 | 3 | 3-3/4 | 3 | 3 | 3 | 3 | 3-3/4 |
| 10 | Conc + DL [plf] | | | | 389 | 703 | | | 216 | 453 | 820 | | | 277 | 583 | 1055 | | 220 | 308 | 648 | 1172 |
| | Total Load [plf] | | | | 1041 | 1482 | | | 782 | 1214 | 1729 | | | 1005 | 1561 | 2222 | | 917 | 1117 | 1734 | 2469 |
| | Min. Bearing [in] | | | | 3 | 3-1/2 | | | 3 | 3 | 3-1/2 | | | 3 | 3 | 3-1/2 | | 3 | 3 | 3 | 3-1/2 |
| 11 | Conc + DL [plf] | | | | 263 | 477 | | | | 307 | 557 | | | | 395 | 716 | | | 207 | 438 | 796 |
| | Total Load [plf] | | | | 859 | 1223 | | | | 1002 | 1427 | | | | 1288 | 1834 | | | 921 | 1431 | 2038 |
| | Min. Bearing [in] | | | | 3 | 3-1/4 | | | | 3 | 3-1/4 | | | | 3 | 3-1/4 | | | 3 | 3 | 3-1/4 |
| 12 | Conc + DL [plf] | | | | | 335 | | | | 214 | 390 | | | | 275 | 502 | | | | 306 | 558 |
| | Total Load [plf] | | | | | 1026 | | | | 841 | 1197 | | | | 1081 | 1539 | | | | 1201 | 1710 |
| | Min. Bearing [in] | | | | | 3 | | | | 3 | 3 | | | | 3 | 3 | | | | 3 | 3 |

**Notes:**

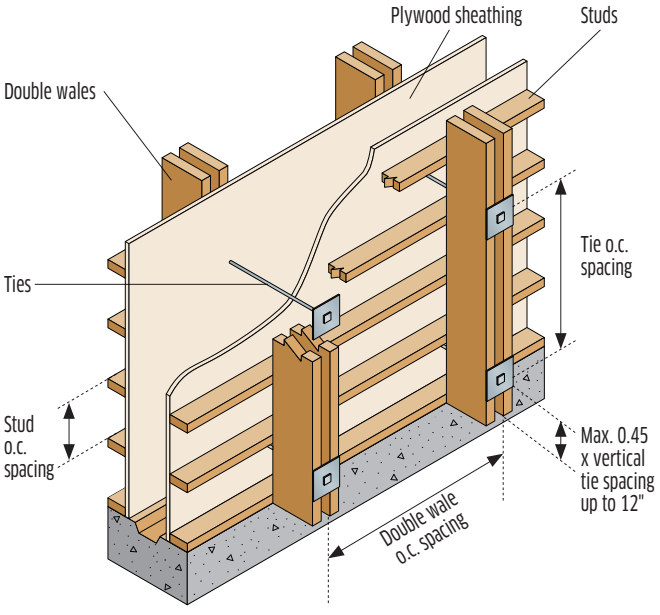
1. Table values are for beam orientation.
2. Span is measured from center to center of supports.
3. Table values for Conc + DL (concrete plus dead load) are limited by deflection equal to the lesser of ¼ inch or span/360.
4. Table values have been adjusted by $C_M$ = 0.90 for unprotected use. Total Load has also been adjusted by $C_D$ = 1.25 for construction load duration.
5. Use sizing software or consult a professional engineer when loading is not uniform or when design conditions are otherwise outside the scope of this table.

## How To Use These Tables:

1. Determine the Conc + DL (concrete plus dead load) and Total Load in pounds per lineal foot (plf) that must be supported by the formwork. Neglect ledger weight.
2. Select a table that matches the ledger under consideration.
3. Select a span from the first column.
4. Scan across the table for a pair of Conc + DL and Total Load values that exceed the design requirements identified in Step 1. If none are found, choose a wider ledger and return to Step 2.
5. Support across the full width of the ledger is required. Verify that the required Min. Bearing length can be provided. If not, consider a wider ledger and return to Step 2.
6. Select the ledger depth at the top of the column that satisfies the criteria provided by Steps 4 and 5.

# Wall and Column Forms

### TYPICAL WALL FORM ASSEMBLY




### DOUBLE WALE ASSEMBLY FOR WALL APPLICATIONS