

3000 Fb FLOOR APPLICATION TABLE – L/360

E = 2,100,000 psi • F_b = 3,000 psi • DOL = 1.0 psi • F_v = 300 • F_{c perp} = 650 psi

| Width | Depth | Load | Clear Span in Feet | | | | | | | | | | | |
|---------|---------|--------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| | | | 8' | 10' | 12' | 14' | 16' | 18' | 20' | 22' | 24' | 26' | 28' | 30' |
| 3 1/2" | 9 1/2" | TL | 1,556 | 1,015 | 675 | 425 | 285 | 200 | 146 | 110 | | | | |
| | | LL | 1,520 | 778 | 450 | 284 | 190 | 133 | 97 | 73 | | | | |
| | 11 7/8" | TL | 2,086 | 1,555 | 1,098 | 815 | 556 | 391 | 285 | 214 | 165 | 130 | 104 | |
| | | LL | | 1,520 | 879 | 554 | 371 | 261 | 190 | 143 | 110 | 86 | 69 | |
| | 14" | TL | 2,546 | 1,944 | 1,503 | 1,120 | 866 | 640 | 467 | 351 | 270 | 212 | 170 | 138 |
| | | LL | | | 1,441 | 907 | 608 | 427 | 311 | 234 | 180 | 142 | 113 | 92 |
| | | TL | | | 1,834 | 1,445 | 1,120 | 892 | 697 | 524 | 403 | 317 | 254 | 206 |
| | | LL | | | | 1,354 | 907 | 637 | 465 | 349 | 269 | 211 | 169 | 138 |
| | 16" | TL | | | | 1,757 | 1,402 | 1,120 | 914 | 745 | 574 | 452 | 362 | 294 |
| | | LL | | | | | 1,292 | 907 | 662 | 497 | 383 | 301 | 241 | 196 |
| | 5 1/4" | 9 1/2" | TL | 2,334 | 1,523 | 1,013 | 638 | 427 | 300 | 219 | 164 | 127 | 100 | |
| | | | LL | 2,279 | 1,167 | 675 | 425 | 285 | 200 | 146 | 110 | 84 | 66 | |
| 11 7/8" | | TL | 3,129 | 2,332 | 1,647 | 1,223 | 835 | 586 | 427 | 321 | 247 | 195 | 156 | 127 |
| | | LL | | 2,279 | 1,319 | 831 | 556 | 391 | 285 | 214 | 165 | 130 | 104 | 84 |
| 14" | | TL | 3,819 | 2,916 | 2,254 | 1,680 | 1,298 | 961 | 700 | 526 | 405 | 319 | 255 | 207 |
| | | LL | | | 2,161 | 1,361 | 912 | 640 | 467 | 351 | 270 | 212 | 170 | 138 |
| 16" | | TL | | | 2,751 | 2,167 | 1,676 | 1,328 | 1,045 | 785 | 605 | 476 | 381 | 310 |
| | | LL | | | | 2,032 | 1,361 | 956 | 697 | 524 | 403 | 317 | 254 | 206 |
| 18" | | TL | | | | 2,635 | 2,087 | 1,657 | 1,346 | 1,113 | 861 | 677 | 542 | 441 |
| | | LL | | | | | 1,938 | 1,361 | 992 | 745 | 574 | 452 | 362 | 294 |
| 7" | | 9 1/2" | TL | 3,112 | 2,031 | 1,351 | 851 | 570 | 400 | 292 | 219 | 169 | 133 | 106 |
| | | | LL | | 1,556 | 900 | 567 | 380 | 267 | 194 | 146 | 113 | 89 | 71 |
| | 11 7/8" | TL | 4,173 | 3,109 | 2,196 | 1,630 | 1,113 | 782 | 570 | 428 | 330 | 259 | 208 | 169 |
| | | LL | | 3,039 | 1,759 | 1,108 | 742 | 521 | 380 | 285 | 220 | 173 | 138 | 113 |
| | 14" | TL | 5,092 | 3,888 | 3,006 | 2,233 | 1,715 | 1,281 | 934 | 702 | 540 | 425 | 340 | 277 |
| | | LL | | | 2,882 | 1,815 | 1,216 | 854 | 622 | 468 | 360 | 283 | 227 | 184 |
| | 16" | TL | | | 3,668 | 2,863 | 2,205 | 1,746 | 1,394 | 1,047 | 807 | 634 | 508 | 413 |
| | | LL | | | | 2,709 | 1,815 | 1,275 | 929 | 698 | 538 | 423 | 339 | 275 |
| | 18" | TL | | | | 3,515 | 2,746 | 2,180 | 1,770 | 1,464 | 1,148 | 903 | 723 | 588 |
| | | LL | | | | | 2,584 | 1,815 | 1,323 | 994 | 766 | 602 | 482 | 392 |

Tables assume 3" of bearing – except as noted.

4 1/2" of Bearing required.

6" of Bearing required.

Deflection limited to LL/360, TL /240.

Design span = clear span + 1/2 required bearing.

Bending stresses are adjusted for volume effects per AITC Tech Note #21.

3000 Fb ROOF APPLICATION TABLE – L/240

E = 2,100,000 psi • F_b = 3,000 psi • DOL = 1.15 psi • F_v = 300 • F_{c perp} = 650 psi

| Width | Depth | Load | Clear Span in Feet | | | | | | | | | | | |
|---------|---------|--------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| | | | 8' | 10' | 12' | 14' | 16' | 18' | 20' | 22' | 24' | 26' | 28' | 30' |
| 3 3/8" | 9 1/2" | TL | 1,584 | 1,037 | 729 | 506 | 339 | 238 | 174 | 130 | 100 | | | |
| | | LL | | | 603 | 380 | 254 | 179 | 130 | 98 | 75 | | | |
| | 11 7/8" | TL | 2,124 | 1,583 | 1,121 | 833 | 643 | 465 | 339 | 255 | 196 | 154 | 124 | 100 |
| | | LL | | | | 742 | 497 | 349 | 254 | 191 | 147 | 116 | 93 | 75 |
| | 14" | TL | | 1,982 | 1,531 | 1,143 | 885 | 704 | 556 | 418 | 322 | 253 | 203 | 165 |
| | | LL | | | | | 814 | 572 | 417 | 313 | 241 | 190 | 152 | 124 |
| | 16" | TL | | | | 1,472 | 1,143 | 912 | 744 | 618 | 480 | 378 | 302 | 246 |
| | | LL | | | | | | 854 | 622 | 467 | 360 | 283 | 227 | 184 |
| | 18" | TL | | | | | 1,429 | 1,143 | 934 | 777 | 655 | 538 | 430 | 350 |
| | | LL | | | | | | 886 | 666 | 513 | 403 | 323 | 263 | |
| | 5 1/4" | 9 1/2" | TL | 2,662 | 1,742 | 1,225 | 851 | 570 | 400 | 292 | 219 | 169 | 133 | 106 |
| | | | LL | | | 1,013 | 638 | 427 | 300 | 219 | 164 | 127 | 100 | 80 |
| 11 7/8" | | TL | 3,569 | 2,660 | 1,883 | 1,400 | 1,080 | 782 | 570 | 428 | 330 | 259 | 208 | 169 |
| | | LL | | | | 1,246 | 835 | 586 | 427 | 321 | 247 | 195 | 156 | 127 |
| 14" | | TL | | 3,329 | 2,572 | 1,920 | 1,486 | 1,182 | 934 | 702 | 540 | 425 | 340 | 277 |
| | | LL | | | | | 1,368 | 961 | 700 | 526 | 405 | 319 | 255 | 207 |
| 16" | | TL | | | | 2,473 | 1,916 | 1,520 | 1,234 | 1,020 | 807 | 634 | 508 | 413 |
| | | LL | | | | | | 1,434 | 1,045 | 785 | 605 | 476 | 381 | 310 |
| 18" | | TL | | | | | 2,382 | 1,895 | 1,540 | 1,275 | 1,072 | 903 | 723 | 588 |
| | | LL | | | | | | | 1,488 | 1,118 | 861 | 677 | 542 | 441 |

Tables assume 3" of bearing – except as noted.

4 1/2" of bearing required.

6" of bearing required.

Deflection limited to LL/240, TL /180.

Design span = clear span + 1/2 required bearing.

Bending stresses are adjusted for volume effects per AITC Tech Note #21.

