

# Two Span Lay-Up With End Joints Over Supports

| Pounds per foot includes live and dead loads and weight of decking |           |  |           |           |           |   |           |           |           | Loads limited by deflection*  |           |           |           |  |           |  |  |  |  |
|--|-----------|--|-----------|-----------|-----------|---|-----------|-----------|-----------|---|-----------|-----------|-----------|--|-----------|--|--|--|--|
|  |           | Douglas Fir/Larch<br>E = 1,800,000 psi<br>Fb = 2,585 psi<br>Fv = 165 psi |           |           |           | Ponderosa Pine<br>E = 1,150,000 psi<br>Fb = 1,485 psi<br>Fv = 150 psi |           |           |           | Ponderosa Pine Face<br>E = 1,500,000 psi **<br>Fb = 1,720 psi<br>Fv = 150 psi |           |           |           | Inland Red Cedar Face<br>E = 1,250,000 psi<br>Fb = 1,485 psi<br>Fv = 130 psi |           |  |  |  |  |
| SIZE   | Span Feet | L/180 PSF  | L/240 PSF | L/180 PSF | L/240 PSF | L/180 PSF   | L/240 PSF | L/180 PSF | L/240 PSF | L/180 PSF   | L/240 PSF | L/180 PSF | L/240 PSF | L/180 PSF  | L/240 PSF |  |  |  |  |
| 2 x 6"   | 3         | 793f   | 793f      | 455f      | 455f      | 528f  | 528f      | 455f      | 455f      | 455f  | 455f      | 455f      | 455f      | 455f   | 455f      |  |  |  |  |
|  | 4         | 446f   | 446f      | 256f      | 256f      | 297f  | 297f      | 256f      | 256f      | 256f  | 256f      | 256f      | 256f      | 256f   | 256f      |  |  |  |  |
|  | 5         | 285f   | 229       | 164       | 146       | 190f  | 190f      | 164f      | 159       | 164f  | 159       | 164f      | 159       | 164f   | 159       |  |  |  |  |
|  | 6         | 177  | 132       | 113       | 85        | 132f  | 110       | 114f      | 92        | 114f  | 92        | 114f      | 92        | 114f   | 92        |  |  |  |  |
|  | 7         | 111  | 83        | 71        | 53        | 93  | 70        | 77        | 58        | 77  | 58        | 77        | 58        | 77   | 58        |  |  |  |  |
|  | 8         | 75   | 56        | 48        | 36        | 62  | 47        | 52        | 39        | 52  | 39        | 52        | 39        | 52   | 39        |  |  |  |  |
|  | 9         | 52   | 39        | 33        | 25        | 44  | 33        | 36        | 27        | 36  | 27        | 36        | 27        | 36   | 27        |  |  |  |  |
|  | 10        | 38   | 29        | 24        | 18        | 32  | 24        | 26        | 20        | 26  | 20        | 26        | 20        | 26   | 20        |  |  |  |  |
|  | 11        | 29   | 22        | 18        | 14        | 24  | 18        | 20        | 15        | 20  | 15        | 20        | 15        | 20   | 15        |  |  |  |  |
|  | 12        | 22   | 17        | 14        | 11        | 18  | 14        | 15        | 12        | 15  | 12        | 15        | 12        | 15   | 12        |  |  |  |  |
| 3 x 6"   | 4         | 1011f  | 1011f     | 581f      | 581f      | 673f  | 673f      | 581f      | 581f      | 581f  | 581f      | 581f      | 581f      | 581f   | 581f      |  |  |  |  |
|  | 5         | 647f   | 647f      | 372f      | 372f      | 431f  | 431f      | 372f      | 372f      | 372f  | 372f      | 372f      | 372f      | 372f   | 372f      |  |  |  |  |
|  | 6         | 450f   | 450f      | 258f      | 258f      | 299f  | 299f      | 258f      | 258f      | 258f  | 258f      | 258f      | 258f      | 258f   | 258f      |  |  |  |  |
|  | 7         | 330f   | 289       | 190f      | 185       | 220f  | 270f      | 190f      | 190f      | 190f  | 190f      | 190f      | 190f      | 190f   | 190f      |  |  |  |  |
|  | 8         | 253f   | 194       | 145f      | 124       | 168f  | 161       | 145f      | 134       | 145f  | 134       | 145f      | 134       | 145f   | 134       |  |  |  |  |
|  | 9         | 181  | 136       | 115f      | 87        | 133f  | 113       | 115f      | 94        | 115f  | 94        | 115f      | 94        | 115f   | 94        |  |  |  |  |
|  | 10        | 132  | 99        | 84        | 63        | 108f  | 83        | 92        | 69        | 92  | 69        | 92        | 69        | 92   | 69        |  |  |  |  |
|  | 11        | 99   | 74        | 63        | 48        | 83  | 62        | 69        | 52        | 69  | 52        | 69        | 52        | 69   | 52        |  |  |  |  |
| 12   | 77        | 57   | 49        | 37        | 64        | 48  | 53        | 40        | 53        | 40  | 53        | 40        | 53        | 40   |           |  |  |  |  |
| 4 x 6"   | 4         | 1718v  | 1718f     | 1008      | 1008f     | 1168f   | 1168f     | 1008f     | 1008f     | 1008f   | 1008f     | 1008f     | 1008f     | 1008f  | 1008f     |  |  |  |  |
|  | 5         | 1124f  | 1124f     | 645f      | 645f      | 748f  | 748f      | 645f      | 645f      | 645f  | 645f      | 645f      | 645f      | 645f   | 645f      |  |  |  |  |
|  | 6         | 780f   | 780f      | 448f      | 448f      | 519f  | 519f      | 448f      | 448f      | 448f  | 448f      | 448f      | 448f      | 448f   | 448f      |  |  |  |  |
|  | 7         | 573f   | 573f      | 329f      | 329f      | 382f  | 382f      | 329f      | 329f      | 329f  | 329f      | 329f      | 329f      | 329f   | 329f      |  |  |  |  |
|  | 8         | 439f   | 439f      | 252f      | 252f      | 292f  | 292f      | 252f      | 252f      | 252f  | 252f      | 252f      | 252f      | 252f   | 252f      |  |  |  |  |
|  | 9         | 347f   | 310       | 199f      | 198       | 231f  | 231f      | 199f      | 199f      | 199f  | 199f      | 199f      | 199f      | 199f   | 199f      |  |  |  |  |
|  | 10        | 281f   | 226       | 161f      | 144       | 187f  | 187f      | 161f      | 157       | 161f  | 157       | 161f      | 157       | 161f   | 157       |  |  |  |  |
|  | 11        | 226  | 170       | 133f      | 108       | 155   | 141       | 133f      | 118       | 133f  | 118       | 133f      | 118       | 133f   | 118       |  |  |  |  |
| 12   | 174       | 131  | 111       | 84        | 130       | 109   | 112f      | 91        | 112f      | 91  | 112f      | 91        | 112f      | 91   |           |  |  |  |  |
| 5 x 6"   | 4         | 2182v  | 2182v     | 1624f     | 1624f     | 1495v   | 1495v     | 1495v     | 1495v     | 1495v   | 1495v     | 1495v     | 1495v     | 1495v  | 1495v     |  |  |  |  |
|  | 5         | 1746v  | 1746v     | 1040f     | 1040f     | 1196v   | 1196v     | 1040f     | 1040f     | 1040f   | 1040f     | 1040f     | 1040f     | 1040f  | 1040f     |  |  |  |  |
|  | 6         | 1257f  | 1257f     | 722f      | 722f      | 837f  | 837f      | 722f      | 722f      | 722f  | 722f      | 722f      | 722f      | 722f   | 722f      |  |  |  |  |
|  | 7         | 924f   | 924f      | 530f      | 530f      | 615f  | 615f      | 530f      | 530f      | 530f  | 530f      | 530f      | 530f      | 530f   | 530f      |  |  |  |  |
|  | 8         | 707f   | 707f      | 406f      | 406f      | 471f  | 471f      | 406f      | 406f      | 406f  | 406f      | 406f      | 406f      | 406f   | 406f      |  |  |  |  |
|  | 9         | 559f   | 559f      | 321f      | 321f      | 372f  | 372f      | 321f      | 321f      | 321f  | 321f      | 321f      | 321f      | 321f   | 321f      |  |  |  |  |
|  | 10        | 453f   | 453f      | 260f      | 260f      | 301f  | 301f      | 260f      | 260f      | 260f  | 260f      | 260f      | 260f      | 260f   | 260f      |  |  |  |  |
|  | 11        | 374f   | 348       | 215f      | 215f      | 249f  | 249f      | 215f      | 215f      | 215f  | 215f      | 215f      | 215f      | 215f   | 215f      |  |  |  |  |
| 12   | 314f      | 268  | 180f      | 171       | 209f      | 209f  | 180f      | 180f      | 180f      | 180f  | 180f      | 180f      | 180f      | 180f   |           |  |  |  |  |

\* f = controlled by bending v = controlled by shear

\*\* Douglas Fir/Larch centers and backs

Loads controlled by bending (f) or shear (v) are based on a Two Month duration of Load factor of 1.15. For Normal Duration of Loading or Floor Loads, values must be divided by 1.15. For floor loads based on deflection using L/360, use 1/2 of L/180 values.