

No. 2 Grade Wood Members and "I" Joists Span Tables

| Floor joists | 40#LL + 10#DL | | | | | | | | | | | | L/360 |
|-------------------|-----------------------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|
| | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | | |
| | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | |
| Douglas Fir-Larch | 10-9 | 9-9 | 8-1 | 14-2 | 12-7 | 10-3 | 17-9 | 15-5 | 12-7 | 20-7 | 17-10 | 14-7 | |
| Hem-Fir | 10-0 | 9-1 | 7-11 | 13-2 | 12-0 | 10-2 | 16-10 | 15-2 | 12-5 | 20-4 | 17-7 | 14-4 | |
| Ponderosa Pine | 9-2 | 8-4 | 7-0 | 12-1 | 10-10 | 8-10 | 15-4 | 13-3 | 10-10 | 17-9 | 15-5 | 12-7 | |
| Southern Pine | 10-9 | 9-9 | 8-6 | 14-2 | 12-10 | 11-0 | 18-0 | 16-1 | 13-5 | 21-9 | 19-0 | 15-4 | |
| S-P-F | 10-3 | 9-4 | 8-1 | 13-6 | 12-3 | 10-3 | 17-3 | 15-5 | 12-7 | 20-7 | 17-10 | 14-7 | |
| S-P-F (South) | 9-6 | 8-7 | 7-6 | 12-6 | 11-4 | 9-6 | 15-11 | 14-3 | 11-8 | 19-1 | 16-6 | 13-6 | |
| Western Cedars | 9-2 | 8-4 | 7-3 | 12-1 | 11-0 | 9-2 | 15-5 | 13-9 | 11-3 | 18-5 | 16-0 | 13-0 | |
| TJI®/15 | Flange Width = 1 1/2" | | | | | | 18-9 | 17-2 | 15-1 | 22-4 | 20-5 | 15-1 | |
| TJI®/25 | Flange Width = 1 3/4" | | | | | | 19-7 | 17-11 | 15-9 | 23-4 | 21-4 | 18-4 | |
| LPI™ 32 | Flange Width = 2 1/2" | | | | | | 19-0 | 18-6 | 15-11 | 23-9 | 22-0 | 18-10 | |

| Rafters: Flat ceiling rooms; attached garages | 40#LL + 7#DL | | | | | | | | | | | | L/180 |
|---|--------------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|
| | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | | |
| | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | |
| Douglas Fir-Larch | 12-8 | 11-0 | 9-0 | 16-1 | 13-11 | 11-5 | 19-8 | 17-0 | 13-11 | 22-9 | 19-9 | 16-1 | |
| Hem-Fir | 12-6 | 10-10 | 8-10 | 15-10 | 13-9 | 11-3 | 19-4 | 16-9 | 13-8 | 22-6 | 19-5 | 15-11 | |
| S-P-F | 12-8 | 11-0 | 9-0 | 16-1 | 13-11 | 11-5 | 19-8 | 17-0 | 13-11 | 22-9 | 19-9 | 16-1 | |
| S-P-F (South) | 11-9 | 10-2 | 8-4 | 14-11 | 12-11 | 10-6 | 18-2 | 15-9 | 12-10 | 21-1 | 18-3 | 14-11 | |

| Rafters: Vaulted ceilings | 40#LL + 15#DL | | | | | | | | | | | | L/240 |
|---------------------------|--|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|
| | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | | |
| | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | |
| Douglas Fir-Larch | 11-9 | 10-2 | 8-4 | 14-10 | 12-11 | 10-6 | 18-2 | 15-9 | 12-10 | 21-1 | 18-3 | 14-11 | |
| Hem-Fir | 11-5 | 10-0 | 8-2 | 14-8 | 12-8 | 10-4 | 17-11 | 15-6 | 12-8 | 20-9 | 18-0 | 14-8 | |
| S-P-F | 11-9 | 10-2 | 8-4 | 14-10 | 12-11 | 10-6 | 18-2 | 15-9 | 12-10 | 21-1 | 18-3 | 14-11 | |
| S-P-F (South) | 10-10 | 9-5 | 7-8 | 13-9 | 11-11 | 9-9 | 16-10 | 14-7 | 11-11 | 19-6 | 16-11 | 13-9 | |
| TJI®/15 | Low Slope: Roof Pitch 6:12 or less | | | | | | — | 17-4 | 15-1 | — | 20-11 | 17-1 | |
| TJI®/15 | High Slope: Roof Pitch greater than 6:12 | | | | | | — | 15-8 | 13-8 | — | 18-11 | 16-5 | |
| LPI™ 32 | Low Slope: Roof Pitch 6:12 or less | | | | | | 22-6 | 20-4 | 16-1 | 26-10 | 23-6 | 19-2 | |
| LPI™ 32 | High Slope: Roof Pitch greater than 6:12 | | | | | | 22-0 | 19-7 | 16-0 | 26-1 | 22-8 | 17-7 | |

| Rafters: Detached garages | 30#LL + 7#DL | | | | | | | | | | | | L/180 |
|---------------------------|--------------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|
| | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | | |
| | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | |
| Douglas Fir-Larch | 14-4 | 12-5 | 10-1 | 18-2 | 15-8 | 12-10 | 22-2 | 19-2 | 15-8 | 25-8 | 22-3 | 18-2 | |
| Hem-Fir | 13-10 | 12-3 | 10-0 | 17-10 | 15-6 | 12-8 | 21-10 | 18-11 | 15-5 | 25-4 | 21-11 | 17-11 | |
| S-P-F | 14-4 | 12-5 | 10-1 | 18-2 | 15-8 | 12-10 | 22-2 | 19-2 | 15-8 | 25-8 | 22-3 | 18-2 | |
| S-P-F (South) | 13-1 | 11-6 | 9-4 | 16-9 | 14-6 | 11-10 | 20-6 | 17-9 | 14-6 | 23-9 | 20-7 | 16-10 | |

| Ceiling joists | 20#LL + 10#DL | | | | | | | | | | | | L/240 |
|-------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| | 2 x 4 | | | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | |
| | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | 12"OC | 16"OC | 24"OC | |
| Douglas Fir-Larch | 9-10 | 8-9 | 7-2 | 14-10 | 12-10 | 10-6 | 18-9 | 16-3 | 13-3 | 22-11 | 19-10 | 16-3 | |
| Hem-Fir | 9-2 | 8-4 | 7-1 | 14-5 | 12-8 | 10-4 | 18-6 | 16-0 | 13-1 | 22-7 | 19-7 | 16-0 | |
| S-P-F | 9-5 | 8-7 | 7-2 | 14-9 | 12-10 | 10-6 | 18-9 | 16-3 | 13-3 | 22-11 | 19-10 | 16-3 | |
| S-P-F (South) | 8-8 | 7-11 | 6-8 | 13-8 | 11-11 | 9-8 | 17-5 | 15-1 | 12-4 | 21-3 | 18-5 | 15-0 | |