| | | | DEAD LOAD = 10 pounds psf | | | | | DEAD LOAD = 20 pounds psf | | | | |
|----------|-----------------------|----|---------------------------|-------|-------|--------|--------|---------------------------|-------|-------|--------|--------|
| | | | 2 × 4 | 2 × 6 | 2 × 8 | 2 × 10 | 2 × 12 | 2 × 4 | 2 × 6 | 2 × 8 | 2 × 10 | 2 × 12 |
| RAFTER | Maximum rafter spans | | | | | | | | | | | |
| SPACING | | ND | (ft | (ft | (ft | (ft | (ft | (ft | (ft | (ft | (ft | (ft |
| (inches) | GRADE | | in.) | in.) | in.) | in.) | in.) | in.) | in.) | in.) | in.) | in.) |
| 12 | Douglas Fir- Larch | SS | 10-5 | 16-4 | 21-7 | Note a | Note a | 10-5 | 16-4 | 21-7 | Note a | Note a |
| | Douglas Fir- Larch | #1 | 10-0 | 15-9 | 20-10 | Note a | Note a | 10-0 | 15-4 | 19-5 | 23-9 | Note a |
| | Douglas Fir- Larch | #2 | 9-10 | 15-6 | 20-5 | 25-8 | Note a | 9-10 | 14-4 | 18-2 | 22-3 | 25-9 |
| | Douglas Fir- Larch | #3 | 8-7 | 12-6 | 15-10 | 19-5 | 22-6 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 |
| | Hem-Fir | SS | 9-10 | 15-6 | 20-5 | Note a | Note a | 9-10 | 15-6 | 20-5 | Note a | Note a |
| | Hem-Fir | #1 | 9-8 | 15-2 | 19-11 | 25-5 | Note a | 9-8 | 14-11 | 18-11 | 23-2 | Note a |
| | Hem-Fir | #2 | 9-2 | 14-5 | 19-0 | 24-3 | Note a | 9-2 | 14-2 | 17-11 | 21-11 | 25-5 |
| | Hem-Fir | #3 | 8-7 | 12-6 | 15-10 | 19-5 | 22-6 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 |
| | Southern Pine | SS | 10-3 | 16-1 | 21-2 | Note a | Note a | 10-3 | 16-1 | 21-2 | Note a | Note a |
| | Southern Pine | #1 | 10-0 | 15-9 | 20-10 | Note a | Note a | 10-0 | 15-9 | 20-10 | 25-10 | Note a |
| | Southern Pine | #2 | 9-10 | 15-6 | 20-5 | Note a | Note a | 9-10 | 15-1 | 19-5 | 23-2 | Note a |
| | Southern Pine | #3 | 9-1 | 13-6 | 17-2 | 20-3 | 24-1 | 7-11 | 11-8 | 14-10 | 17-6 | 20-11 |
| | Spruce-Pine-Fir | SS | 9-8 | 15-2 | 19-11 | 25-5 | Note a | 9-8 | 15-2 | 19-11 | 25-5 | Note a |
| | Spruce-Pine-Fir | #1 | 9-5 | 14-9 | 19-6 | 24-10 | Note a | 9-5 | 14-4 | 18-2 | 22-3 | 25-9 |
| | Spruce-Pine-Fir | #2 | 9-5 | 14-9 | 19-6 | 24-10 | Note a | 9-5 | 14-4 | 18-2 | 22-3 | 25-9 |
| | Spruce-Pine-Fir | #3 | 8-7 | 12-6 | 15-10 | 19-5 | 22-6 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 |
| 16 | Douglas Fir- Larch | SS | 9-6 | 14-11 | 19-7 | 25-0 | Note a | 9-6 | 14-11 | 19-7 | 24-9 | Note a |
| | Douglas Fir- Larch | #1 | 9-1 | 14-4 | 18-11 | 23-9 | Note a | 9-1 | 13-3 | 16-10 | 20-7 | 23-10 |
| | Douglas Fir- Larch | #2 | 8-11 | 14-1 | 18-2 | 22-3 | 25-9 | 8-6 | 12-5 | 15-9 | 19-3 | 22-4 |
| | Douglas Fir- Larch | #3 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 | 6-5 | 9-5 | 11-11 | 14-6 | 16-10 |
| | Hem-Fir | SS | 8-11 | 14-1 | 18-6 | 23-8 | Note a | 8-11 | 14-1 | 18-6 | 23-8 | Note a |
| | Hem-Fir | #1 | 8-9 | 13-9 | 18-1 | 23-1 | Note a | 8-9 | 12-11 | 16-5 | 20-0 | 23-3 |
| | Hem-Fir | #2 | 8-4 | 13-1 | 17-3 | 21-11 | 25-5 | 8-4 | 12-3 | 15-6 | 18-11 | 22-0 |
| | Hem-Fir | #3 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 | 6-5 | 9-5 | 11-11 | 14-6 | 16-10 |
| | Southern Pine | SS | 9-4 | 14-7 | 19-3 | 24-7 | Note a | 9-4 | 14-7 | 19-3 | 24-7 | Note a |
| | Southern Pine | #1 | 9-1 | 14-4 | 18-11 | 24-1 | Note a | 9-1 | 14-4 | 18-10 | 22-4 | Note a |
| | Southern Pine | #2 | 8-11 | 14-1 | 18-6 | 23-2 | Note a | 8-11 | 13-0 | 16-10 | 20-1 | 23-7 |
| | Southern Pine | #3 | 7-11 | 11-8 | 14-10 | 17-6 | 20-11 | 6-10 | 10-1 | 12-10 | 15-2 | 18-1 |
| | Spruce-Pine-Fir | SS | 8-9 | 13-9 | 18-1 | 23-1 | Note a | 8-9 | 13-9 | 18-1 | 23-0 | Note a |
| | Spruce-Pine-Fir | #1 | 8-7 | 13-5 | 17-9 | 22-3 | 25-9 | 8-6 | 12-5 | 15-9 | 19-3 | 22-4 |
| | Spruce-Pine-Fir | #2 | 8-7 | 13-5 | 17-9 | 22-3 | 25-9 | 8-6 | 12-5 | 15-9 | 19-3 | 22-4 |
| | Spruce-Pine-Fir | #3 | 7-5 | 10-10 | 13-9 | 16-9 | 19-6 | 6-5 | 9-5 | 11-11 | 14-6 | 16-10 |

(continued)

TABLE 2308.10.3(2)-continued RAFTER SPANS FOR COMMON LUMBER SPECIES (Roof Live Load = 20 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 240)