

Span Tables for Douglas Fir-Larch Lumber

2022 California Building Code, Section 2308

2022 Residential Building Code, R502, R802

**Rafters (L/Δ=240),
Table 2308.7.2(2),
Table R802.4.1(2)**

**Ceiling Joists (L/Δ=240),
Table 2308.7.1(1),
Table R802.5.1(1)**

**Floor Joists (L/Δ=360)
Table 2308.4.2.1(2)
Table R502.3.1(2)**

Douglas Fir - Larch No.2

Live Load Dead Load		20 psf 10 psf	10 psf 5 psf	40 psf 10 psf
Size (inches)	Spacing (inches)	Rafter Spans (ft.-ins.)	Ceiling Joist Spans (ft.-ins.)	Floor Joist Spans (ft.-ins.)
2x4	12.0	9'-10"	12'-5"	NA
	16.0	8'-11"	11'-3"	NA
	19.2	8'-5"	10'-7"	NA
	24.0	7'-10"	9'-10"	NA
2x6	12.0	15'-6"	19'-6"	10'-9"
	16.0	14'-1"	17'-8"	9'-9"
	19.2	13'-1"	16'-7"	9'-1"
	24.0	11'-9"	14'-10"	8'-1"
2x8	12.0	20'-5"	25'-8"	14'-2"
	16.0	18'-2"	23'-0"	12'-7"
	19.2	16'-7"	21'-0"	11'-6"
	24.0	14'-10"	18'-9"	10'-3"
2x10	12.0	25'-8"	Note a	17'-9"
	16.0	22'-3"	Note a	15'-5"
	19.2	20'-3"	25'-8"	14'-1"
	24.0	18'-2"	22'-11"	12'-7"
2x12	12.0	Note b	NA	20'-7"
	16.0	25'-9"	NA	17'-10"
	19.2	23'-6"	NA	16'-3"
	24.0	21'-0"	NA	14'-7"

Note a: Span exceeds 26 feet in length.

Note b: Span exceeds 26 feet in length. Check sources for availability of lumber greater than 20 feet.

Updated 1-18-2023