



City of Rancho Cucamonga

BUILDING AND SAFETY SERVICES DEPARTMENT

10500 Civic Center Drive | Rancho Cucamonga, CA 91730
 Tel: (909) 477-2710 | Fax: (909) 477-2711 | www.CityofRC.us

SPAN TABLE

The following table represents the minimum standards for roof rafters, ceiling joists, and floor joists contained within the latest adopted edition of the California Building Code (CBC), and can only be used for projects conforming to “conventional light-frame construction” parameters (see CBC Chapter 23 for complete requirements). Other proposals must be designed and submitted by a State licensed Architect or Engineer.

RAFTER and JOIST SPAN TABLE ^{1,2}									
Lumber Size	Lumber Spacing	Rafters						Ceiling Joists	Floor Joists ³
		All Slopes w/ drywall ceiling		Low Slopes up to 3:12		High Slopes greater than 3:12			
		Light ⁴	Heavy ⁵	Light ⁴	Heavy ⁵	Light ⁴	Heavy ⁵		
2 x 4	12	9'-10"	9'-9"	9'-10"	9'-10"	10'-7"	10'-7"	12'-4"	---
	16	8'-11"	8'-5"	8'-11"	8'-11"	9'-7"	9'-7"	11'-3"	---
	24	7'-4"	6'-11"	7'-9"	7'-4"	8'-4"	7'-10"	9'-10"	---
2 x 6	12	15'-4"	14'-4"	15'-5"	15'-4"	16'-7"	16'-3"	19'-5"	10'-8"
	16	13'-3"	12'-5"	14'-0"	13'-3"	15'-1"	14'-1"	17'-8"	9'-8"
	24	10'-10"	10'-1"	11'-8"	10'-10"	12'-7"	11'-6"	14'-10"	8'-1"
2 x 8	12	19'-5"	18'-2"	20'-4"	19'-5"	21'-11"	20'-7"	25'-8"	14'-1"
	16	16'-10"	15'-8"	18'-2"	16'-10"	19'-6"	17'-10"	23'-0"	12'-7"
	24	13'-8"	12'-10"	14'-10"	13'-8"	15'-11"	14'-7"	18'-9"	10'-3"
2 x 10	12	23'-9"	22'-2"	25'-7"	23'-9"	26'-0"	25'-2"	26'-0"	17'-9"
	16	20'-6"	19'-2"	22'-2"	20'-6"	23'-10"	21'-10"	26'-0"	15'-4"
	24	16'-9"	15'-8"	18'-1"	16'-9"	19'-5"	17'-10"	22'-11"	12'-6"
2 x 12	12	26'-0"	25'-9"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	20'-7"
	16	23'-10"	22'-3"	25'-9"	23'-10"	26'-0"	25'-4"	26'-0"	17'-9"
	24	19'-5"	18'-2"	21'-0"	19'-5"	22'-7"	20'-8"	26'-0"	14'-6"

¹ Table based on Douglas Fir-Larch, No. 2 values for visually graded lumber by WCLIB and WWPA.

² Spans shown are clear horizontal distance between supports.

³ Based on 40 psf live load.

⁴ Light roofing material consists of composition or wood shingles.

⁵ Heavy roofing material consists of rock, gravel, tile, or shake shingles.