

SPAN TABLES AND ALLOWABLE LOADS

2019 CBC FOR RESIDENTIAL LIGHT-FRAME ONLY

Design Criteria: Douglas Fir-Larch

Strength: Live load of 40 psf, plus dead load of 10 psf

Limited to span in inches divided by L/240

Spans are limited to 26 feet

FLOOR JOISTS			CEILING JOISTS		
SIZE & SPACING	GRADE #1	GRADE #2	SIZE & SPACING	GRADE #1	GRADE #2
2 x 6 @ 12" O.C. @ 16" O.C. @ 24" O.C.	10' 11"	10' 9"	2 x 4 @ 12" O.C. @ 16" O.C. @ 24" O.C.	10' 0"	9' 10"
	9' 11"	9' 9"		9' 1"	8' 9"
	8' 8"	8' 1"		7' 8"	7' 2"
2 x 8 @ 12" O.C. @ 16" O.C. @ 24" O.C.	14' 5"	14' 2"	2 x 6 @ 12" O.C. @ 16" O.C. @ 24" O.C.	15' 9"	14' 10"
	13' 1"	12' 7"		13' 9"	12' 10"
	11' 0"	10' 3"		11' 2"	10' 6"
2 x 10 @ 12" O.C. @ 16" O.C. @ 24" O.C.	18' 5"	17' 9"	2 x 8 @ 12" O.C. @ 16" O.C. @ 24" O.C.	20' 1"	18' 9"
	16' 5"	15' 5"		17' 5"	16' 3"
	13' 5"	12' 7"		14' 2"	13' 3"
2 x 12 @ 12" O.C. @ 16" O.C. @ 24" O.C.	22' 0"	20' 7"	2 x 10 @ 12" O.C. @ 16" O.C. @ 24" O.C.	24' 6"	22' 11"
	19' 1"	17' 10"		21' 3"	19' 10"
	15' 7"	14' 7"		17' 4"	16' 3"

RAFTERS		
SIZE & SPACING	GRADE #1	GRADE #2
2 x 6 @ 12" O.C. @ 16" O.C. @ 24" O.C.	15' 9"	15' 6"
	14' 4"	14' 1"
	12' 6"	11' 9"
2 x 8 @ 12" O.C. @ 16" O.C. @ 24" O.C.	20' 10"	20' 5"
	18' 11"	18' 2"
	15' 10"	14' 10"
2 x 10 @ 12" O.C. @ 16" O.C. @ 24" O.C.	Note A	25' 8"
	23' 9"	22' 3"
	19' 5"	18' 2"
2 x 12 @ 12" O.C. @ 16" O.C. @ 24" O.C.	Note A	Note A
	Note A	25' 9"
	22' 6"	21' 0"

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