



# YOLO COUNTY BUILDING INSPECTION DIVISION

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Form #  
GH - 019

## SPAN TABLES/DETAILS FOR CONVENTIONAL WOOD FRAMING

The spans in the table listed below are based on **#2 Douglas Fir Standard Grade lumber.**

### ROOF RAFTERS

CBC Table 2308.10.3(1) Note: Tile does not include heavy Spanish tile which typically weighs 19lbs sq. ft. alone.

SIZE	SPACING	COMP/SHAKE 20LL 10dl	TILE 20LL 20dl
2 X 6	12" O.C	16'-7"	14'-4"
	16" O.C	14'-7"	12'-5"
	24" O.C	11'-9"	10'-2"
2 X 8	12" O.C	21'-0"	18'-2"
	16" O.C	18'-2"	15'-9"
	24" O.C	14'-10"	12'-10"
2 X 10	12" O.C	25'-8"	22'-3"
	16" O.C	22'-3"	19'-3"
	24" O.C	18'-2"	15'-8"

dl = Dead load/LL = Live load

### CEILING JOISTS

CBC Table 2308.10.2(1)

SPACING	2 x 4	2 x 6	2 x 8
12" O.C	12'-5"	19'-6"	25'-8"
16" O.C	11'-3"	17'-8"	23'-0"
24" O.C	9'-10"	14'-9"	18'-9"

### ROOF SHEATHING

7/16" or 1/2" structural APA rated sheathing with exterior glue and a minimum span rating of 24/16 is permitted on 24" o.c or less roof framing.

Nails: 6d common or deformed shank or larger spaced 6" o.c at the edges and 12" o.c in the field. (8d nails minimum for structural roof sheathing.) CBC Table 2304.9.1

### FLOOR JOISTS

CBC Table 2308.8(2) (40LL 20dl)

SIZE	SPACING	MAXIMUM SPAN
2 x 6	12" O.C	10'-6"
	16" O.C	9'-1"
	24" O.C	7'-5"
2 x 8	12" O.C	13'-3"
	16" O.C	11'-6"
	24" O.C	9'-5"
2 x 10	12" O.C	16'-3"
	16" O.C	14'-1"
	24" O.C	11'-6"
2 x 12	12" O.C	18'-10"
	16" O.C	16'-3"
	24" O.C	13'-4"

**\*For Header and Girder spans see CBC\*  
Tables 2308.9.5 and 2308.9.6**

### FLOOR SHEATHING/SUBFLOOR

16" o.c framing- 1/2"-3/4" sheathing\* with a panel rating of 16/24

24" o.c framing- 3/4"-1" sheathing\* with a panel rating of 24/48

48" o.c framing- 1 1/8" sheathing\* with a panel rating of 48

(\* = tongue and groove subfloor)

Flooring 3/4" or less use 6d deformed shank or larger spaced 6" o.c at the edges and 12" o.c in the field.

Flooring over 3/4" use 10d common or 8d deformed shank or larger spaced 6" o.c at the edges and 12" o.c in the field.