



# Patio Cover Example

## INFORMATION GUIDELINE

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### TYPICAL PATIO COVER CONSTRUCTION

ROOFING MATERIAL PER UBC CHAPTER 15 AND ALL APPLICABLE COUNTY ORDINANCES.  
ROOFING TYPE \_\_\_\_\_

FOR SOLID ROOFS USE UBC SPAN TABLES 23-IV-R7 FOR 10DL+20LL=30 LB. TOTAL LOAD.  
SHEATHING TYPE \_\_\_\_\_

(FOR CORRUGATED FIBERGLASS OR LATTICED ROOFS, USE SPAN TABLES ON BACK.)

MIN. 2x D.F.#2 LEDGER, FASTENED TO WALL STUDS PER '97 UBC Table 23-II-B-1  
RAFTER SPACING \_\_\_\_\_ INCHES O.C.

SOLID BLOCKING PER '97 UBC Sec. 2316

12' MAXIMUM HEIGHT

APPROVED POST CAP TYPE \_\_\_\_\_

BEAM SPAN \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
BEAM SIZE \_\_\_\_\_ x \_\_\_\_\_ INCHES  
NUMBER OF POSTS \_\_\_\_\_

MAIN BEAM

APPROVED RAFTER TIE CLIP TYPE \_\_\_\_\_

APPROVED HANGER TYPE \_\_\_\_\_

WIDTH \_\_\_\_\_ FEET \_\_\_\_\_ INCHES

DEPTH \_\_\_\_\_ FEET \_\_\_\_\_ INCHES

POST SIZE x INCHES

9" MIN.

GRADE

3-1/2" MINIMUM SLAB THICKNESS

ANCHORAGE SHALL BE INSTALLED PER MANUFACTURERS AND EVALUATION REPORTS  
TYPE \_\_\_\_\_

APPROVED POST BASE TYPE \_\_\_\_\_

18x18 CONCRETE POST PIER  
MAX POST LOAD = 2,250 LB.

Max. 1000 Lbs sq. ft. Soil bearing  
Minimum 2500 PSI Concrete

- REFER TO UBC TABLE 23-II-B-1 FOR TYPICAL NAILING REQUIREMENTS.
- REFER TO UBC APPENDIX CHAPTER 31 DIVISION III FOR ALLOWABLE PATIO ENCLOSURE CRITERIA.
- ALL CONNECTIONS TO RESIST 10 POUNDS PER FOOT UPLIFT.
- POST LOAD ON 3-1/2" SLAB NOT TO EXCEED 750 POUNDS

## Allowable Spans

Patio Roof Column Height Table				
Allowable Column Loads				
Grade	Allowable load on post	Width	Depth	Length
	Pounds	Inches	Inches	Feet
RW construction common 4"	1826	4	4	12
RW construction common 4"	2856	4	6	12
RW construction common 6"	9131	6	6	12

BEAM SPAN TABLE										
For rafter span loading of beam LL + DL per sq. ft. on roof area.										
Douglas Fir # 2 Live Load=10 lb/sq ft. Dead Load=5 lb/sq ft; TOTAL LOAD=15 lb/sq ft										
(Half of rafter load on beam)			4X8				4X10		4X12	
Rafter Span	Ft. to Beam	On Beam	Allowable Span		Allowable Span		Allowable Span			
Feet	Feet	lb/ft	Feet	Inches	Feet	Inches	Feet	Inches		
12	6	90	14	1	17	9	21	3		
13	6.5	97.5	13	6	17	10	20	6		
14	7	105	13	1	16	6	19	10		
15	7.5	112.5	12	8	15	11	19	3		
16	8	120	12	4	15	6	18	8		
17	8.5	127.5	11	11	15	0	18	1		
18	9	135	11	8	15	8	17	8		
19	9.5	142.5	11	4	14	3	17	2		
20	10	150	11	0	13	11	16	10		
21	10.5	157.5	10	10	13	8	16	5		
22	11	165	10	6	13	4	16	0		
23	11.5	172.5	10	4	13	0	15	9		
24	12	180	10	1	12	9	15	5		

Note: The values shown do not include the self weight of the beam; the weight of the beam has been considered in the calculation.

PATIO ROOF RAFTER SPAN TABLE									
Douglas Fir-Larch Roof Rafter L/240 10LL+5DL Deflection calculated on LL only									
LL=10 Lb/Sq. Ft.			DL=5 Lb/Sq. Ft.			Deflection=L/240			
Grade	Width	Height	Grade	Width	Height	Grade	Width	Height	
DF #2	2	X 4	DF #2	2	X 6	DF #2	2	X 8	
Spacing		Allowable Span		Spacing		Allowable Span		Spacing	
Inches o.c.	Feet	Inches	Inches o.c.	Feet	Inches	Inches o.c.	Feet	Inches	
12	10	11	12	17	1	12	23	5	
16	9	6	16	14	10	16	20	3	
24	7	9	24	12	2	24	16	6	