



## Patio Covers & Carports

**BUILDING & SAFETY DIVISION**

**(530) 795-4910 ext. 112 or 117**

**318 First Street**

**FAX (530) 795-4935**

**Winters, CA 95694**

The cover is limited to 12' in height. It is designed to be open without ceiling joists or ceiling materials in addition to the rafters. The framing must be exposed (no sheetrock or ceiling cover) or alternate rafter spans are required. The structure may be a listed I.C.B.O. metal type or one using the provided span charts, framing details and foundation details. Three copies of the plot plan, framing plans (or ICBO listed cover plans) elevations and interior floor plan (as needed) will need to be submitted for review with your permit application.

Covers with solid roofs must use a roofing material approved for the low slope of the roof and all roofs must slope a minimum of 1/4" per foot. Composition roofing with 2 layers of 15# underlayment may be used on covers with a pitch of 2:12 or more.

**DISTANCE TO PROPERTY LINES:** Please verify with the Community Development Director the setback requirements for your property as the first step of your project plan.

**CARPORTS:** A carport is a structure that is entirely open on two or more sides (including the longest side), or it must be classified as a private garage.

**FLOOR PLAN:** When the cover will be attached to the dwelling which has windows under the cover:

1. A floor plan showing the use and dimensions of the rooms adjacent to the patio cover.
2. Size and type of all windows and doors from those rooms.

**EXTERIOR OPENINGS IN THE COMMON WALL:** When required openings for natural light, ventilation in the common wall between the home and the cover, the cover must have a minimum 7' ceiling height and:

1. Patio covers must have the longest side and one additional side at least 65% open and unobstructed for the area of the wall located at 6' 8" and below. Translucent or transparent plastic not more than .125 inches in thickness or openings may be covered with insect screening or plastic that is readily removable.
2. In carports the ceiling cannot have any enclosed useable space above the carport and two sides must be entirely open including the longest side.

**BEDROOM ESCAPE** windows must open directly to the outside, not into an enclosed patio, (screened, walled or partially walled) nor any carport.

**ELECTRICAL:** All electrical wiring and equipment must comply with NEC for exterior installations.

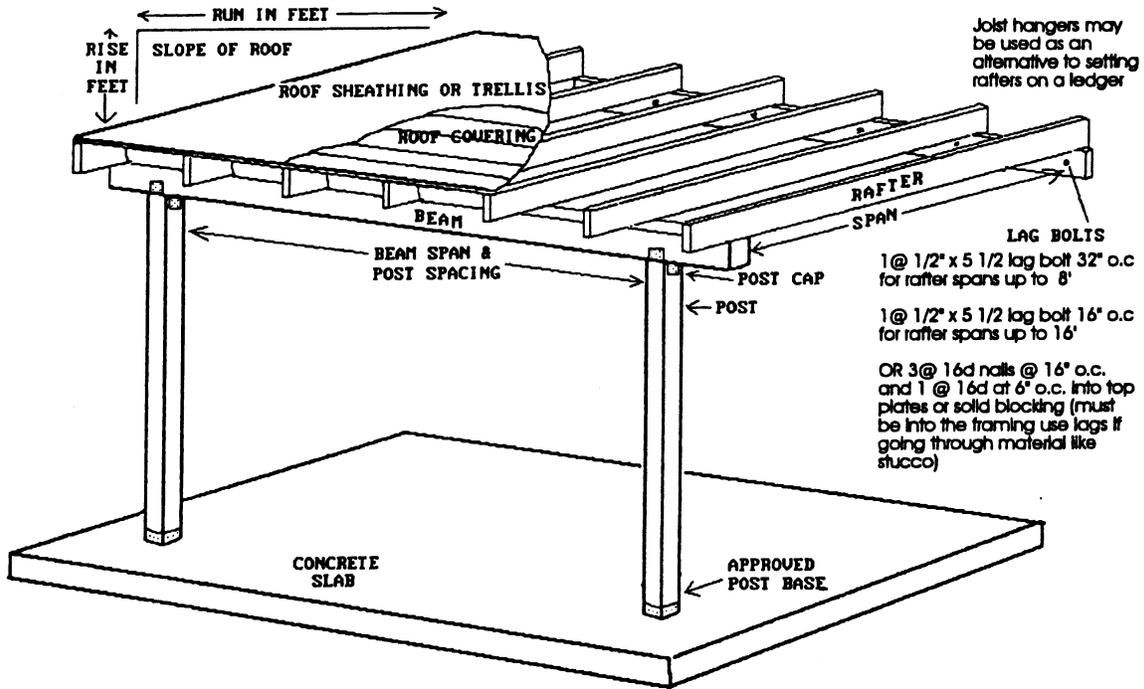
**FIRE SEPARATION:** No fire protection is required for the common wall between a one or two family dwelling, lodging house or congregate residence for a patio cover or carport provided the carport is open on 2 or more sides (including the longest side).

### SPAN CHARTS

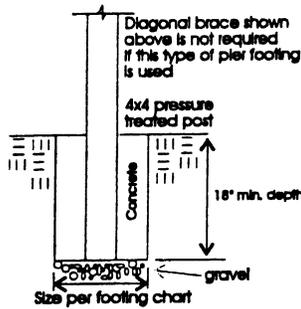
Trellis Type Patio Cover no plywood or roofing				Patio Cover with a solid roof. DF #2 lumber			Maximum DF #2 beam spans for solid roofs See notes below table for trellis roofs (Distance is between center of posts)											
Rafter Size	Rafter Spacing	Rafter span of Doug Fir Fir #2	Rafter span of Standard Redwood	Rafter Size	Rafter Spacing	Maximum Rafter Span	Rafter span	Beam Size										
								4x4	4x6	4x8	4x10							
2x4	16" o.c.	11'-3"	7'-4"	2x4	16" o.c. 24" o.c.	9'-7" 7'-2"	10' or less	6'-6"	10'-0"	14'-0"	16'-0"							
	24" o.c.	9'-10"	6'-0"				14' or less	6'-0"	9'-6"	12'-0"	15'-6"							
	32" o.c.	8-5	5'-3"				18' or less	N/A	8'-0"	11'-0"	14'-0"							
2x6	16" o.c.	17'-8"	12'-5"	2x6	16" o.c. 24" o.c.	13'-9" 11'-7"												
	24" o.c.	14'-9"	10'-6"															
	32" o.c.	12'-5"	8'-6"															
2x8	16" o.c.	n/a	16'-0"	2x8	16" o.c. 24" o.c.	18'-0" 14'-10"												
	24" o.c.	18'-0"	13'-5"															
	32" o.c.	16'-0"	11'-0"															
	48" o.c.	13'-5"	9'-2"															

**Allowable beam spans:**  
 1. Reduce by 1 foot if beams are double 2x material.  
 2. Reduce by 1 foot for standard grade 4x redwood material supporting a trellis roof.

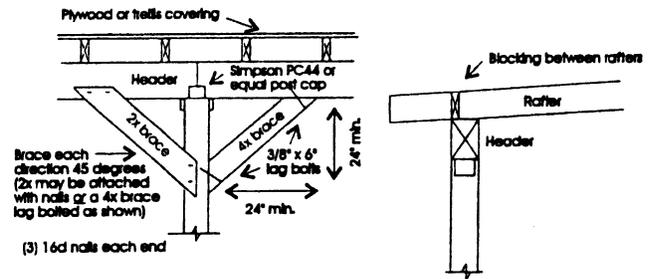
## FOR ATTACHED COVERS USE DETAILS FROM THIS PAGE AND THE FIRST PAGE SPAN CHARTS



### Footing Details (Either type of foundation may be used)



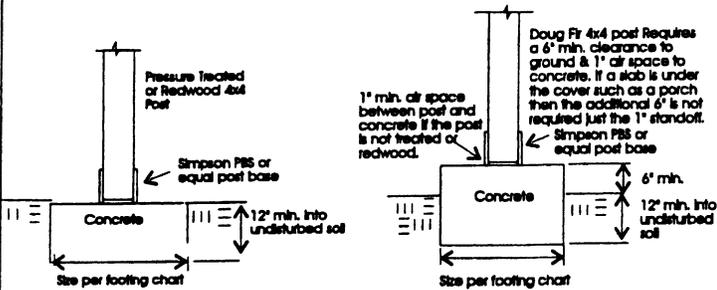
### Framing Details



### Footing Sizes (inches)

Beam Span (in feet)	Rafter Span (in feet)					
	6	8	10	14	16	18
6	12**	12**	12*	12*	12	12
8	12**	12*	12*	12	14	14
10	12*	12*	12	14	14	16
14	12*	14	14	16	18	18
18	12	14	16	18	20	20

\*\* may support a trellis or solid roof on a sound 3.5 patio/carport slab.  
\* may support a trellis roof on a sound 3.5 patio/carport slab.



Patio Covers can be attached to the ends of Rafters with a full 3.5" of material at seat cut of the rafter with the following limitations (note it is recommended that the rafter attach at the bearing wall):

Patios up to 16' in depth may attach to rafters spaced at 16" o.c. with an eave length of up to 24".

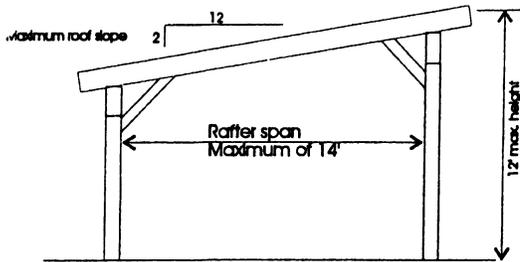
Patios up to 12' in depth may attach to rafters spaced at 24" o.c. and an eave length of up to 24".

The attachment should be:

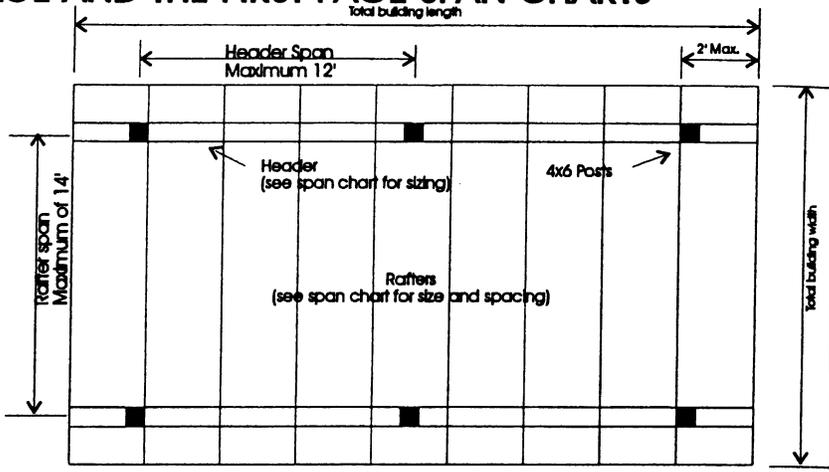
By attaching a ledger to the rafter tails, face nailing and L clipping the ledger to the existing rafter.

By lapping the new to the existing rafter, nailing with 16d's and solid blocking.

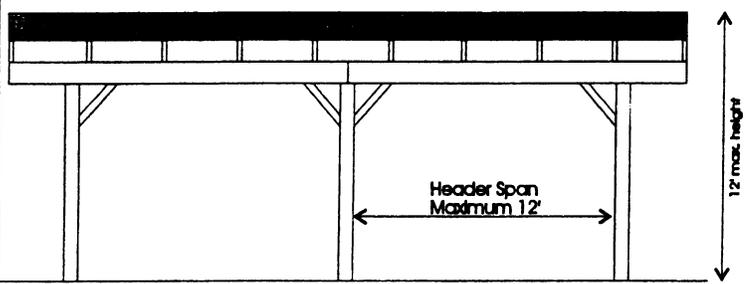
**FOR DETACHED COVERS MAXIMUM ROOF SLOPE 2:12  
USE DETAILS FROM THIS PAGE AND THE FIRST PAGE SPAN CHARTS**



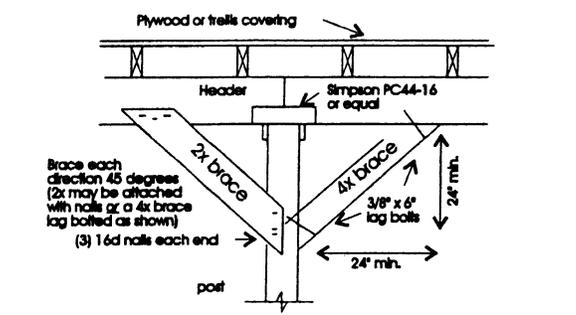
**Building Elevations**



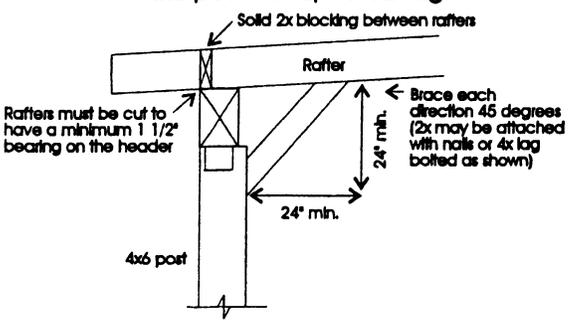
**Roof framing, post and header layout plan (sample)**



**Framing Details**



**4x4 posts ok up to 8' high  
OR  
4x6 posts for up to 12' high**



**Foundation Details for free standing cover**

