



PINAL COUNTY  
wide open opportunity

## REGULATIONS GOVERNING

# Patio Covers

PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT  
BUILDING SAFETY DIVISION  
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INFORMATION  
BULLETIN

# 006

March 2013

This information bulletin describes the minimum requirements for obtaining patio cover permits for residential buildings. Please reference Bulletin 003 (Permit Exemptions) to determine whether your project requires a building permit. The minimum requirements for a patio cover plan submittal are attached for your use. If your project exceeds the attached details, please provide two sets of drawings specific to your project.

### I. DEFINITION

**A. Patio covers** are one-story, roofed structures not more than 12 feet above grade and used only for recreational, outdoor living purposes.

**B. Patio covers** may be attached or detached and are permitted only as accessory to one- or two-family dwellings or lodging houses or to individual dwelling units in multiple dwelling unit buildings. Patio covers cannot be used as storage structures.

**C. Patio covers** must be open on two or more sides.

**1.** Enclosure walls must have clear height of not less than 6'-8" measured from the floor to the soffit of the supporting members.

**2.** Enclosure walls may have any configuration, provided at least 65 percent of the total wall area of the longer wall and one additional wall is open. Note that sliding glass doors may not be included in the open area. The openings shall be permitted to be enclosed with one of the following:

1. Insect screen.
2. Approved translucent plastic not more than 1/8" in thickness.
3. Glass conforming to section R309 (2012 IRC).
4. Any combination of the foregoing.

**3.** Exterior openings in the dwelling required for lighting and ventilation shall be permitted to open into an enclosed patio structure. The patio structure shall not be enclosed if such openings are serving as emergency egress or rescue openings from sleeping rooms.

### II. DRAWINGS TO PROVIDE & FORMS TO COMPLETE

Plans must be drawn to scale and must be of sufficient clarity to indicate the location, nature and extent of the work proposed. Be sure to clearly label all existing and proposed construction.

Plans must show, in detail that the proposed work will conform to the provisions of the 2012 International

Building Code, Zoning Ordinances and all other relevant laws, ordinances, rules and regulations.

### Two sets of plans are required and must include:

- A. Plot Plan**  
See figure 5 for requirements.
- B. Foundation and Framing Plans**  
A foundation plan, roof framing plan, elevations, cross sections, and connection details are needed for review.
- C. Permit Application**  
All projects must be submitted with a completed Building Permit Application that can be found under Forms on our website.

### III. CONSTRUCTION SPECIFICATIONS

Following are the minimum construction specifications for patio covers.

**A.** Lumber must be Douglas fir-larch No.2 or better. All lumber must be grade marked. Joists, girders and posts may be required to be protected against termites. (See Section R318 of the International Residential Code (IRC) for details.) All posts must be at least 4 x 4.

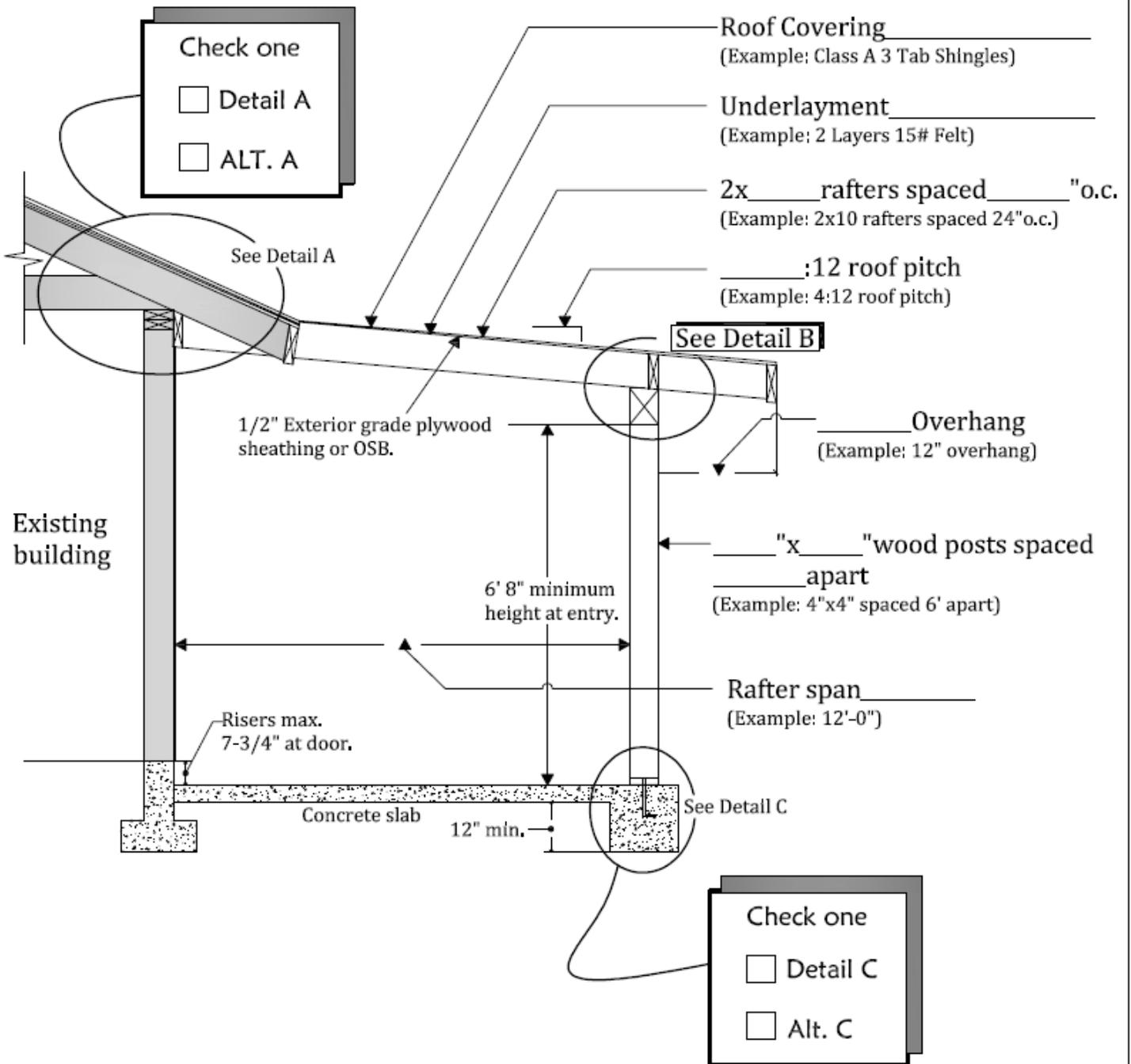
**B.** The post anchorage and bracing details shown on the following sheets have been approved by Pinal County for unenclosed patio covers.

**1.** Posts must be anchored at the lower end and must be braced at the upper end using any of the details provided. Decorative-type bracing may be substituted if the same resistance to lateral loading is provided.

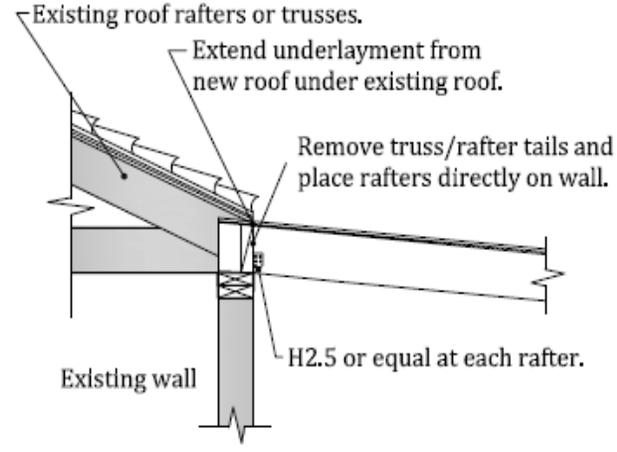
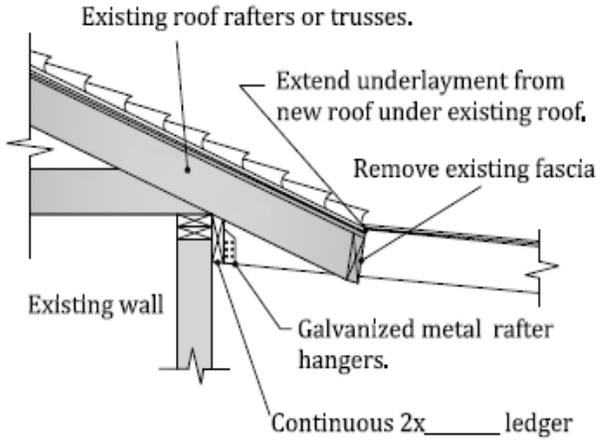
**2.** Patio covers with roofing and/or enclosed walls must be designed in accordance with the requirements of IRC Section R305.1 and Chapter 16 of the International Building Code.

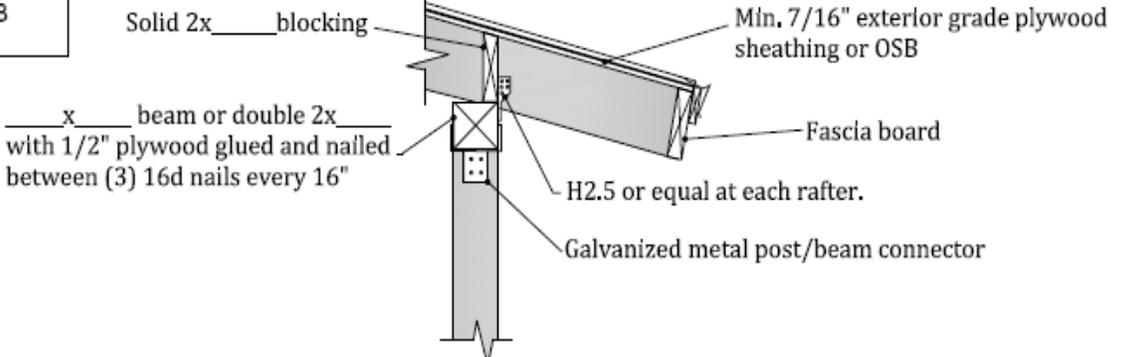
**C.** When it is desired to connect and support one side of the patio structure by attaching it directly to the house, the rafter spacing and beam sizes may be as shown in the Tables provided. The main beam may be replaced on the side attached to the dwelling unit with a ledger the same size as the rafters and fastened to the studs with 3/8" x 5" lag screws spaced at 32" maximum on center for up to a 10' rafter span. Lag screws may be spaced at 16" on center when the rafter span does not exceed 20'. Attaching the rafters to existing dwelling unit rafters is not recommended. If a ledger beam is not used, patio cover rafters should be notched and placed directly on the double top plate of the dwelling unit wall.

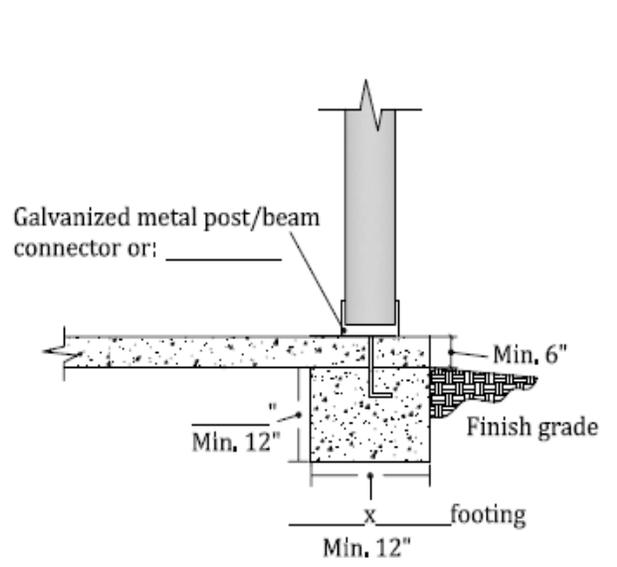
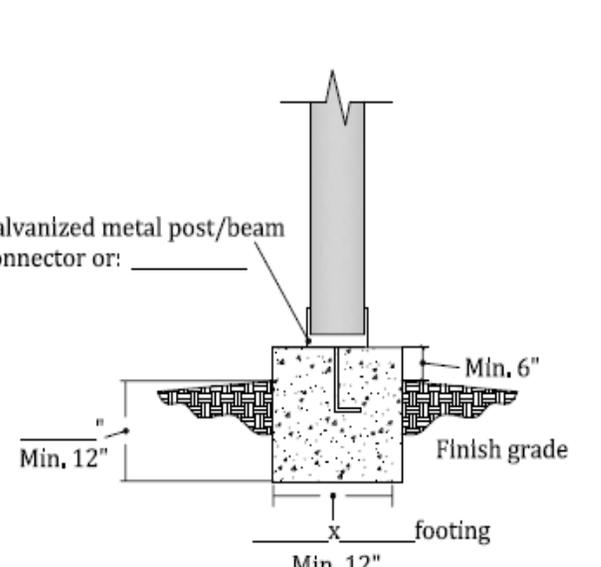
Fill in the blanks with dimensions and materials which will be used to build your project. Please print legibly. Details provided on page 3.



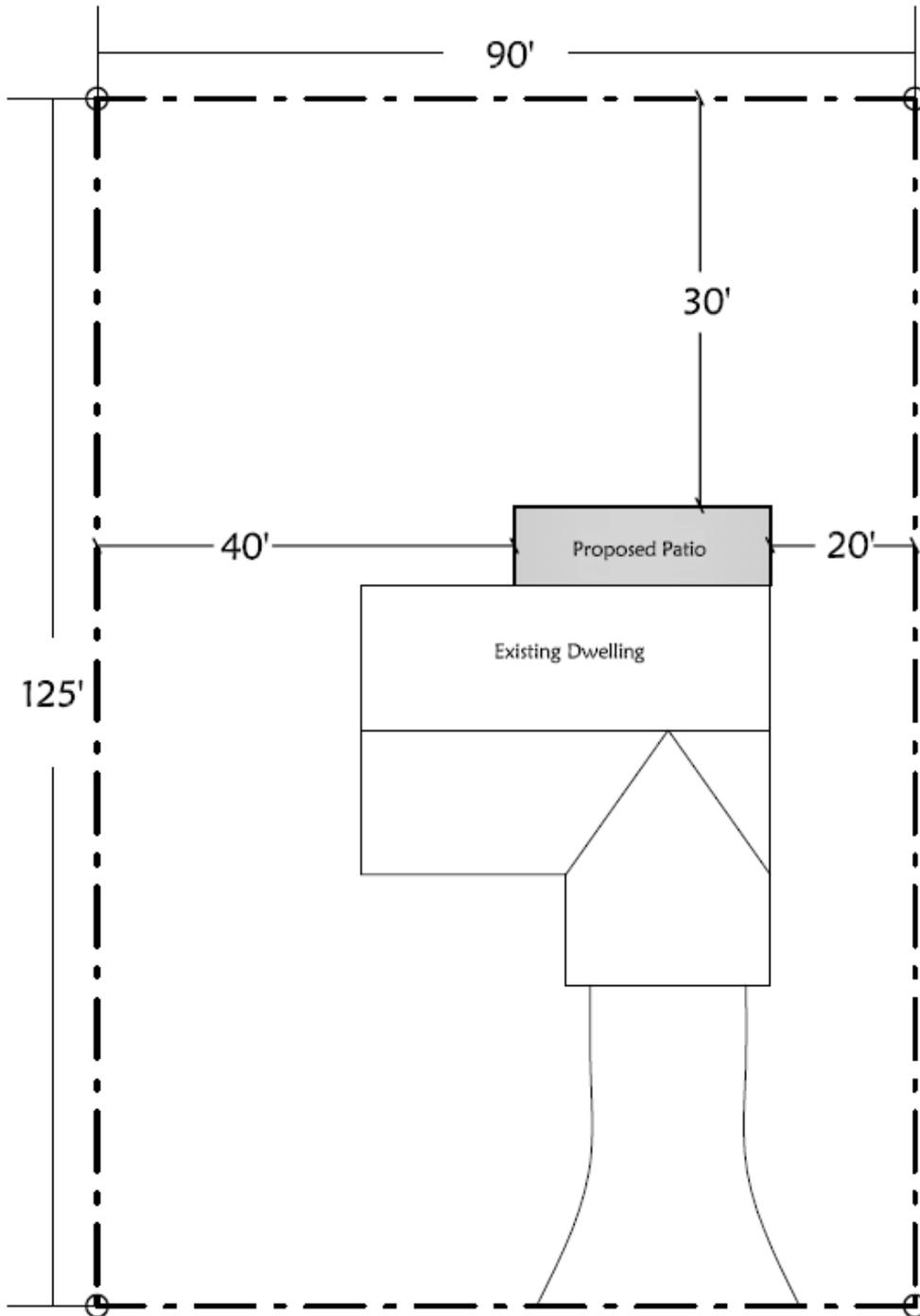
Fill in the blanks with dimensions and materials which will be used to build your project. Please print legibly.

PATIO ROOF ON WALL	DETAIL A	ALT. A	PATIO ROOF W/ LEDGER BOARD
 <p>Existing roof rafters or trusses.</p> <p>Extend underlayment from new roof under existing roof.</p> <p>Remove truss/rafter tails and place rafters directly on wall.</p> <p>Existing wall</p> <p>H2.5 or equal at each rafter.</p>		<p>NOTE: Remove wall finish where ledger occurs</p>  <p>Existing roof rafters or trusses.</p> <p>Extend underlayment from new roof under existing roof.</p> <p>Remove existing fascia</p> <p>Existing wall</p> <p>Galvanized metal rafter hangers.</p> <p>Continuous 2x_____ ledger</p> <p>Attach ledger with min. 3/8" x 5" lag bolts or equal at each stud _____</p>	

DETAIL B	 <p>Solid 2x_____ blocking</p> <p>_____ x _____ beam or double 2x _____ with 1/2" plywood glued and nailed between (3) 16d nails every 16"</p> <p>Min. 7/16" exterior grade plywood sheathing or OSB</p> <p>Fascia board</p> <p>H2.5 or equal at each rafter.</p> <p>Galvanized metal post/beam connector</p>		
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POST FOOTING WITH SLAB	DETAIL C	ALT. C	POST FOOTING WITHOUT SLAB
 <p>Galvanized metal post/beam connector or: _____</p> <p>Min. 6"</p> <p>Min. 12"</p> <p>Finish grade</p> <p>x footing</p> <p>Min. 12"</p>		 <p>Galvanized metal post/beam connector or: _____</p> <p>Min. 6"</p> <p>Min. 12"</p> <p>Finish grade</p> <p>x footing</p> <p>Min. 12"</p>	

**FIGURE 5**  
SAMPLE PATIO PLOT PLAN



**NOTE:**

PLOT PLAN SHALL COMPLY WITH ZONING. CONTACT PLANNING AND DEVELOPMENT FOR A LIST OF THEIR SETBACK REQUIREMENTS. (520) 866-6442

**IMPORTANT NOTES**

1. Beam table bases on maximum rafter span of 12 feet with 12" overhang.
2. All lumber to be Doug-Fir #2 or better.
3. Beams are to be joined together with 3 non-corrosive 16d nails or 3-3" deck screws every 16" on center or equal.
4. All splices in beam members must occur over support posts.
5. All wood parts must be at least 6" above finish grade or be constructed of pressure treated wood.
6. House structure which is cantilevered (i.e. fascia board) cannot be used for support of patio/carport roof/cover structure. ROOFS SHALL NOT BE ATTACHED TO MANUFACTURED HOMES, MUST BE SELF SUPPORTING.
7. For other options please call the building department.

**BEAM TABLE**

BEAM SIZE	MAXIMUM SPAN BETWEEN POSTS AND MIN. FOOTING SIZE	
(2) 2 x 6	7' (SPAN)	12" (FTG)
(2) 2 x 8	9' (SPAN)	14" (FTG)
(2) 2 x 10	11' (SPAN)	16" (FTG)
(2) 2 x 12	13' (SPAN)	18" (FTG)

**ROOF RAFTER TABLE**

(Based on a 20lb live load – 15lb dead load)

RAFTER SIZE	RAFTER SPACING	MAXIMUM SPAN
2 x 6	12" O.C.	13'-0"
	16" O.C.	12'-0"
	24" O.C.	10'-0"
2 x 8	12" O.C.	18'-0"
	16" O.C.	15'-6"
	24" O.C.	12'-6"
2 x 10	12" O.C.	22'-0"
	16" O.C.	19'-0"
	24" O.C.	15'-6"

# PINAL COUNTY BUILDING SAFETY SELF SUPPORTING PATIO

