



**City of Laguna Niguel
Building Division**

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TYPICAL PATIO COVERS

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PLEASE NOTE: This information Bulletin is made available to assist you in preparing for obtaining permits. These standards are currently being formulated by Building & Safety and are not yet final. Changes, including additions to this list, may be made at any time and without notice. For information on current permit standards, please call the City of Laguna Niguel at (949) 362-4360

I. DEFINITION

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

Patio covers must be open on one or more sides for a clear height of not less than 6'-8" from floor to soffit of supporting members. The open side(s) must not be covered with any permanent materials which obstruct the free passage of light and air except insect screening having mesh not finer than 16" X 16" or readily removable transparent flexible plastic screening of 20 mil maximum thickness.

If two sides are open, the open sides may be partially enclosed by solid walls, which do not exceed 30 inches in height above the floor, in addition to the screening (**see drawings in this Information Bulletin**). However, when required windows from adjoining rooms open into a patio cover, open area equivalent to the requirements of Appendix I Section I 103 of the California Building Code must apply.

Patio covers shall be attached, and permitted only as accessory to single-family dwellings or to individual dwelling units in multi-dwelling-unit buildings. Patio covers cannot be used as second story walking decks, carports, garages, habitable rooms or storage structures.

II. CONCRETE MIX

The concrete mix for footings must meet the strength of $F'c = 4500$ psi, type V minimum. W/C 0.45

III. LUMBER

Lumber shall be Douglas Fir Larch No. 2 or better; all lumber must be grade marked.

IV. POST ANCHORAGE AND BRACING

The details shown on this sheet have been approved by the City of Laguna Niguel Building & Safety. Posts must be anchored at the lower end by any of the methods noted. They must be braced to the upper end using any of the optional methods shown.

Decorative-type bracing may be substituted for the above if the same amount of structural bracing is realized. When the load on supporting post does not exceed 750 pounds per post, a minimum 3 1/2" thick concrete slab on grade may be substituted for the pad footings shown on the typical framing details. Post anchorage to slabs must be the same as to footings.

V. LEDGER TO HOUSE ATTACHMENT

When it is desired to connect and support one side of the structure by attaching it directly to the house, the rafter spans and main beam sizes will be as shown in the table. However, the main beam may be replaced on the side attached to the house with a ledger the same size as the rafters and fastened to the studs with 3/8" X 5" lag screws spaced at 16" on center. Attachment to existing house rafters is achieved with optional method shown (See *Detail B of Sheet 5*).

OWNER:

ADDRESS:

CITY:

STATE:

ZIP:

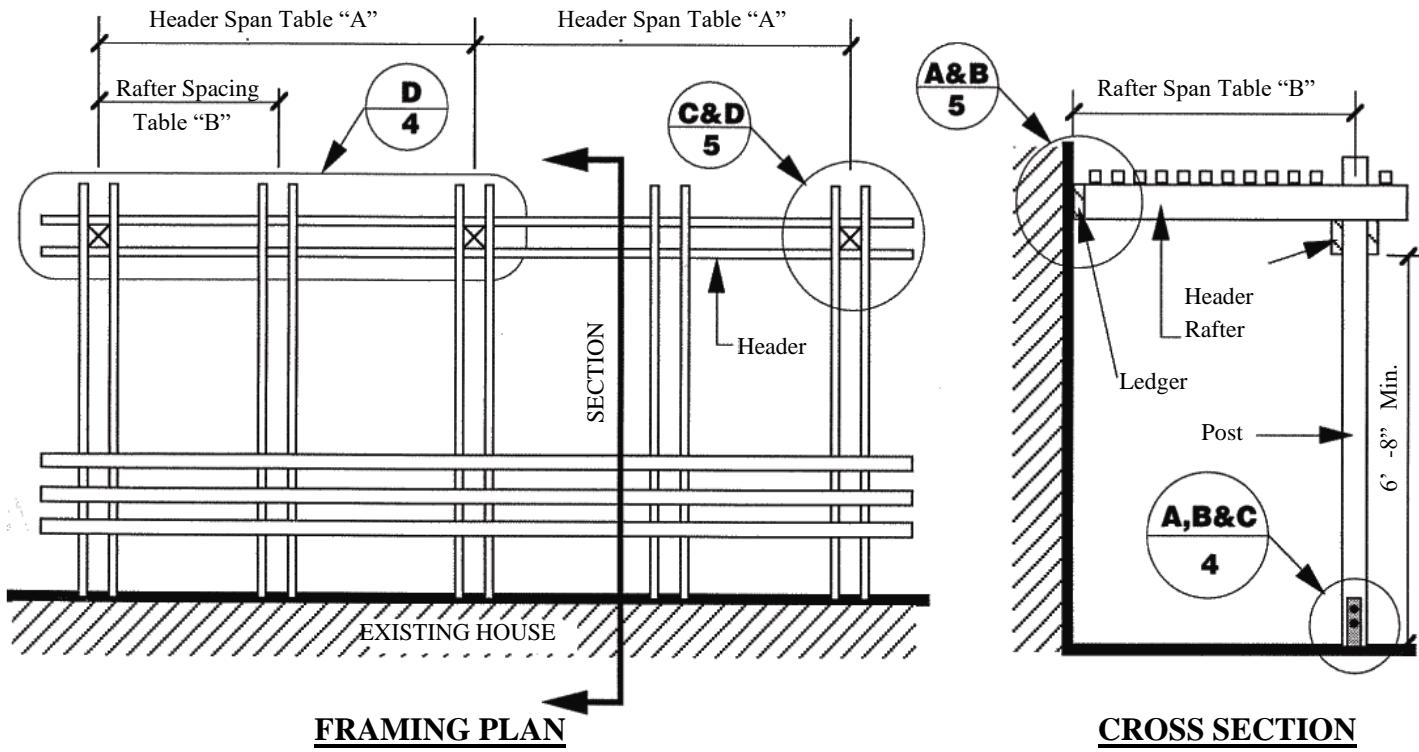
DIRECTIONS

1. Do not use pencil or red ink.
2. If framing is different from plan shown in this form, use an additional page to show the framing plan.
3. Submit the following:
 - a. Three copies of site plan. (Standard forms are available)
 - b. Three copies of this form. Complete both sides.
 - c. A Building Permit application form.
 - d. H.O.A Approval

GUIDELINES FOR PATIO CONSTRUCTION

(Choose one that best fits your condition)

1 Zero lot line
 1 Condominium
 1 Town house
 1 Single Family



PATIO COVER REQUIREMENTS

1. HEADER: Header shall be _____ Single Header [] Double Header []
2. JOISTS: Joists shall be _____ at on ____ center Single Joist [] Double Joist []
3. ROOF SHEATHING: Sheathing shall be _____ Self - spaced
4. LEDGER: Ledger shall be a _____ mounted on existing wall with 3/8" X 5" lag bolts at 16' on center (See Detail A of Sheet 5)
5. FASCIA: Existing fascias, if used as a ledger, must be attached to the existing rafters with metal framing anchors on each side of each rafter. (See B of sheet 5)

TABLE: A		MINIMUM HEADER SIZES	
HEADER	ROOF TYPE / MAXIMUM SPAN		
SIZE	LT. WGHT	SIZE	LT. WGHT
4X4	6'-4"	(2)2X4	5'-11"
4X6	10'-0"	(2)2X6	9'-4"
4X8	13'-3"	(2)2X8	12'-4"
4X10	16'-11"	(2)2X10	15'-8"
4X12	20'-6"	(2)2X12	19'-1"
6X6	11'-5"	(2)3X6	12'-8"
6X8	15'-7"	(2)3X8	15'-11"
6X10	19'-9"	(2)3X10	22'-3"

NOTES:

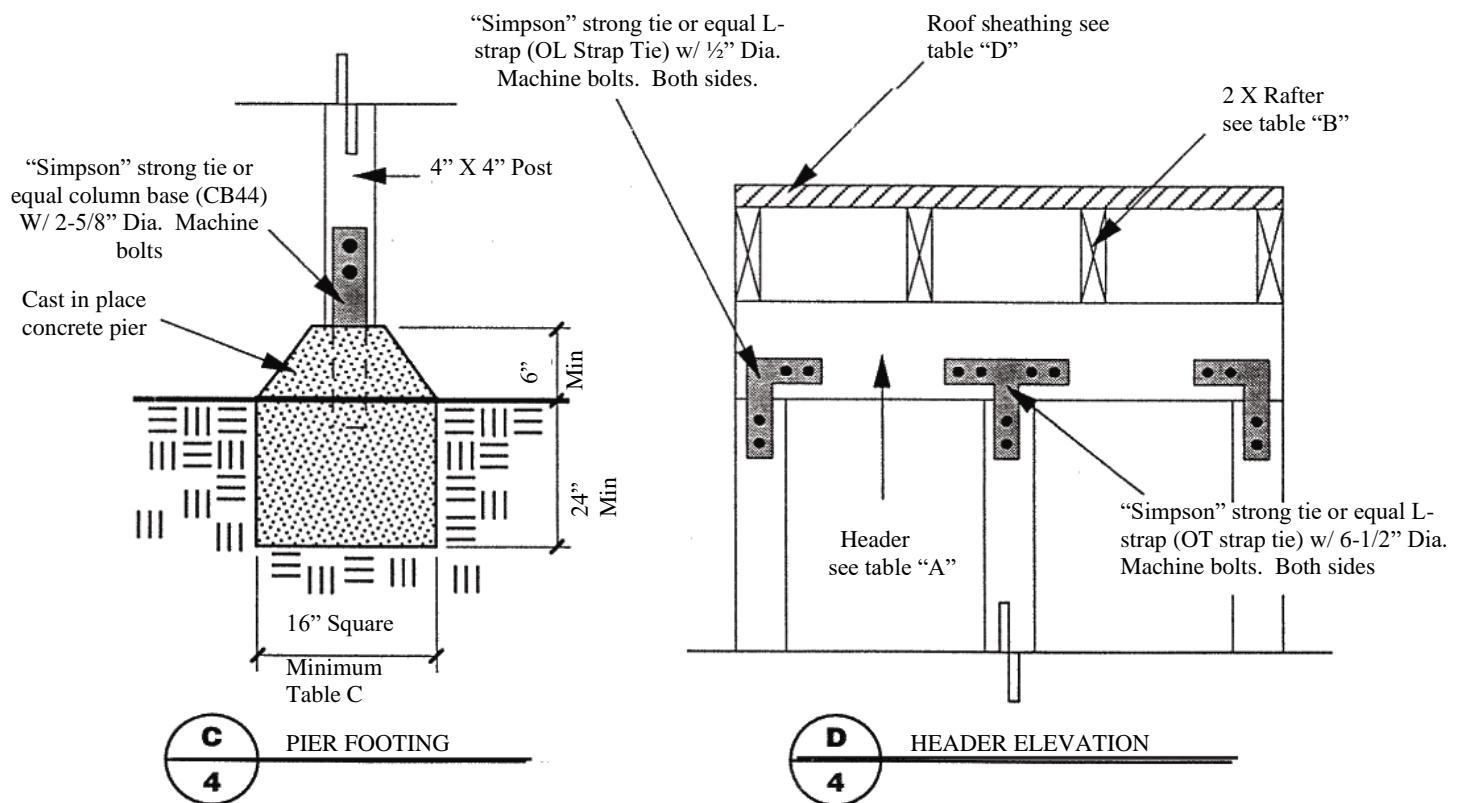
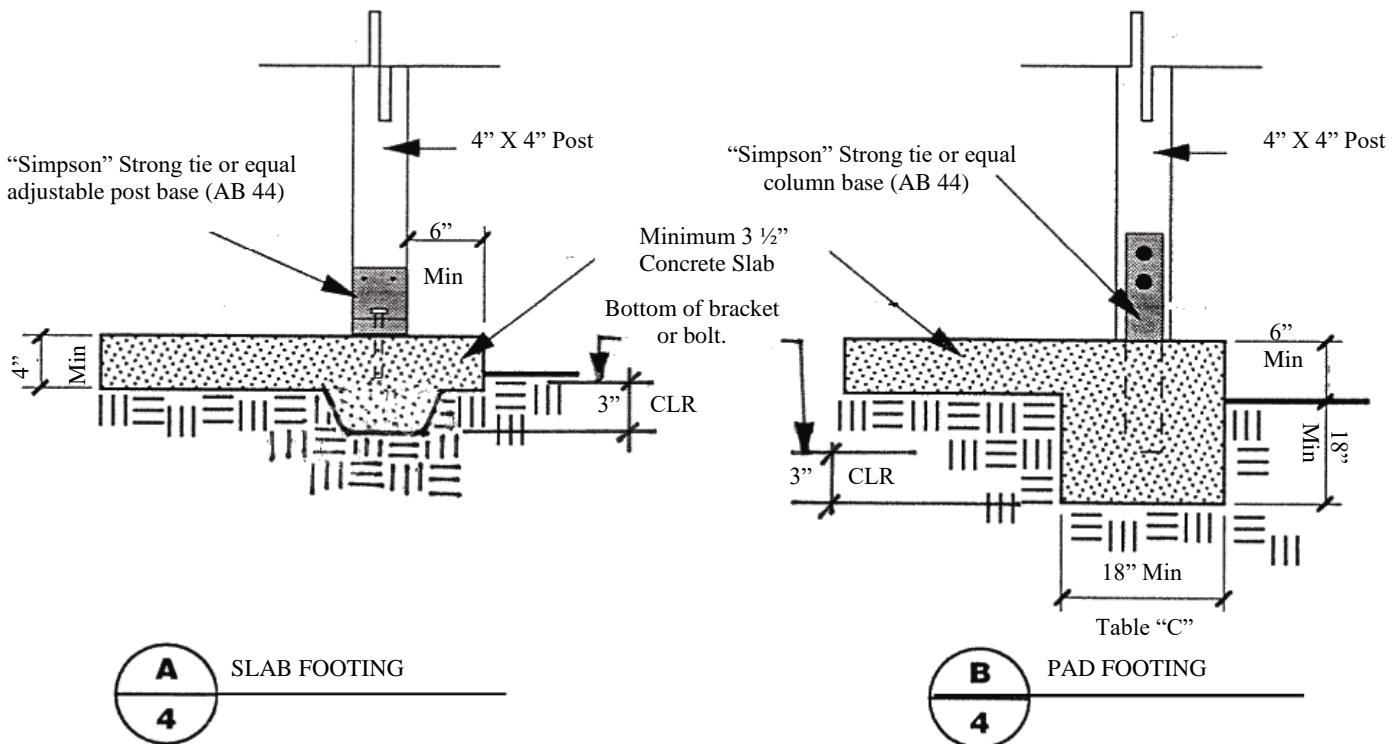
* See paragraph on post anchorage

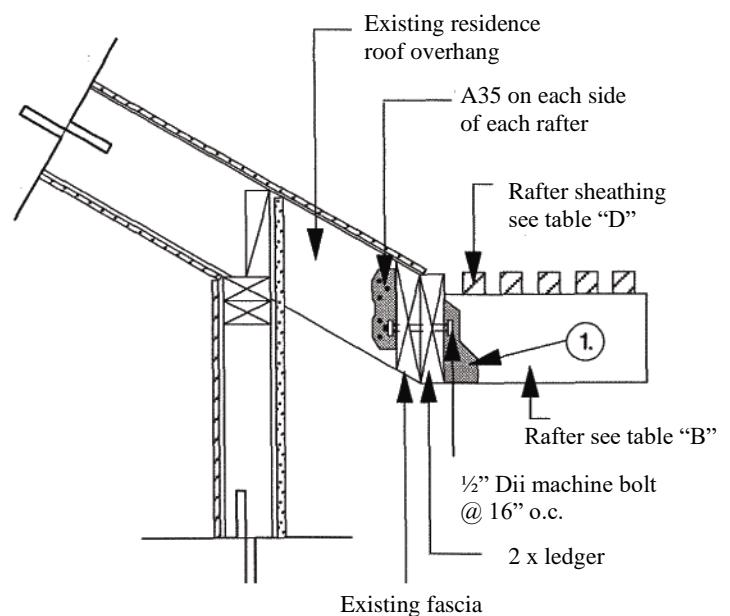
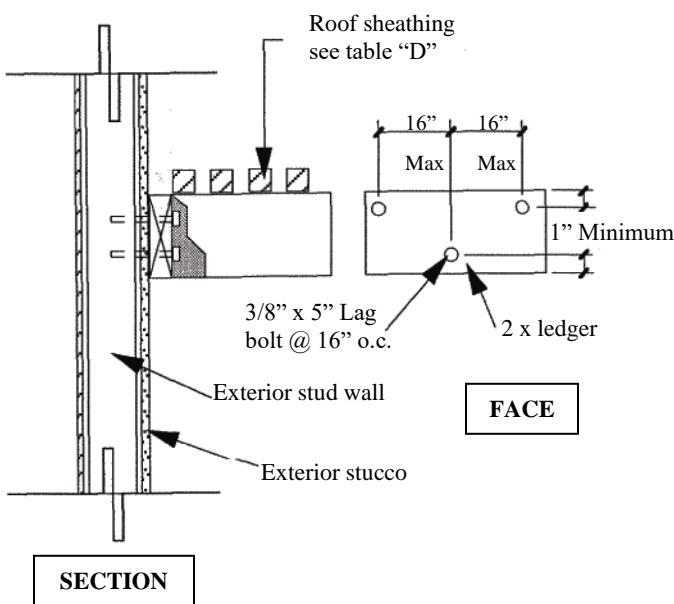
** After prolonged periods of time 2' x 4" rafters spanning more than 8 feet may deflect permanently and give an objectionable appearance. It is therefore recommended that for rafter spans exceeding 8 feet a minimum rafter size of 2' x 6" be used

TABLE: D		ROOF SHEATHING
2" X 2"	Self Space Spans	6'-0"
2" x 4"	Self Spaced Spans on edge**	11'-0"

TABLE: B		MAXIMUM RAFTER SPAN TABLE						
RAFTER SIZE	LIGHTWEIGHT ROOF (SPACING CENTER-TO-CENTER)							
	16"	24"	32"	36"	48"	60"	72"	
2X4**	11'-6"	10'-0"	7'-11"	7'-7"	6'-11"	6'-5"	6'-1"	
2X6	18'-1"	15'-5"	12'-6"	12'-1"	10'-11"	10'-1"	9'-6"	
2X8	23'-10"	20'-10"	16'-6"	15'-10"	14'-5"	13'-4"	12'-7"	
2X10			20'-11"	20'-2"	18'-4"	17'-0"	16'-0"	
4X4		11'-7"	10'-6"	10'-1"	9'-2"	8'-6"	8'-0"	
4X6		18'-2"	16'-6"	15'-10"	14'-5"	13'-4"	12'-7"	
4X8		24'-1"	21'-10"	21'-0"	19'-1"	17'-3"	16'-8"	
4X10					24'-4"	22'-7"	21'-3"	

TABLE: C		MINIMUM SQUARE FOOTING SIZES						
POST SPACING	RAFTER SPAN (SEE CROSS SECTION)							
	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
4'-0"	12" sq.	12" sq.	12" sq.	12" sq.	12" sq.	12" sq.	14" sq.	14" sq.
6'-0"	12" sq.	12" sq.	14" sq.	14" sq.	14" sq.	16" sq.	16" sq.	16" sq.
8'-0"	14" sq.	14" sq.	14" sq.	16" sq.	16" sq.	18" sq.	18" sq.	20" sq.
10'-0"	14" sq.	16" sq.	16" sq.	18" sq.	18" sq.	20" sq.	20" sq.	22" sq.
12'-0"	16" sq.	16" sq.	18" sq.	20" sq.	20" sq.	22" sq.	22" sq.	24" sq.
14'-0"	16" sq.	18" sq.	20" sq.	20" sq.	22" sq.	22" sq.	24" sq.	24" sq.
16'-0"	18" sq.	20" sq.	20" sq.	22" sq.	24" sq.	24" sq.	27" sq.	27" sq.
18'-0"	20" sq.	20" sq.	22" sq.	24" sq.	24" sq.	27" sq.	27" sq.	30" sq.
20'-0"	20" sq.	22" sq.	24" sq.	24" sq.	27" sq.	27" sq.	30" sq.	30" sq.

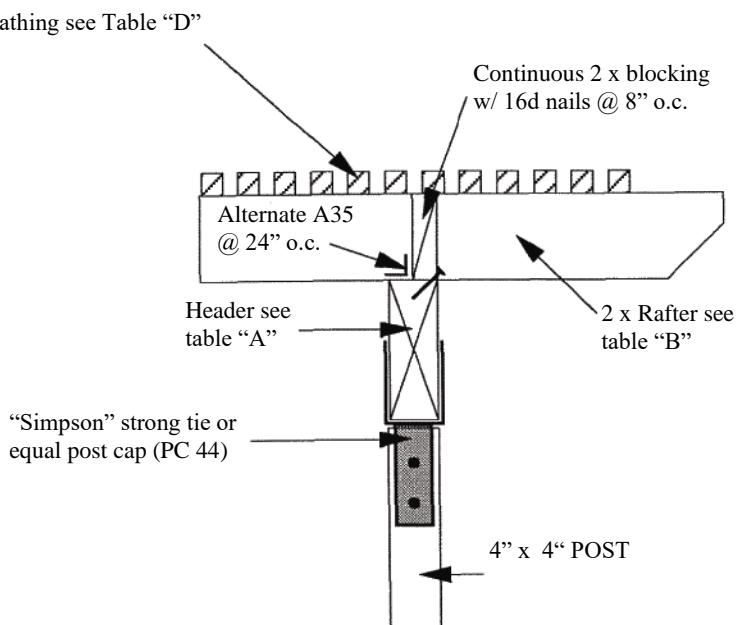
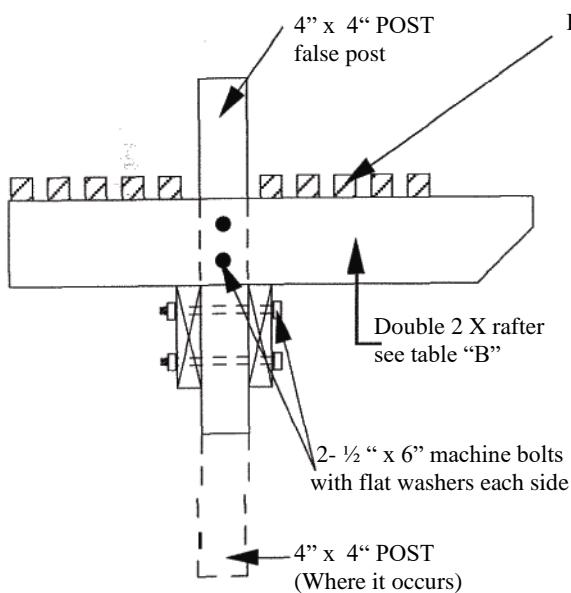




NOTE: 1. "Simpson" strong tie or equal standard joist hanger (U26)

A LEDGER DETAIL

B EAVE CONNECTION



C HEADER DETAIL

D HEADER DETAIL