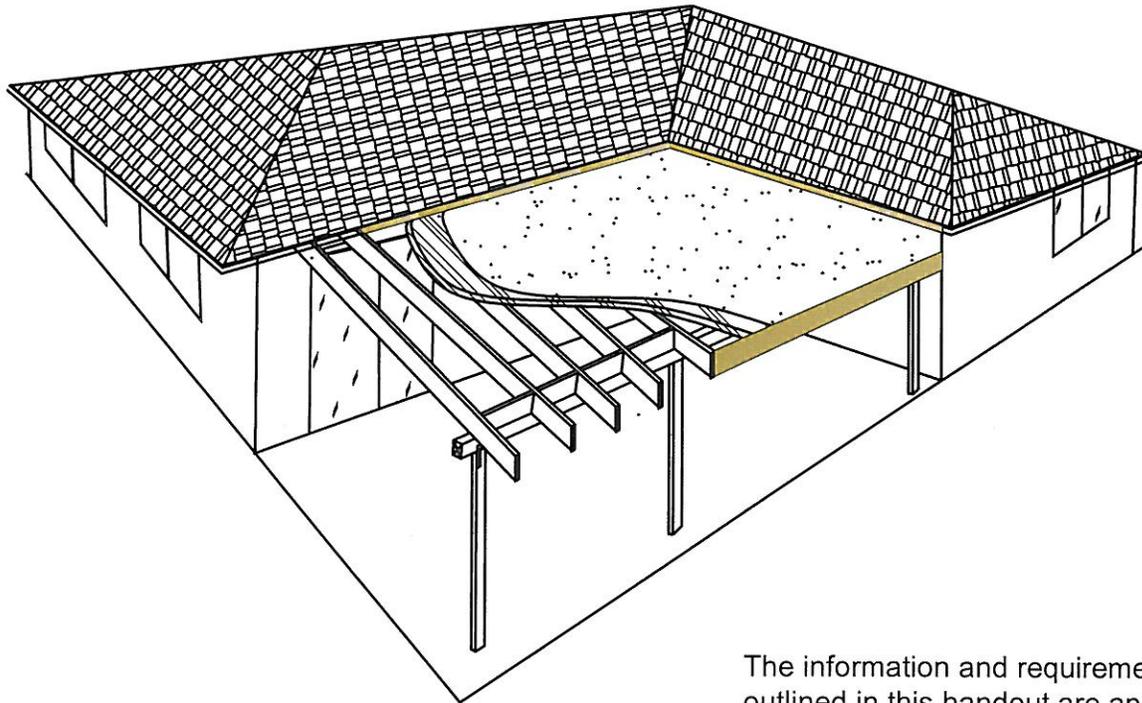




**DEPARTMENT OF  
BUILDING & SAFETY**  
8353 SIERRA AVE, FONTANA, CA 92335  
(909) 350-7640

INFORMATION AND SUBMITTAL  
REQUIREMENTS FOR:

# RESIDENTIAL PATIO COVERS



The information and requirements outlined in this handout are applicable to Residential Patio Covers ONLY!

Patio covers are defined as one-story structures, not exceeding 12 feet in height, that are used only for recreational, outdoor living purposes and not as carports, garages, storage rooms, habitable rooms, or 2nd. floor sun decks or balconies.

Patio slabs WITHOUT an overhead structure do NOT require building permits. However, if footings are to be poured with the slab to accommodate a future patio cover, a "foundation for future Patio Cover" permit is required.

## DRAWINGS REQUIRED:

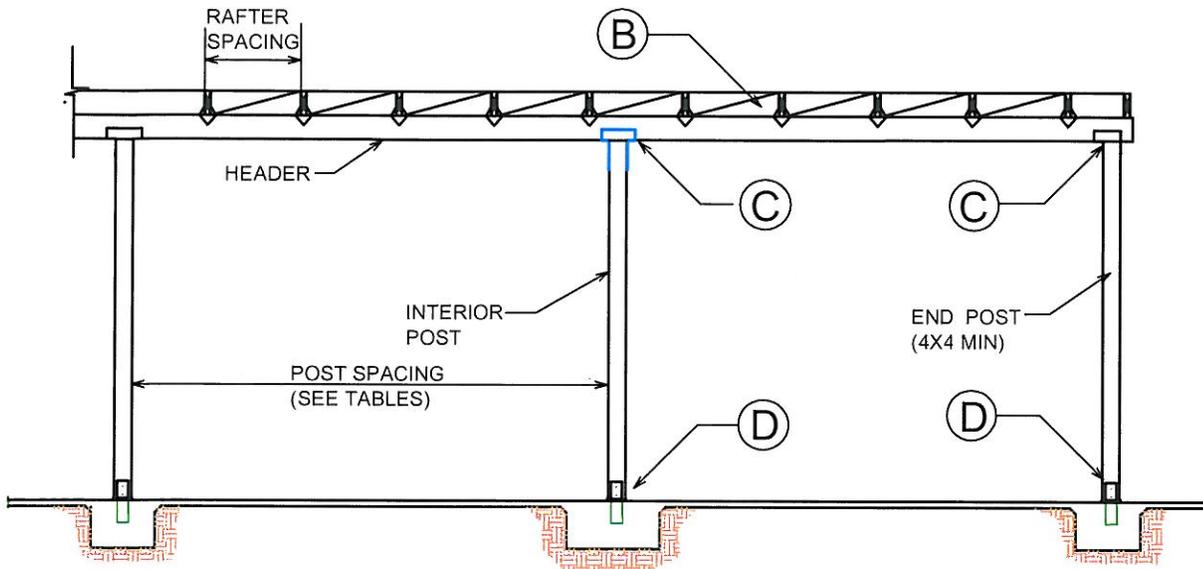
No specific drawings are required, other than a site plan, when constructing a residential patio cover in accordance with the standards shown in this handout. Simply fill out the permit application form completely, using the tables within this handout, and return it to the Building and Safety permit counter.

NOTE: Commercial shade structures, residential patio covers not built according to the standards in this handout, and all decks require complete construction drawings.

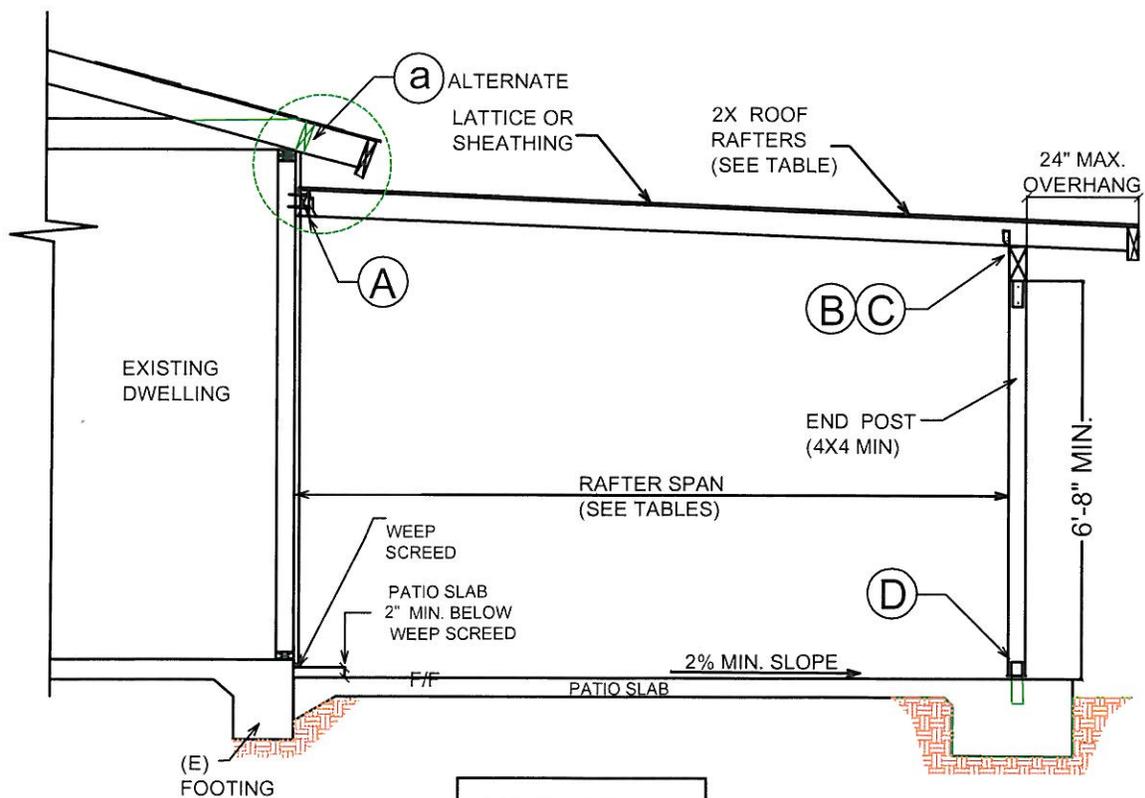
-GENERAL PATIO COVER NOTES-

- A. This handout applies only to flat roof systems less than 2 vertical units in 12 horizontal units. This handout does not apply to snow load; to the use of any tile roof; to the use of a deck above the patio; to a truss roof system, or to a gable roof conventional construction.
- B. All construction , material and workmanship shall conform to the latest adopted edition of the California Building Code.
- C. All parts of the structure shall be interconnected in such manner as to create a stable structure capable of resisting uplift and lateral displacement and to transmit all forces, both vertical and horizontal , from the uppermost portion of the structure to the foundation.
- D. The overall lateral stability of the structure is subject to the Building Inspectors' approval, and additional bracing may be required. ( from what is shown on the handout).
- E. All footing Excavation , forms, reinforcement, and column bases shall be inspected and approved by the City of Fontana Building Inspector prior to the placement of any concrete. All excavations shall be level, clean, and contain no loose earth or other foreign material.
- F. All concrete shall be : 1 part cement to 2 parts sand to 3 parts gravel, and shall obtain a minimum ultimate compressive strength of 2,500 PSI at 28 days.
- G. All lumber, plywood, particle board, etc., shall conform to the applicable standards under which it was graded and shall be so identified by a grade mark (stamp).
- H. All lumber shall be Douglas Fir (North) and shall be of the following minimum grades, unless otherwise noted: Rafters (2x, 3x) #2) Beams (4x)..#2; Beams (6x and larger).. #1; Posts.. #1.
- I. Plywood shall be Structural II or C-D grade minimum, with exterior grade glue, unless otherwise noted. Each sheet shall be stamped with a registered grade stamp "DFPA" or "PA" and shall conform to PS-1-07
- J. Structural members shall no be cut, notched, or bore in any manner. [except as specified in the California Building Code and approved by the Building Inspector.]
- K. All beams, headers, rafters, joists, etc... shall be set with the crown side up.
- L. Posts shall be supported by concrete piers or metal pedestals that project at least 8 inches above exposed ground and at least 1 inch above a concrete slab that entirely surrounds and adjoins the post a minimum of 12 inches in width.
- M. All bolts shall be a minimum nominal diameter of  $\frac{1}{2}$ " , unless otherwise noted. Each bolt shall have a nut and a standard cut washer under both the head and nut. Holes shall be bored  $\frac{1}{32}$ " to  $\frac{1}{16}$ " larger than the nominal bolt diameter. Lag screws shall have a standard cut washer under the head and shall be installed in pre (lead) holes of approximately 75 % of the shank diameter. All bolts and lag screws shall be install and shall be re-tightened prior to the final inspection by the Building Inspector.
- N. All framing hardware an connectors (straps, joists hangers, post caps, column bases, etc..), shall be "Simpson Strong Tie" or equal.
- O. All bolts, screws, hardware, etc.. shall be of an approved corrosion-resistant type.
- P. If a patio cover is to be attached to the existing fascia and rafter tails, the new patio cover rafters shall be the same spacing and size- or smaller- as the existing rafter tails. If the existing roof framing is a "truss Roof System" , complete structural calculations by a licensed Engineer/ Architect will be required.

# PATIO COVER SECTION VIEWS



FRONT VIEW



SIDE VIEW

## - SOLID PATIO COVER -

FOOTINGS						
RAFTER SPAN	POST LOCATION	POST SPACING				
		8 FT.	10 FT.	12 FT.	14 FT.	
UP TO 12FT.	INTERNAL	26 X 26	29 X 29	32 X 32	35 X 35	
	END	20 X 20	22 X 22	24 X 24	27 X 27	
UP TO 16FT.	INTERNAL	30 X 30	33 X 33	36 X 36	39 X 39	
	END	22 X 22	24 X 24	27 X 27	30 X 30	
UP TO 20FT.	INTERNAL	34 X 34	37 X 37	40 X 40	44 X 44	
	END	25 X 25	28 X 28	32 X 32	34 X 34	

(NOTE: The footing sizes are in inches.)

RAFTERS		
SIZE	SPACING	MAX SPAN
2 X 6	12" O.C.	15'-6"
	16" O.C.	13'-6"
	24' O.C.	11'-0"
2 X 8	12" O.C.	20'-6"
	16" O.C.	17'-6"
	24' O.C.	14'-0"
2 X 10	12" O.C.	26'-0"
	16" O.C.	22'-6"
	24' O.C.	18'-6"
2 X 12	12" O.C.	30'-0"
	16" O.C.	26'-6"
	24' O.C.	23'-0"

HEADERS	
SIZE	MAXIMUM POST/COL. SPACING
4 X 8	8 FT.
4 X 10	10 FT.
4 X 12	12 FT.
4 X 14	14 FT.

**DOUBLE 2X** HEADERS	
SIZE	MAXIMUM POST/COL. SPACING
2- 2 X 10	8 FT.
2- 2 X 12	10 FT.
2- 2 X 14	12 FT.

### SPECIFIC NOTES:

1. Plywood sheathing: shall be a minimum of  $\frac{15}{32}$  inch thick with a panel span rating of  $\frac{32}{16}$  ; shall be installed with the face grain (long dimension ) perpendicular to the rafters; shall be continuous over two or more rafters with joints staggered; and shall be fastened to the rafters with 8d nailed spaced at 6 inches on center at edges and 12 inches on center at intermediate supports. plywood joints shall occur over a rafter.
2. Slope: the roof system shall be sloped a minimum of  $\frac{1}{4}$  inch in 12 inches for drainage.
3. Roofing material: all roofing material shall be installed per the manufacturer's specifications for roof slope and for high wind area.
4. Inspections Required: footing, roof sheathing, and final.
5. Additional Information: please see the general notes, and the enclosed framing plans and details, for additional information.

# LATTICE PATIO COVER

<b>FOOTINGS</b>						
RAFTER SPAN	POST LOCATION	POST SPACING				
		8 FT.	10 FT.	12 FT.	14 FT.	
UP TO 12FT.	INTERNAL	12 X 12	14 X 14	16 X 16	18 X 18	
	END	12 X 12	12 X 12	13 X 13	14 X 14	
UP TO 16FT.	INTERNAL	14 X 14	16 X 16	18 X 18	20 X 20	
	END	13 X 13	13 X 13	14 X 14	16 X 16	
UP TO 20FT.	INTERNAL	16 X 16	18 X 18	20 X 20	22 X 22	
	END	13 X 13	14 X 14	16 X 16	17 X 17	

(NOTE: The footing sizes are in inches.)

<b>RAFTERS</b>		
SIZE	SPACING	MAX SPAN
2 X 6	12" O.C.	15'-6"
	16" O.C.	13'-6"
	24' O.C.	11'-0"
2 X 8	12" O.C.	20'-6"
	16" O.C.	17'-6"
	24' O.C.	14'-0"
2 X 10	12" O.C.	26'-0"
	16" O.C.	22'-6"
	24' O.C.	18'-6"
2 X 12	12" O.C.	30'-0"
	16" O.C.	26'-6"
	24' O.C.	23'-0"

<b>HEADERS</b>	
SIZE	MAXIMUM POST/COL. SPACING
4 X 6	8 FT.
4 X 8	10 FT.
4 X 10	12 FT.
4 X 12	14 FT.

<b>**DOUBLE 2X** HEADERS</b>	
SIZE	MAXIMUM POST SPACING
4 X 8	8 FT.
4 X 10	10 FT.
4 X 12	12 FT.
4 X 14	14 FT.

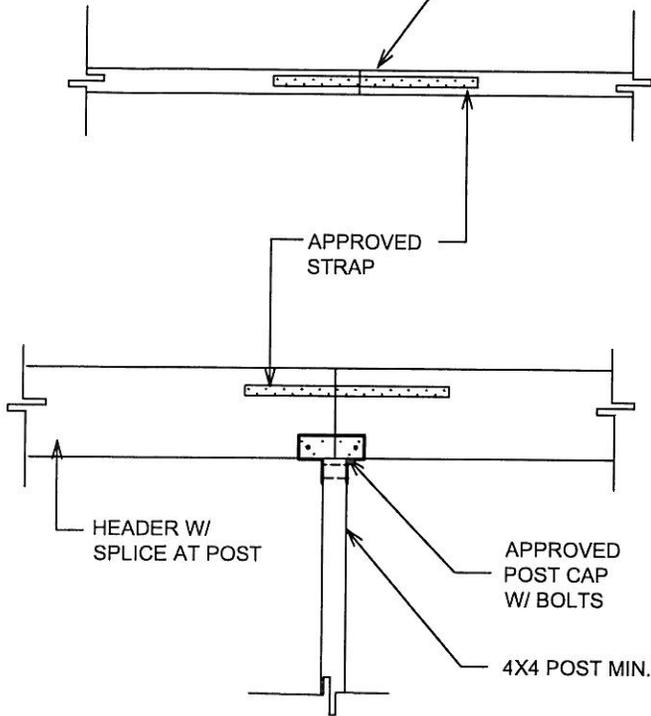
SPECIFIC NOTES:

1. LATTICE: Spaced Lattice shall be 2x2 minimum. Diamond lattice shall be Architectural grade and is subject to the approval of the Building Official. Wherever type of lattice is to be used, it shall be installed on top of the roof rafters.
2. INSPECTIONS REQUIRED: Footing and Framing.
3. ADDITIONAL INFORMATION: Please see the General Notes, and the enclosed framing plans and details, for additional information.

# PATIO COVER DETAILS

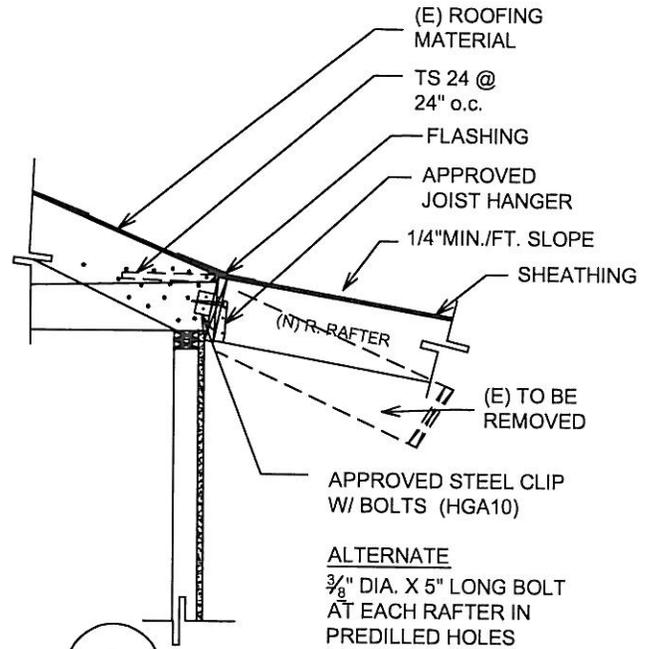
NOTE: HEADER SHALL BE CONTINUOUS OVER AT LEAST 2 POSTS

ALTERNATE STRAP LOCATION ON TOP OF HEADER



C

TYPICAL INTERNAL POST TO HEADER/BEAM- SPLICED HEADER

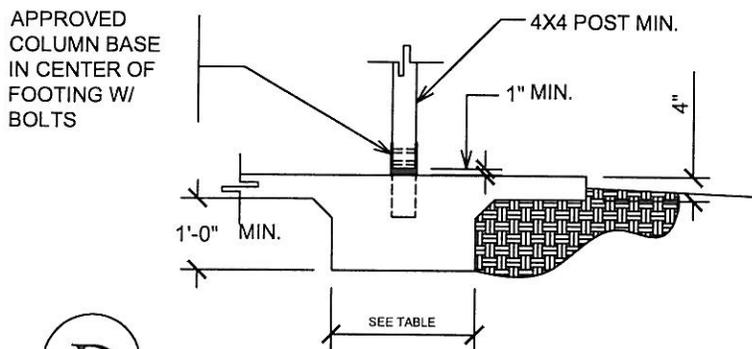


a

ALTERNATE TO STANDARD LEDGER CONNECTION

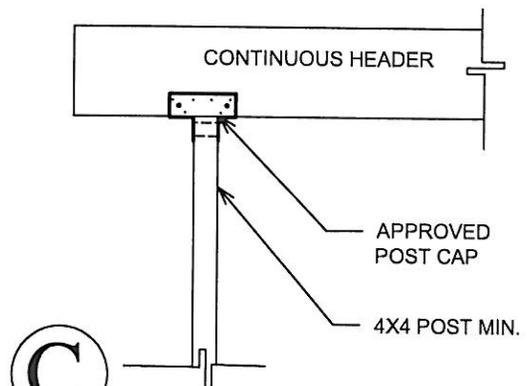
ALTERNATE  
3/8" DIA. X 5" LONG BOLT AT EACH RAFTER IN PREDILLED HOLES

\*  
NOTE:  
SEE GENERAL NOTES, ITEM "L"



D

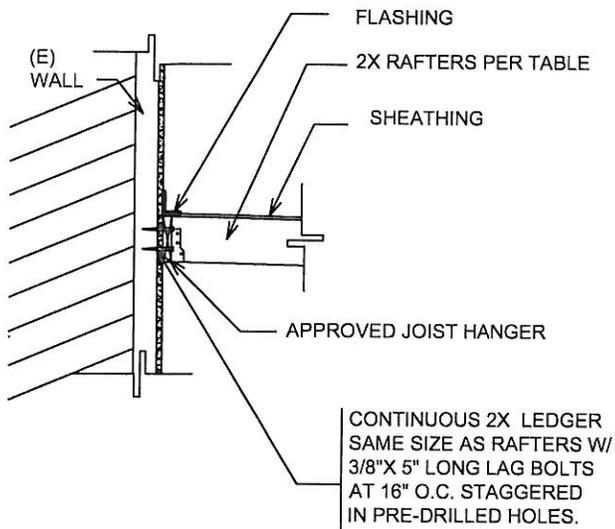
TYPICAL FOOTING



C

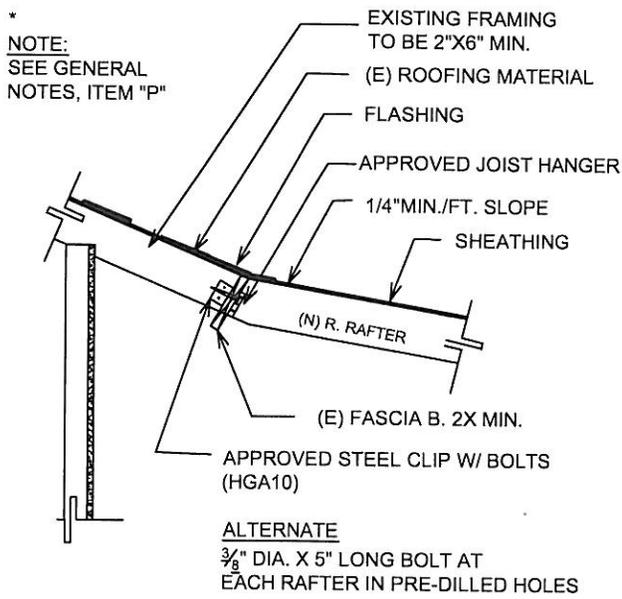
TYPICAL END POST TO HEADER/BEAM- CONTINUOUS HEADER

# PATIO COVER DETAILS



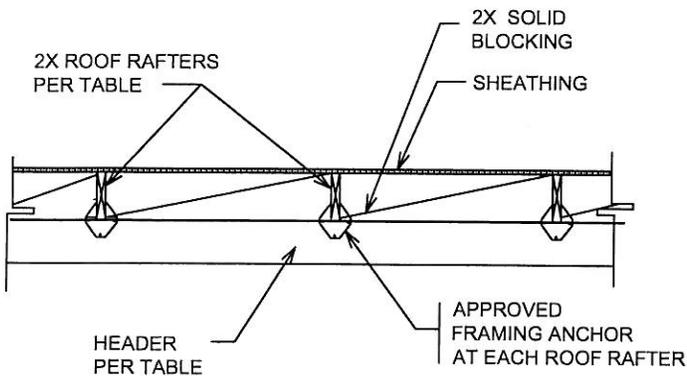
A

ATTACHED PATIO COVER TO EXISTING STRUCTURE



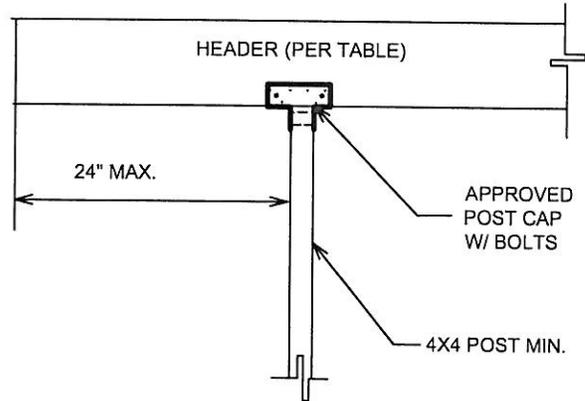
a

PATIO COVER ATTACHMENT TO EXISTING FASCIA BOARD



B

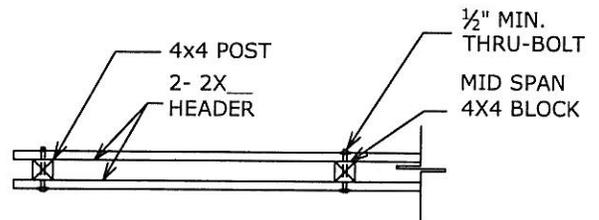
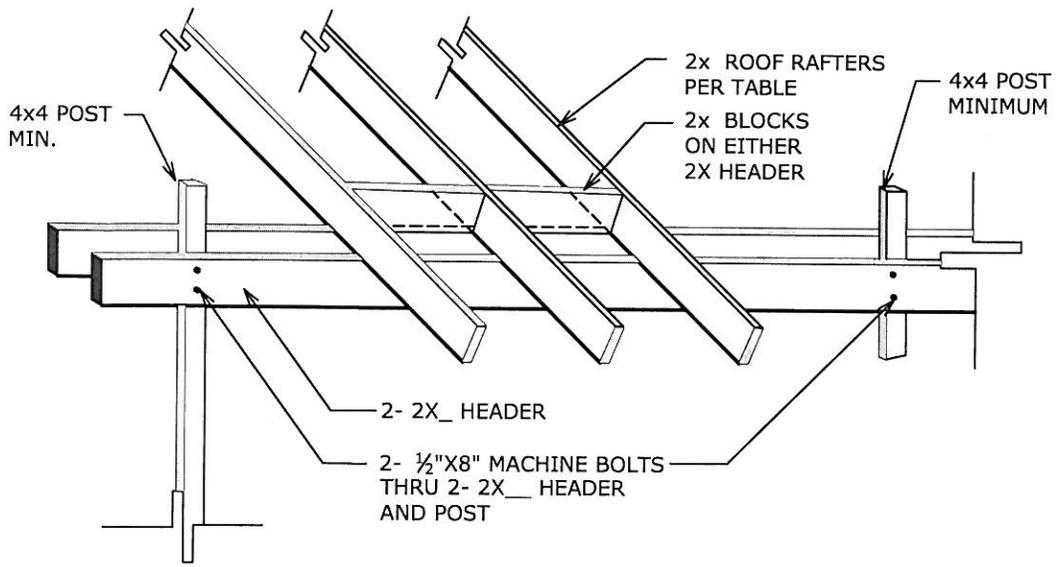
TYPICAL RAFTER TO HEADER



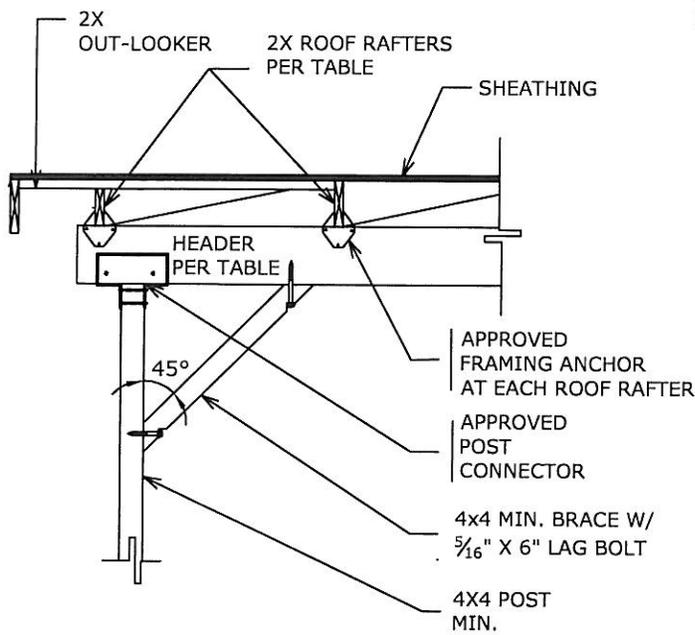
C

TYPICAL POST TO HEADER

# PATIO COVER DETAILS FOR DOUBLE 2X HEADER



TYPICAL END POST AND MID 4X4 BLOCK TO DOUBLE 2X\_\_ HEADER PER TABLE



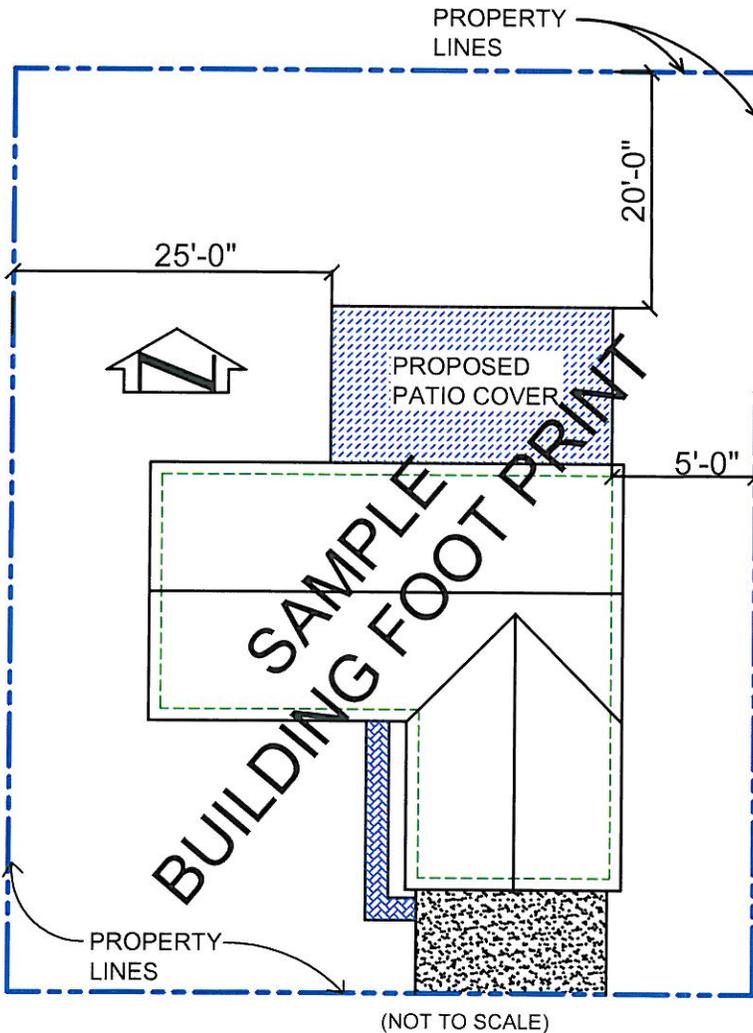
**B**  
TYPICAL RAFTER TO HEADER

# DEPARTMENT OF BUILDING & SAFETY

## RESIDENTIAL PATIO COVER

NOTE: This form is to be used only when the patio cover is being built in accordance with the CITY STANDARD specifications shown in this handout. (\* Detached patios must include lateral bracing.) All non-standard patio covers and all decks require formal plans submitted for plan check.

Specify the following information on the attached blank site plan:



1. Existing Building Footprint
2. All setbacks to property Line/s
3. PATIO SIZE:  
 \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_ sq. ft.
4. TYPE OF COVER:  
 Lattice     Attached  
 Solid       \*Detached
5. FOOTING SIZES:  
 End: \_\_\_\_\_ x \_\_\_\_\_  
 Internal: \_\_\_\_\_ x \_\_\_\_\_
6. POSTS:  
 Size: \_\_\_\_\_ x \_\_\_\_\_  
 spacing: \_\_\_\_\_ o.c.
7. HEADER/BEAM SIZE:  
 \_\_\_\_\_ x \_\_\_\_\_
8. RAFTERS:  
 Size: \_\_\_\_\_ x \_\_\_\_\_  
 Spacing: \_\_\_\_\_ o.c.
9. LEDGER SIZE:  
 \_\_\_\_\_ x \_\_\_\_\_

PROPERTY ADDRESS: \_\_\_\_\_  
 PROPERTY OWNER: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 APN or Tract & Lot #: \_\_\_\_\_

DEPARTMENT OF BUILDING & SAFETY  
RESIDENTIAL PATIO COVER

SITE PLAN