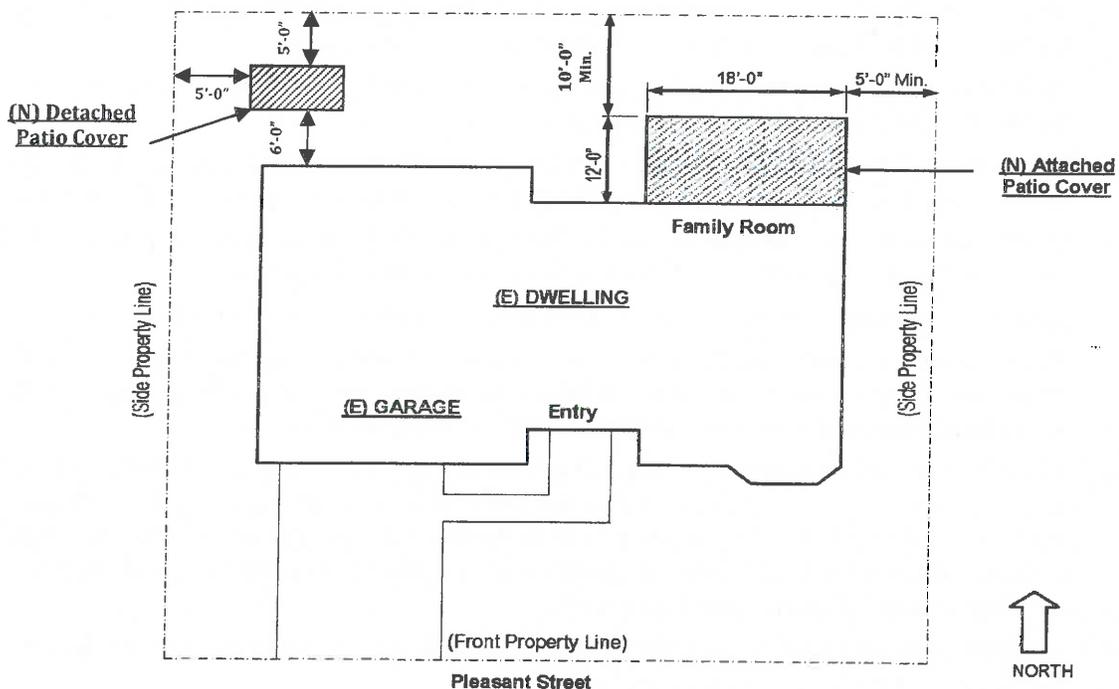




# Residential Freestanding Lattice Patio Cover

**Attached** unenclosed patio structure with open lattice roofs may be built using conventional light wood-frame construction guidelines. Patios covers, sunshades, and similar structures closer than six feet (6') to the main building, which are not enclosed on the sides except for required roof supports, may utilize up to twenty (20%) of the required rear yard\* area, but may be no closer than ten feet (10') to the rear property line. (Zoning Ord. Section 25-25-30(C)).

**Detached** patio covers more than six feet (6') from the main house are considered accessory structures in determining setbacks. Setbacks for a detached patio cover is 5 feet (5') from sides and rear property lines. If less than 5 feet to a property line restrictions apply; (see Accessory Building Handout for details). Accessory structures cannot exceed 30% of the required rear yard\* or 1000 square feet of area. Projections cannot project closer than 1/3 the required setback.



**SITE PLAN**  
SCALE: 1" = 20'-0"

### General Guidelines

Please note on your plot plan all setbacks from the patio cover to the side and rear property lines. Show distance to main structure. Show other distance from any other structures in the rear yard.

Note: Detached patio covers less than 120 square feet in area do not require a building permit, but still must comply with setback requirements.

**\*Required rear yard** is measured 20 feet from the rear property line times width the of the yard. For detached patio covers only 30% of the required rear yard may be covered by all structures. A standard 50' wide lot allows up to 333 sq. ft. of accessory buildings. Structures located outside the required yard may cover up to 1000 sq. ft. in area.

### Patio Cover Limitations

The following patio cover illustrations are only applicable in residential dwellings classified as R-3 occupancies. Patio covers are **not** designed or intended to be used as room additions which require compliance with code provisions such as heating, waterproofing, and structural engineered systems. Furthermore, patio covers cannot be converted to complying room additions.

### Disclaimer

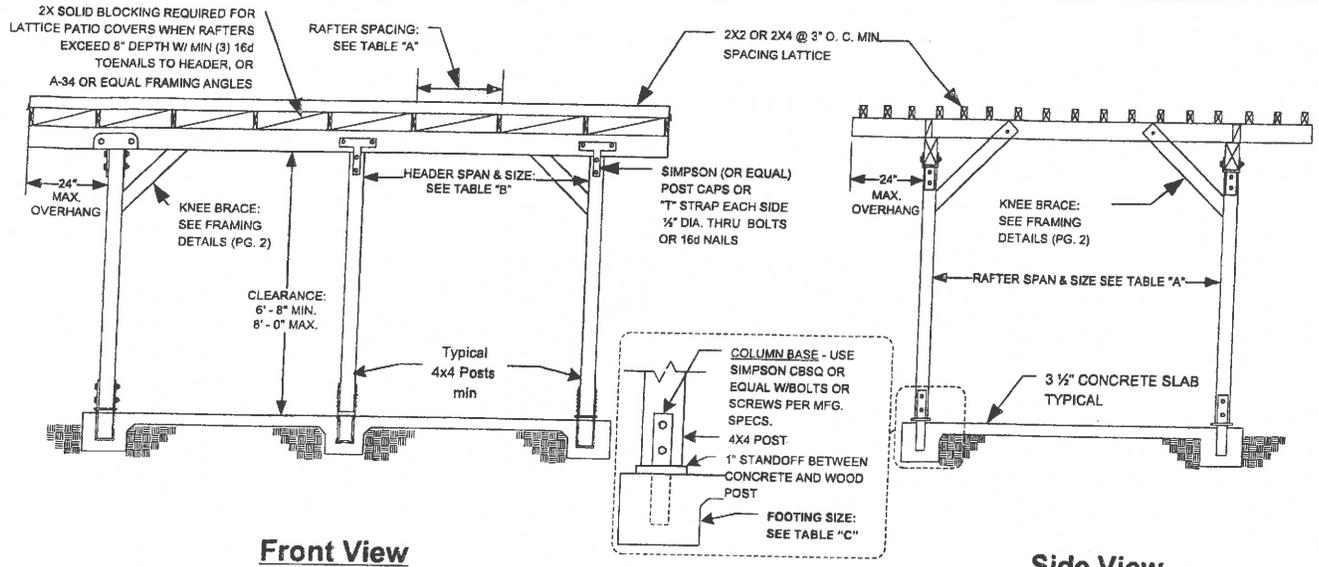
Use of this conventional standard design is at the user's risk and carries no implied or inferred guarantee against failure of defects.

## GENERAL NOTES

1. This handout applies only to lattice patio covers. This handout does not apply to solid roof systems such as tile roofs, decks above patio, truss roof system, or attachment to metal frame homes. All sloped roof patio covers require engineering.
2. All construction material and workmanship must conform to the latest adopted edition of the California Building Code
3. The overall lateral stability of the structure is subject to the Building Inspector's approval at time of inspection and additional bracing may be required.
4. All footing excavations, forms, reinforcement, and column bases must be inspected and approved by the Building Inspector prior to placement of any concrete. All excavations must be level, clean, dry and contain no loose earth or other foreign material.
5. All concrete shall be: 1 part cement to 2 parts sand to 3 parts gravel, and shall obtain a minimum ultimate compressive strength of 2,000 PSI at 28 days.
6. All lumber must be of the following grades: Rafters/Joists (2x, 3x) #2; Beams (4x) #2; Beams (6x and larger) #1; Posts/Columns #1
7. Plywood or OSB must be structural 11 or C-D grade minimum, with exterior grade glue, unless otherwise noted. Each sheet must be stamped with a registered grade stamp "DFPA" or "APA".
8. Structural members must **not** be cut, notched or bored in any manner (except as specified in the California Building Code and approved by the Building Inspector).
9. All beams, headers, rafters, joists, etc. must be set with the crown side up.
10. Post/columns must be supported by concrete piers or metal pedestals that project a least 6 inches above exposed ground and at least 1 inch above a concrete slab that entirely surrounds and adjoins the post/column a minimum of 18 inches in width.
11. All bolts must be a minimum nominal diameter of 1/2 inch, unless otherwise noted. Each bolt must have a nut and a standard cut washer under both the head and nut. Holes for bolts must be bored 1/32 inch to 1/16 inch larger than the nominal bolt diameter. Lag screws must have a standard cut washer under the head and must be installed pre-bored (lead) holes of approximately 75% of the shank diameter.
12. All framing hardware and connectors (straps, joist hangers, post caps, column bases, etc.) must be "Simpson Strong-Tie or approved equal.
13. All bolts, screws, hardware, etc. must be an approved corrosion-resistant type.
14. All lumber exposed to the exterior shall be weather protected with an approved exterior paint or equivalent sealant.



# Residential Freestanding Lattice Patio Cover



Front View

Side View

TABLE "A" RAFTER SPANS (DOUGLAS FIR #2 OR BETTER)			TABLE "B" HEADER SIZE & SPANS (DOUGLAS FIR #2 OR BETTER)			TABLE "C" FOOTING SIZE
SIZE	SPACING	SPAN	RAFTER SPAN	HEADER		BASED ON 1000 P.S.F. SOIL BEARING PRESSURE.
				SPAN	SIZE	
2 x 4	12" O.C.	9' - 10"	UP TO 12'-0"	8'-0" MAX	4 x 6	18" SQ. X 20" DEEP
	16" O.C.	8' - 11"		10'-0" MAX	4 x 8	18" SQ. X 20" DEEP
	24" O.C.	7' - 8"		12'-0" MAX	4 x 10	18" SQ. X 20" DEEP
	32" O.C.	6' - 3"		14'-0" MAX	4 x 12	18" SQ. X 20" DEEP
2 x 6	12" O.C.	15' - 4"	12'-1" TO 20'-0"	8'-0" MAX	4 x 8	24" SQ. X 20" DEEP
	16" O.C.	13' - 9"		10'-0" MAX	4 x 10	24" SQ. X 20" DEEP
	24" O.C.	11' - 3"		12'-0" MAX	4 x 12	24" SQ. X 20" DEEP
	32" O.C.	9' - 7"		14'-0" MAX	4 x 14	24" SQ. X 20" DEEP
2 x 8	12" O.C.	20' - 0"				
	16" O.C.	18' - 2"				
	24" O.C.	14' - 10"				
	32" O.C.	12' - 8"				
2 x 10	12" O.C.	20' - 0"				
	16" O.C.	20' - 0"				
	24" O.C.	18' - 11"				
	32" O.C.	16' - 2"				
4 x 4	24" O.C.	10' - 0"				
	32" O.C.	9' - 3"				
	48" O.C.	7' - 8"				
4 x 6	24" O.C.	15' - 11"				
	32" O.C.	13' - 9"				
	48" O.C.	11' - 3"				
4 x 8	24" O.C.	20' - 0"				
	32" O.C.	18' - 2"				
	48" O.C.	14' - 10"				

**DISCLAIMER:**  
 Alternate patio designs may be possible when provided with an engineered analysis. Use of this conventional standard design is at the user's risk and carries no implied or inferred guarantee against failure or defects.

- NOTES:**
- TWO 2X MEMBERS MAY BE SUBSTITUTED FOR ONE 4X HORIZONTAL FRAMING MEMBER.
  - LUMBER SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER AND SHALL BEAR A GRADE STAMP.
  - CONCRETE SHALL BE 1 PART CEMENT, 3 PARTS SAND AND 4 PARTS GRAVEL, VOLUMETRIC MEASURE, WITH NO MORE THAN 7 1/2 GALLONS OF WATER PER SACK OF CEMENT.
  - ALL METAL HARDWARE & FASTENERS SHALL BE GALVANIZED OR EQUALLY APPROVED CORROSION RESISTANCE.
  - NOT DESIGNED TO BE ENCLOSED - ADDITIONAL ENGINEERING ANALYSIS WILL BE REQUIRED IF ENCLOSED.
  - SEE PAGE 2 OF 2 FOR CONSTRUCTION DETAILS.

**BUILDING DIVISION**

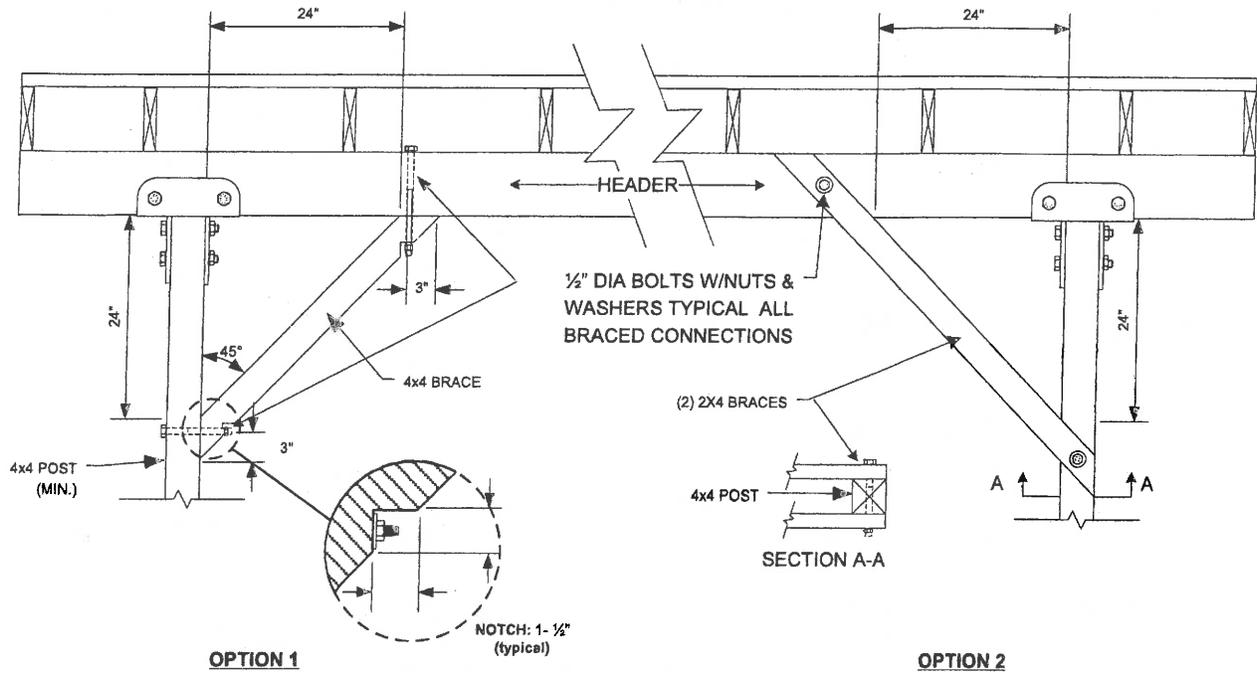
FREE STANDING LATTICE  
 PATIO COVER  
 FOR RESIDENTIAL CONSTRUCTION



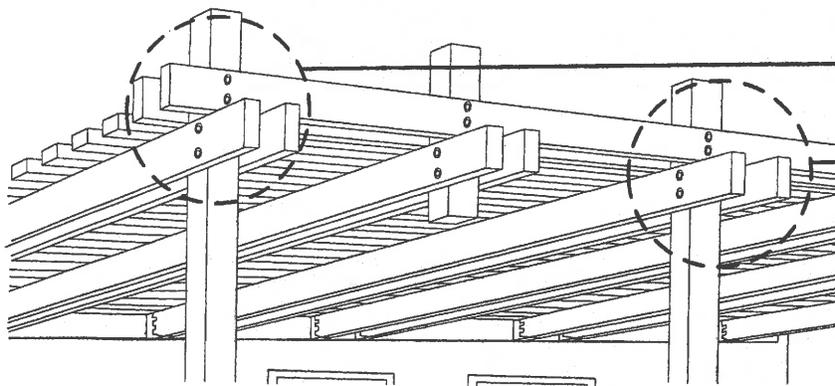
COMMUNITY DEVELOPMENT DEPARTMENT  
300 FIRST STREET WOODLAND, CA 95695  
(530) 661-5820 (530) 406-0832 FAX  
<http://www.cityofwoodland.org>

# Residential Freestanding Lattice Patio Cover

## KNEE BRACE DETAIL AT POSTS



## INVERTED HEADER DESIGN OPTION (LATTICE ONLY)



TWO 1/2" DIA. THRU-BOLTS (W/ WASHERS), PER CONNECTION AS SHOWN

FOR HEADERS OR RAFTERS- TWO 2X MEMBERS MAY BE SUBSTITUTED FOR ONE 4X MEMBER. SEE TABLES "A" & "B" FOR SPAN LIMITS

## BUILDING DIVISION

FREE STANDING LATTICE  
PATIO COVER  
FOR RESIDENTIAL CONSTRUCTION