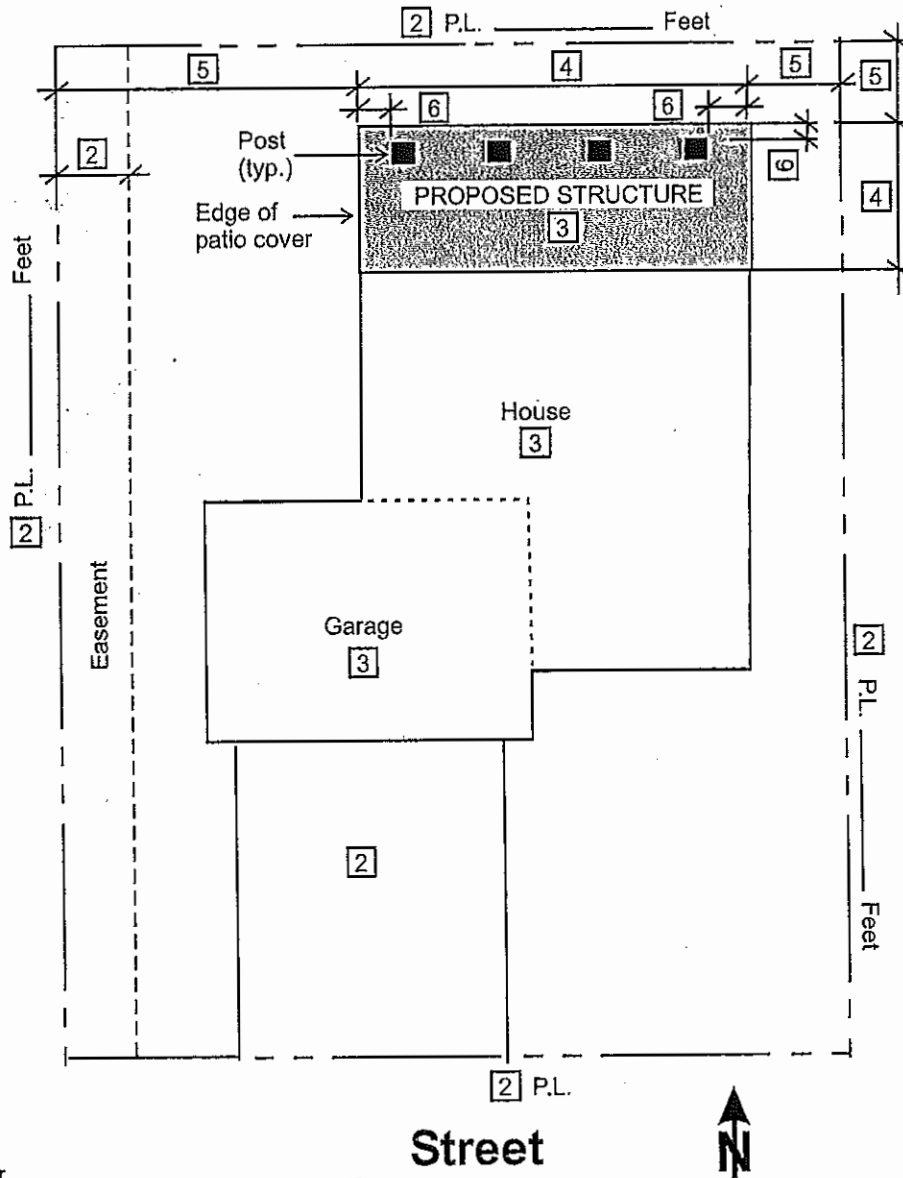


# City of Costa Mesa Building Division

## BUILDING PLAN REQUIREMENTS FOR ATTACHED PATIO COVERS

(Note: Detached patio covers require an engineered design.)



Owner \_\_\_\_\_

Address \_\_\_\_\_

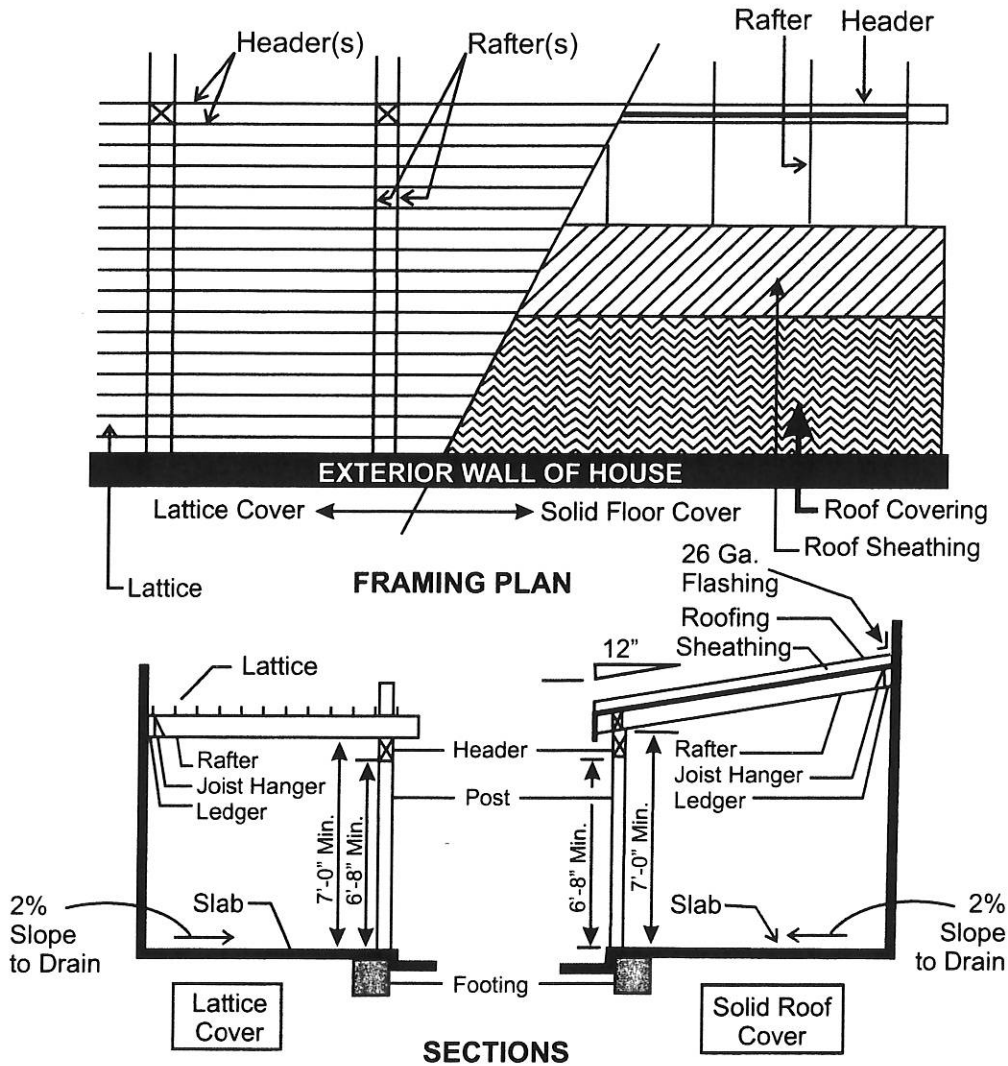
**Street**

1

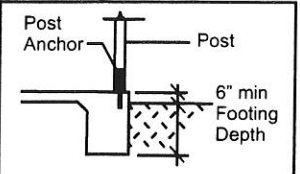
Scale: \_\_\_\_\_" = \_\_\_\_\_'

**INSTRUCTIONS - 3 COPIES MUST BE SUBMITTED**  
Using this as an example draw your own plot plan on a separate drawing.

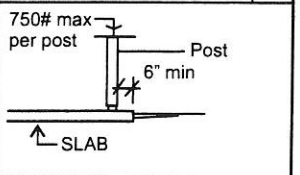
- 1 Show owner's name, project address, north arrow and scale.
- 2 Show and dimension all property lines, easements and driveways.
- 3 Show locations of existing and proposed structures, including all setback dimensions
- 4 Show dimensions of proposed structure.
- 5 Show setbacks from property lines to proposed structure.  
(5'-0" min.; verify if Planning Dept. requires greater setbacks)
- 6 Dimension overhangs



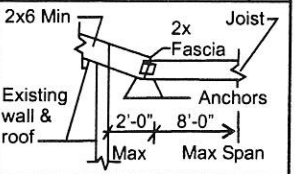
DETAIL OPTIONS	
Check the ones that apply:	
Lattice Cover:	
<input type="checkbox"/> A	<input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
Solid Cover:	
<input type="checkbox"/> A	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F



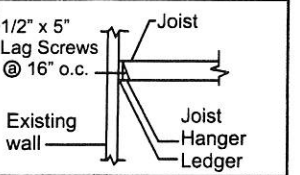
**PAD FOOTING** A



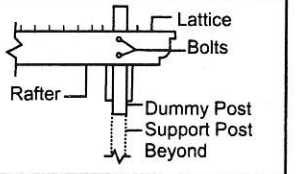
**SLAB FOOTING** B



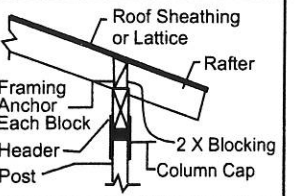
**EAVE CONNECTION** C



**WALL CONNECTION** D



**RAFTER/HEADER** E



**JOIST/HEADER** F

**CONSTRUCTION MATERIALS**

SPECIFY LUMBER:  DF  Redwood  Hemfir  
 SPECIFY GRADE:  No. 1  No. 2  
 CONCRETE: 2500 psi min. @ 28 days  
 CONNECTIONS: ICBO approved or equal

- Roof covering: \_\_\_\_\_ Slope: \_\_\_\_\_:12
- Roof sheathing: \_\_\_\_\_ Maximum spans: \_\_\_\_\_  
 lattice: \_\_\_\_\_ x \_\_\_\_\_ @ \_\_\_\_\_" o.c.: 2x2 - 6'; 2x3 - 8'; 2x4 - 10'  
 solid: \_\_\_\_\_" CCX plywood or \_\_\_\_\_" lumber: 1" - 2' - 8"; 2" - 8' - 0"
- Rafters: \_\_\_\_\_ x \_\_\_\_\_ @ \_\_\_\_\_" o.c.  Single  Double
- Header: \_\_\_\_\_ x \_\_\_\_\_  Single  Double
- Ledger: \_\_\_\_\_ x \_\_\_\_\_ (2x min)
- Fascia: \_\_\_\_\_ x \_\_\_\_\_ (2x6 min)
- Post: \_\_\_\_\_ x \_\_\_\_\_ (4x4 min) Raise 1" min above slab surface
- Footing: \_\_\_\_\_ x \_\_\_\_\_ 12"x12" min for up to 66 sf tributary area; 18"x18" min for 67-150 sf tributary area  
 \_\_\_\_\_" depth (Expansive Soil Zone \_\_\_\_\_)
- Slab \_\_\_\_\_" thick (Expansive Soil Zone \_\_\_\_\_)
- Connections:
  - Joist to Ledger - Metal joist hanger
  - Joist to Header - Solid blocking with framing anchor
  - Doubled joist or header to post - (2) 1/2" dia. thru bolts w/ washers
  - Joist to Fascia - Metal framing anchors each side (min. capacity = 0.5" joist span \* joist spacing \* 15)
  - Header to Post - Column Cap
  - Post to Slab or Footing - Metal Anchor/Post Base
  - Roof Sheathing - 8 d @ 6" o.c. Edges and 12" o.c. Field

# SPAN TABLES

## LATTICE PATIO COVER

DESIGN LOAD: 5 PSF DL + 10 PSF LL								REDUCE SPANS 20% FOR HEM-FIR OR REDWOOD								HEADER SPANS (MAX)			
RAFTER SPANS (MAX)															SIZE	DF NO 1	DF NO 2		
DF NO 1							DF NO 2												
SIZE	SPACING (" o.c.)							SIZE	SPACING (" o.c.)										
	16	24	32	36	48	60	72		16	24	32	36	48	60	72				
2X4	10'-0"	8'-9"	8'-0"	7'-7"	6'-10"	6'-6"	6'-1"	2X4	9'-9"	8'-7"	7'-9"	7'-6"	6'-9"	6'-3"	5'-10"	(2) 2X6	9'-6"	8'-9"	
2X6	15'-8"	13'-8"	12'-6"	12'-0"	10'-10"	10'-1"	9'-6"	2X6	15'-4"	13'-6"	12'-2"	11'-9"	10'-8"	9'-9"	8'-10"	(2) 2X8	12'-1"	11'-3"	
2X8	-	18'-1"	16'-6"	15'-9"	14'-4"	13'-2"	12'-1"	2X8	-	17'-9"	16'-1"	15'-6"	13'-9"	12'-4"	11'-3"	(2) 2X10	14'-9"	13'-9"	
2X10	-	-	-	20'-0"	18'-1"	16'-2"	14'-9"	2X10	-	-	-	19'-6"	16'-10"	15'-1"	13'-9"	(2) 2X12	17'-1"	16'-0"	
(2) 2X4	10'-0"	8'-9"	8'-0"	7'-8"	7'-0"	6'-6"	6'-1"	(2) 2X4	9'-10"	8'-7"	7'-9"	7'-6"	6'-8"	6'-4"	5'-11"	4X6	10'-0"	9'-7"	
(2) 2X6	15'-9"	13'-9"	12'-6"	12'-0"	10'-11"	10'-1"	9'-6"	(2) 2X6	15'-5"	13'-6"	12'-3"	11'-9"	10'-8"	9'-9"	8'-11"	4X8	13'-2"	12'-8"	
(2) 2X8	-	18'-1"	16'-6"	15'-10"	14'-4"	13'-3"	12'-1"	(2) 2X8	-	17'-9"	16'-1"	15'-6"	13'-10"	12'-4"	11'-3"	4X10	16'-8"	15'-7"	
																	4X12	19'-4"	18'-1"

## SOLID PATIO COVER

DESIGN LOAD: 10 PSF DL + 10 PSF LL								REDUCE SPANS 20% FOR HEM-FIR OR REDWOOD								HEADER SPANS (MAX)			
RAFTER SPANS (MAX)															SIZE	DF NO 1	DF NO 2		
DF NO 1							DF NO 2												
SIZE	SPACING (" o.c.)							SIZE	SPACING (" o.c.)										
	16	24	32	36	48	60	72		16	24	32	36	48	60	72				
2X4	9'-1"	8'-0"	7'-2"	6'-10"	6'-3"	5'-10"	5'-6"	2X4	8'-10"	7'-9"	7'-1"	6'-9"	6'-2"	5'-8"	5'-3"	(2) 2X6	8'-3"	7'-8"	
2X6	14'-3"	12'-6"	11'-4"	10'-10"	9'-10"	9'-2"	8'-8"	2X6	14'-0"	12'-2"	11'-1"	10'-8"	9'-6"	8'-6"	7'-8"	(2) 2X8	10'-6"	9'-9"	
2X8	18'-9"	16'-6"	15'-0"	14'-4"	12'-9"	11'-6"	10'-6"	2X8	18'-6"	16'-1"	14'-8"	13'-9"	12'-0"	10'-8"	9'-9"	(2) 2X10	12'-9"	12'-0"	
2X10	-	-	19'-1"	18'-1"	15'-8"	14'-0"	12'-9"	2X10	-	-	17'-10"	16'-10"	14'-7"	13'-1"	12'-0"	(2) 2X12	14'-9"	13'-10"	
4X4	12'-1"	10'-6"	9'-7"	9'-2"	8'-4"	7'-9"	7'-3"	4X4	11'-9"	10'-3"	9'-4"	9'-0"	8'-2"	7'-7"	7'-2"	4X6	8'-10"	8'-4"	
4X6	19'-0"	16'-7"	15'-1"	14'-6"	13'-2"	12'-2"	11'-6"	4X6	18'-7"	16'-2"	14'-9"	14'-2"	12'-10"	12'-0"	11'-3"	4X8	11'-9"	11'-0"	
4X8	-	-	19'-9"	19'-1"	17'-3"	16'-1"	15'-1"	4X8	-	16'-1"	14'-8"	14'-1"	12'-9"	11'-10"	11'-2"	4X10	14'-4"	13'-6"	
																	4X12	16'-9"	15'-8"