

# RESIDENTIAL CARPORT STANDARD PLANS

This Information Bulletin describes the minimum requirements for obtaining carport permits for residential buildings using this information bulletin, International Code Council Evaluation Services (ICC-ES) reports, or other conventionally framed plans.

## I. DEFINITION

A carport is a covered motor vehicle parking structure accessory to a one or two families dwelling unit. It may be freestanding or attached to another structure. A carport cannot exceed 1,000 square feet in area or one story in height and must be entirely open on two or more sides except for structural supports (CBC 406.1.1). There can be no enclosed use above a carport. Any structure which does not meet the above definition must comply with all regulations relating to a private garage. (CBC 406.1) Note: Area may be up to 3,000 square feet when complying with CBC 406.1.2

## II. WHEN IS A PERMIT REQUIRED?

A building permit is required for any new carport or for repair or enclosure of an existing carport. A final inspection must be passed before the work is considered completed by the City.

## III. OPTIONS FOR SERVICE

Carport permits may be obtained over-the-counter when using this information bulletin, ICC-ES evaluation reports or designed using conventional wood framing.

## IV. PROJECT FEES

Fees which include Plan Check, Permit and Inspection are charged at initial review.

Documents Referenced in this  
Informational Bulletin:  
2013 California Building and  
Residential Code (CBC)(CRC)

## V. DRAWINGS TO PROVIDE AND 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 2013 California Building Code, Poway Municipal Code, and all other relevant laws, ordinances, rules, and regulations.

Three sets of plans are required and must include the following:

### A. Site Plan

Three copies of a site plan are required for a permit. You must include information on each of the following items on the site plan:

1. Name of owner.
2. Address and Assessor's Parcel Number where carport is to be built.
3. Legal description of property.
4. North arrow and scale. Suggested scale: One inch equals 20 feet.
5. Boundaries and dimensions of property.\*
6. Names of bordering streets.\*
7. Distance from front property line to face of curb (or center line of street if no curb exists).\*
8. Width of alley(s), if any.\*
9. Location and width of easements. Private easements should be shown on the property's deed.\*
10. Location and dimensions of existing buildings, structures, retaining walls, paved parking, and driveways. Include distance from property lines.
11. Location and dimensions of proposed carport. Include distance from property lines.
12. Location and spacing of all posts supporting carport.
13. Location of existing curb cuts to be closed or altered and location of new curb cuts. A separate permit must be obtained for new curb cuts.

## B. Foundation and Framing Plans

Provide one of the following:

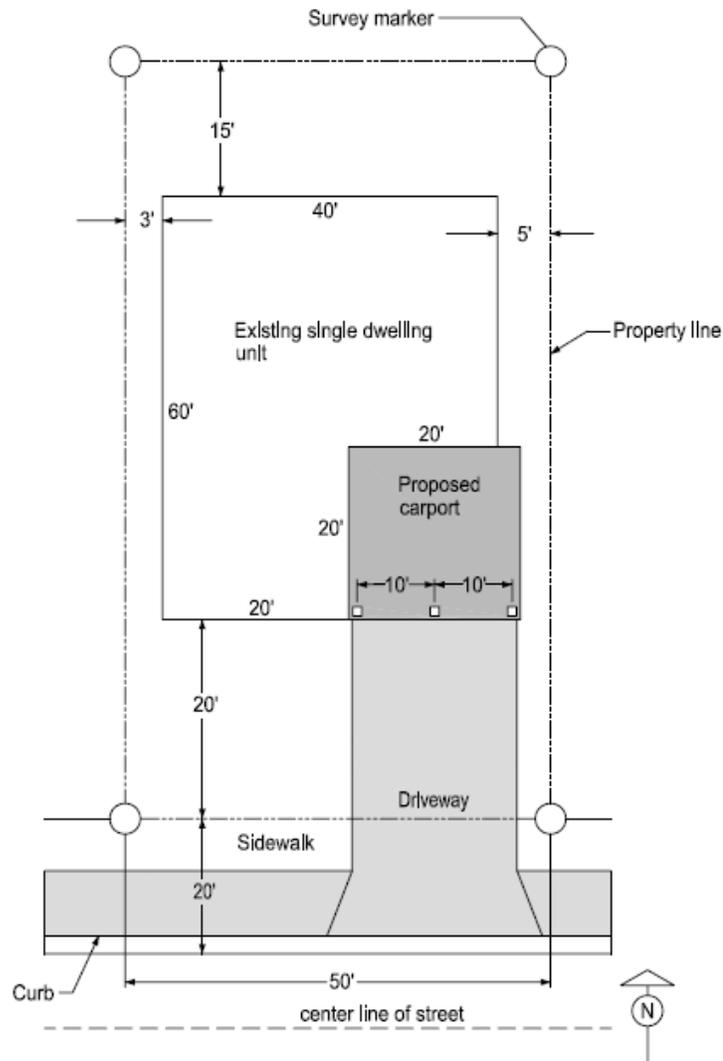
1. One copy of the City standard plan (specifications in this information bulletin) with the proposed footing sizes, rafter sizes, and beam sizes highlighted, *or*,
2. One copy of (ICC-ES) evaluation reports approved plan available from your material supplier, *or*,
3. Three copies of any other plan. These plans should include a roof framing plan, foundation plan, elevations, cross-sections, and connection details.

## C. Floor Plan

For carports within six feet of a dwelling, include a floor plan and show the following information:

1. Use and dimensions of all rooms adjacent to the carport.
2. Size and type of all windows and doors from those rooms.

**Figure 1 / Sample Carport Site Plan**



#### **D. Permit Application**

All projects must be submitted with a Permit Application. If you intend to obtain your permit on the same day as plan review, the application must be fully completed.

Note: there are no exceptions to the Workers' Compensation Insurance requirements. If the property owner is doing the construction work or is hiring a number of different contractors, a separate Owner-Builder Verification form must be signed by the owner before the permit can be issued.

#### **VI. ADDITIONAL REGULATIONS**

**A.** If carport posts are to be located less than five feet (three feet with automatic fire sprinklers) from the property line, and zoning regulations permit the closer location, the carport must have a one-hour fire-resistive wall extending to the underside of the carport sheathing on the property line side to provide fire protection (CRC Table R302.1). No openings shall be permitted in this wall. Openings (unprotected and protected) shall not exceed 25% of the area of these walls that are between three feet (914 mm) and five feet (1524) from the property line per table R302.1. (See Table R302.1 (2) for sprinklered carport)

**B.** No fire protection is required for the common wall between a one- or two-dwelling unit structure and a carport (Section R302.6).

**C.** When exterior openings required for light and/or ventilation occur in the wall of the dwelling unit beneath the carport roof, the minimum height of the carport roof is seven feet, measured from the parking surface to the underside of the rafters (CBC 1208.2).

**D.** All electrical wiring and equipment must comply with regulations for exterior installation.

**E.** Structures located in a Very High Fire Hazard Severity Zone or Brush Management Zones, governed by the City Brush Management Ordinances, may need to meet additional fire protection requirements.

#### **VII. CURB CUTS**

Cutting the curb, closing an existing curb cut or paving a driveway on public property requires a separate permit and must comply with parking regulations.

#### **VIII. CONSTRUCTION SPECIFICATIONS**

Following are the minimum construction specifications for carports:

**A.** The concrete mix for footings must meet a compressive strength of  $f'c = 2,500$  psi minimum.

**B.** 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 decay and termites (CRC Section R317.1)

**C.** The post anchorage and bracing details shown on the following pages have been approved by the City for carports.

1. Posts must be anchored at the lower end and must be braced at the upper end using any of the details shown in Figure 5.

2. Post anchorage to slabs may be accomplished with a standard approved post base installed per manufacturer's instructions. The footing must be adequate for the load applied. See Section X below and Table A.

**D.** The post anchorage and bracing details shown on the following pages have been approved by the City for carports. 3/8" x 5" lag screws spaced at 16" maximum on center. See Figure 7. Carport rafters may not be solely supported by the existing rafter tails or fascia of the house.

**F.** Specify roof covering (shingles, shakes, etc.) when submitting plans. If nominal one-inch-thick roof sheathing is used, the roof may have rafters spaced not more than 32" on center. If plastic roof coverings are used, installation must be according to manufacturer's recommendations and the corrugations must be placed perpendicular to and across the supports. Roof systems shall be sloped 1/4 inch in 12 inches for drainage.

**G.** Post size is based on the height of the deck floor above finished grade (at

the highest point):  
0 to 8 feet high: 4x4 minimum,  
8 to 10 feet high: 6x6 minimum

## IX. INSPECTIONS

An Inspection Record Card is issued at the time the permit is obtained. The inspector signs this card as the construction is inspected and approved. The approved plans, the Inspection Record Card, and the permit are important records and should be retained.

A combination permit is active for 180 days. Each inspection scheduled and passed, extends the permit 180 days. Permits approaching expiration can be extended under special circumstances. Inspections are required at the following times:

- A. When footings have been excavated but before concrete is placed,
- B. When ledger beams are attached to an existing structure, and when roof sheathing is nailed and
- C. When work is complete.

**Note:** *The project is not legally complete until there is an approved final inspection. Call to schedule inspections.*

## X. TABLES

Tables A, B, and C make the following assumptions:

Roof live load is 20 psf.

Roof dead load is 7 psf.

All lumber is to be Douglas fir-larch No. 2 or better (repetitive member use):

$F_b = 900$  psi

$F_v = 180$  psi

$E = 1,600,000$  psi

Soil bearing pressure is 1,500 psf minimum.

If the above information differs, values in the tables must be adjusted.

**Table A / Minimum Square Footing Sizes (Inches)\***

Post Spacing (Feet)	Rafter Span (Feet) <sup>1</sup>							
	6	8	10	12	14	16	18	20
4	12	12	12	12	12	12	12	12
6	12	12	12	12	12	12	12	14
8	12	12	12	12	12	14	14	14
10	12	12	12	14	14	14	16	16
12	12	12	14	14	16	16	18	18
14	12	12	14	16	16	18	18	20
16	12	14	14	16	18	18	20	20
18	12	14	16	18	18	20	20	22
20	14	14	16	18	20	20	22	24

\*See dimension "A" on "Figure 5"

<sup>1</sup> Assume reinforcing bar size #4 top and bottom, rebar yield Fy=60 ksi

**Table B / Minimum Rafter Sizes (Inches)**

Rafter Span (feet)	Rafter Spacing Center-to-Center (Inches) <sup>1,2</sup>			
	12 (5/16" plywood sheathing)	16 (3/8" plywood sheathing)	24 (1/2" plywood sheathing)	32 (5/8" plywood sheathing)
6	2x4	2x4	2x4	2x4
7	2x4	2x4	2x4	2x4
8	2x4	2x4	2x6	2x6
9	2x4	2x6	2x6	2x6
10	2x6	2x6	2x6	2x6
11	2x6	2x6	2x6	2x6
12	2x6	2x6	2x6	2x8
13	2x6	2x6	2x8	2x8
14	2x6	2x6	2x8	2x8
15	2x6	2x8	2x8	2x10
16	2x8	2x8	2x8	2x10
17	2x8	2x8	2x10	2x10
18	2x8	2x8	2x10	2x10
19	2x8	2x10	2x10	2x12
20	2x8	2x10	2x10	2x12

<sup>1</sup> Deflection base on L/360 (LL only)

<sup>2</sup> Load Duration Factor = 1.

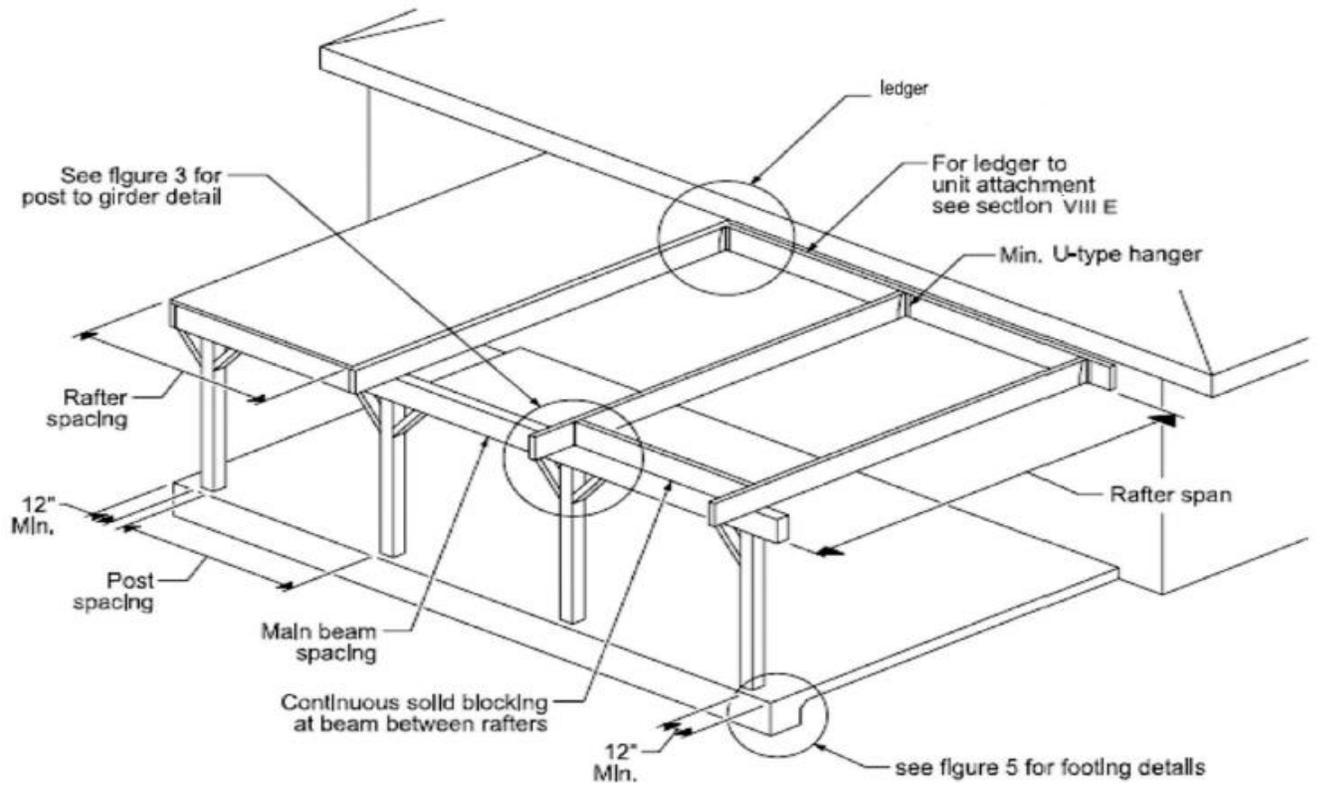
**Table C / Minimum Beam Sizes (Inches)**

Post Spacing (Feet)	Rafter Span (In Feet) <sup>1,2</sup>								
	4	6	8	10	12	14	16	18	20
4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4
6	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x6
8	4x4	4x4	4x6						
10	4x4	4x6	4x6	4x6	4x6	4x6	4x8	4x8	4x8
12	4x6	4x6	4x6	4x8	4x8	4x8	4x8	4x8	4x10
14	4x6	4x8	4x8	4x8	4x8	4x10	4x10	4x10	4x10
16	4x8	4x8	4x8	4x10	4x10	4x10	4x10	4x10	4x10
18	4x8	4x8	4x10	4x10	4x10	4x12	4x12	4x12	4x12
20	4x8	4x10	4x10	4x12	4x12	4x12	4x12	4x12	4x12
	6x8	6x8	6x10	6x10	6x10	6x12	6x12	6x12	6x14

<sup>1</sup> Deflection base on L/360 (LL only)

<sup>2</sup> Load Duration Factor = 1.

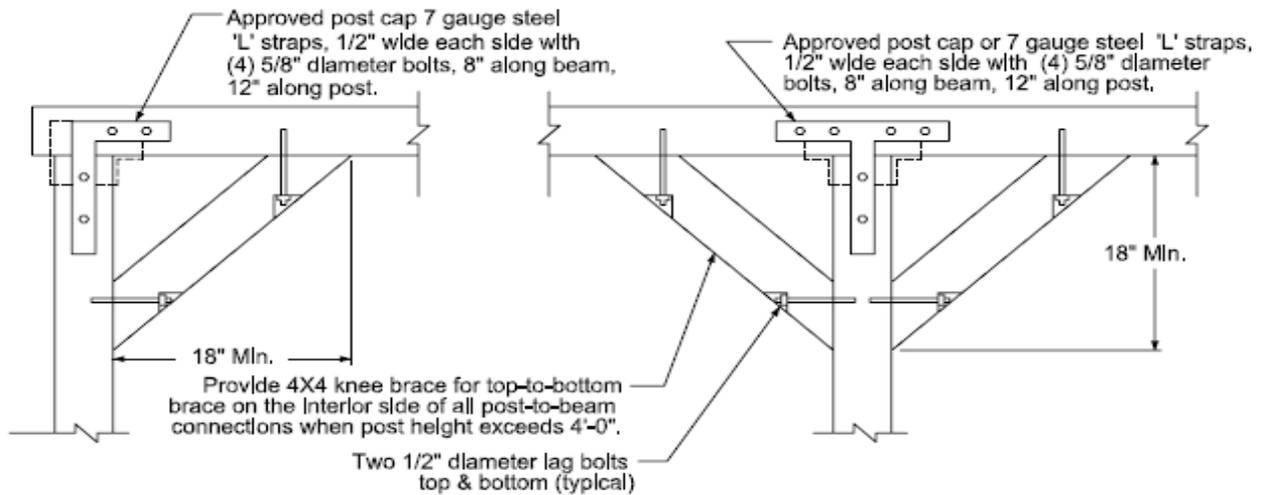
**Figure 2 / Typical Patio**



**Figure 3 / Post-to-Girder Connection**

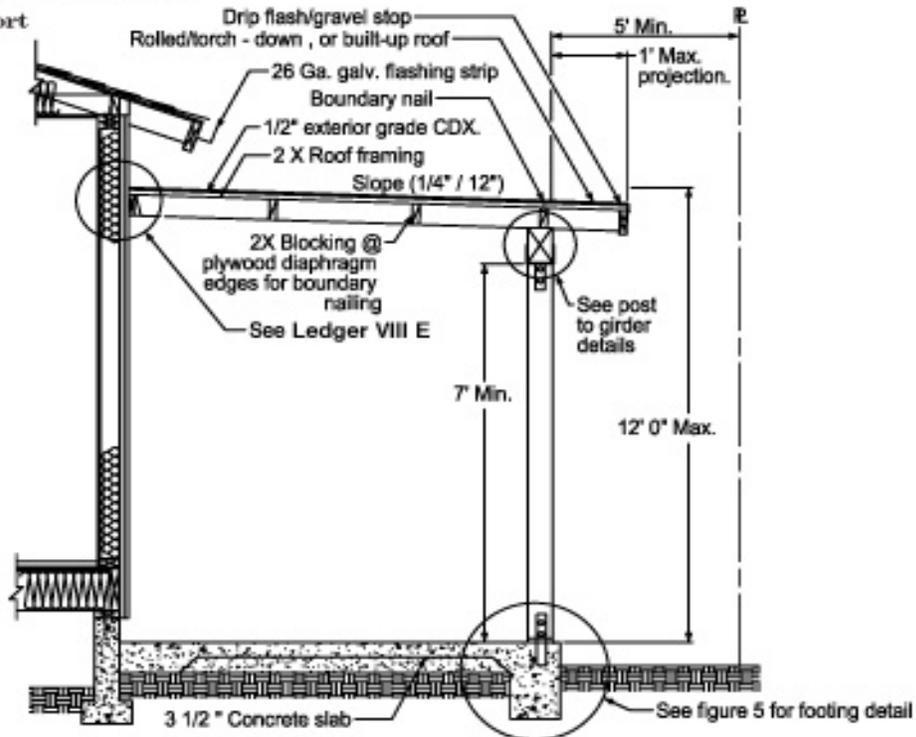
**Case 1 / Connection, Interior Condition**

**Case 2 / Interior Condition**

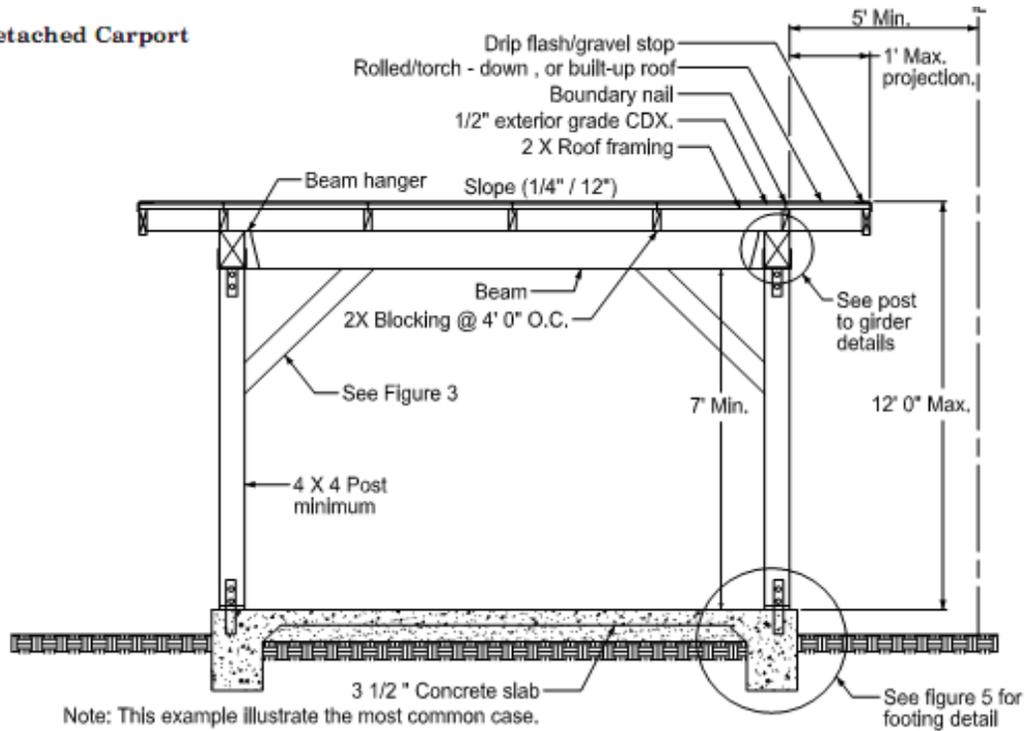


**Figure 4 / Section View of Carport**

**A / Attached Carport**



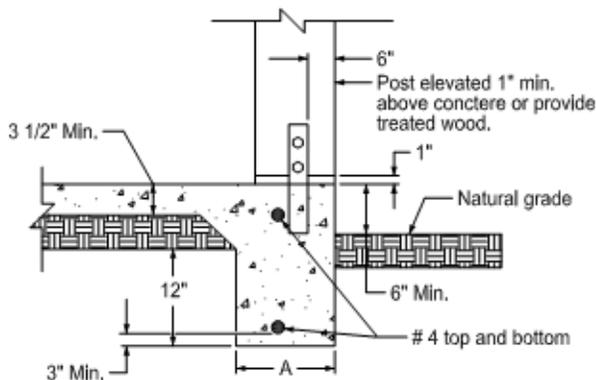
**B / Detached Carport**



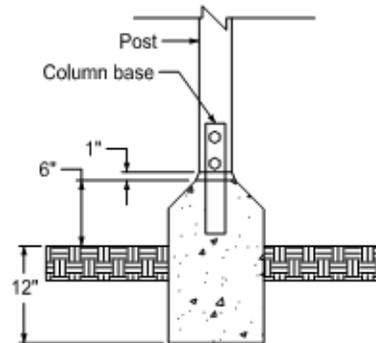
**Figure 5 / Typical Footing Detail**

**Case 1 / Anchor and Footing Detail,  
Integrated Slab**

**Case 2 / Anchor and Footing Detail,  
Isolated Pier**



Note: Minimum continuous footing dimension shall be 12" from end post



***Building Division Counter is open between the hours of 7:30 a.m. and 5:30 p.m. (closed for lunch 11:30 a.m. - 12:30 p.m.) Monday through Thursday. City Hall and the Building Division counter are closed on alternating Fridays ([see calendar](#)). Our Friday hours are 8:00 a.m. – 5:00 p.m. (closed for lunch 11:30 a.m. - 12:30 p.m.).***

**\*\*\*Please contact the Poway Building Division if you have any questions or concerns at (858) 668-4645 or [building@poway.org](mailto:building@poway.org)\*\*\***