Residential Carport Specifications

1. Definition

A carport is a covered motor vehicle parking structure accessory to a single or duplex 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. 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 garage.

2. 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 of Vista.

3. Your options for service

Carport permits may be obtained when using the City of Vista standard plan, ICC-approved plans, or designed using conventional wood framing. All other projects are to be submitted.

- Plans are to be submitted at the Development Services counter located at City Hall, 200 Civic Center Dr., Vista, CA 92084. You may contact the counter staff at 760-639-6100 Monday – Thursday 7:30 a.m. to 5:30 p.m. and alternate Fridays 7:30 a.m. to 4:30 p.m.

4. Drawings to provide—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 California Building Code, Land Development Code, and all other relevant laws, ordinances, rules and regulations. Zoning information, including required setbacks, is available at the Development Services counter.

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

A. Plot Plan—please see Figure 4 of this handout for requirements.

B. Foundation and Framing Plans — provide one of the following:

1) One copy of the City of Vista standard plan (specifications in this information bulletin) with the proposed footing sizes, rafter sizes, and beam sizes highlighted; or,

2) One copy of the International Code Council (ICC) 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.

200 Civic Center Drive * Vista, CA 92084 * 760-639-6100 * Fax 760-639-6101
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C. Floor Plan — for carports within 6' 0" 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.

D. Permit Application

All projects must be submitted with a Permit Application, which is done over the counter during the submittal process. Please 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-building verification form must be signed by the owner at the Development Services Center before the permit can be issued.

5. Additional Regulations

A. If carport posts are to be located less than 5' 0" from the property line (zoning regulations permitting), the carport may require a parapet on the property line side, protected on the exterior with material approved for one hour fire resistive construction.

B. No fire protection is required for the common wall between a one- or two-dwelling unit structure and a carport.

C. When exterior opening 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 7' 0", measured from the parking surface to the underside of the rafters. When no required opening exists in the wall beneath the carport roof, there is no minimum required height.

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

6. Curb Cuts

Cutting the curb, closing an existing curb cut, or paving a driveway on public property requires a separate permit. Please see the City of Vista "Right-of-Way" handout.

7. Construction Specifications — the 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. See Chapter 23 of the California Building Code for details. All posts must be a minimum of 4 x 4.

C. The post anchorage and bracing details shown on the following pages have been approved by the City of Vista 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 2 of this handout. Decorative-type bracing may be substituted if the same resistance to lateral loading is provided.

2) Post anchorage 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 9 and Table A of this handout. When the load on supporting posts does not exceed 750 pounds per post, a minimum 3½ inch thick

concrete slab-on-grade may be substituted for the pad footings shown on the typical framing details.

D. When it is desired to connect and support one side of the carport structure by attaching it directly to the dwelling unit, the rafter spacing and beam sizes may be as shown in Tables B and C. However, the main beam may be replaced on the side attached to the dwelling unit with a ledger the same size as the rafters and fastened to the studs with ½" x 5" lag screws spaced at 32" maximum on center when the rafter span does not exceed 7' 6". Lag screws may be spaced at 16" maximum on center when the rafter span does not exceed 15" 0". Attaching the rafters to existing dwelling unit rafters is not allowed. If a ledger beam is not used, carport rafters should be notched and placed directly on the double top plate of the dwelling unit. See the "Minimum Construction Specification" hand-out for further information on notching.

E. Specify roof covering (shingles, tile, 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 a minimum of ¼ inch in 12 inches for roof drainage. The slope and type of roof shall comply with Chapter 15 of the California Building Code.

8. Inspections

An inspection record card (hard 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 building permit is active for 180 days. Each inspection scheduled and passed extends the permit 180 days. Permits can be extended under special circumstances. Please note that the California Building Code allows one extension.

Inspections are required at the following times:

- When footings have been excavated but before concrete is placed.
- When ledger beams are attached to an existing structure.
- When work is complete.

Note: The project is not legally complete until there is an approved final inspection. Please call 760-639-6106 one day in advance to schedule inspections.

9. Tables

Tables A, B and C make the following assumptions:

- Roof live load is 10 psf
- Roof dead load is 7 psf
- All lumber is to be Douglas fir-larch No. 2 or better
- Fb = 825 psi
- Fv = 90 psi
- E = 1,200,000 psi
- Repetitive member use
- All posts are to be 4 x 4 minimum
- Soil bearing pressure is 1,000 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)							
	6	8	10	12	14	16	18	20
4	12*	12*	12*	12*	12*	12*	14	14
6	12*	12*	14	14	14	14	16	16
8	14	14	14	16	16	16	18	20
10	14	16	16	18	18	18	20	22
12	16	16	18	20	20	20	22	24
14	16	18	20	20	22	22	24	24
16	18	20	20	22	24	24	27	27
18	20	20	22	24	24	24	27	30
20	20	22	24	24	27	27	30	30

Table B/Minimum Rafter Sizes (Inches)

Rafter Span (feet)	Rafter Spacing Center-to-Center (Inches)			
	12 (5/16" plywood sheathing)	16 (3/8" plywood sheathing)	24 (1/2" plywood sheathing)	32 (5/8" plywood sheathing)
6	2x4	2x4	2x4	2x6
7	2x4	2x4	2x6	2x6
8	2x4	2x6	2x6	2x6
9	2x6	2x6	2x6	2x6
10	2x6	2x6	2x6	2x8
11	2x6	2x6	2x8	2x8
12	2x6	2x8	2x8	2x8
13	2x8	2x8	2x8	2x10
14	2x8	2x8	2x10	2x10
15	2x8	2x8	2x10	2x10
16	2x8	2x10	2x10	2x12
17	2x10	2x10	2x12	2x12
18	2x10	2x10	2x12	2x12
19	2x10	2x10	2x12	2x14
20	2x10	2x12	2x12	2x14

Table C/Minimum Beam Sizes (Inches)

Post Spacing (Feet)	Rafter Span (In Feet)								
	4	6	8	10	12	14	16	18	20
4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4
6	4x4	4x4	4x4	4x4	4x6	4x6	4x6	4x6	4x6
8	4x4	4x6	4x6	4x6	4x6	4x6	4x6	4x8	4x8
10	4x6	4x6	4x6	4x8	4x8	4x8	4x8	4x8	4x8
						6x8	6x8	6x8	6x8
12	4x6	4x8	4x8	4x8	4x8	4x10	4x10	4x10	4x10
				6x8	6x8	6x8	6x8	6x8	6x10
14	4x8	4x8	4x10	4x10	4x10	4x10	4x12	4x12	4x12
		6x8	6x8	6x8	6x8	6x10	6x10	6x10	6x10
16	4x8	4x10	4x10	4x10	4x12	4x10	4x12	4x12	4x14
	6x8	6x8	6x8	6x10	6x10	6x10	6x10	6x12	6x12
18	4x8	4x10	4x12	4x12	4x12	4x12	4x14		
	6x8	6x8	6x10	6x10	6x10	6x12	6x12	6x12	6x14
20	4x8	4x12	4x12	4x12	4x14	4x14			
	6x8	6x10	6x10	6x12	6x12	6x12	6x14	6x14	6x14

Note:
* See dimension "A" on "Figure 2, Case 4."

Figure 1/Typical Patio construction

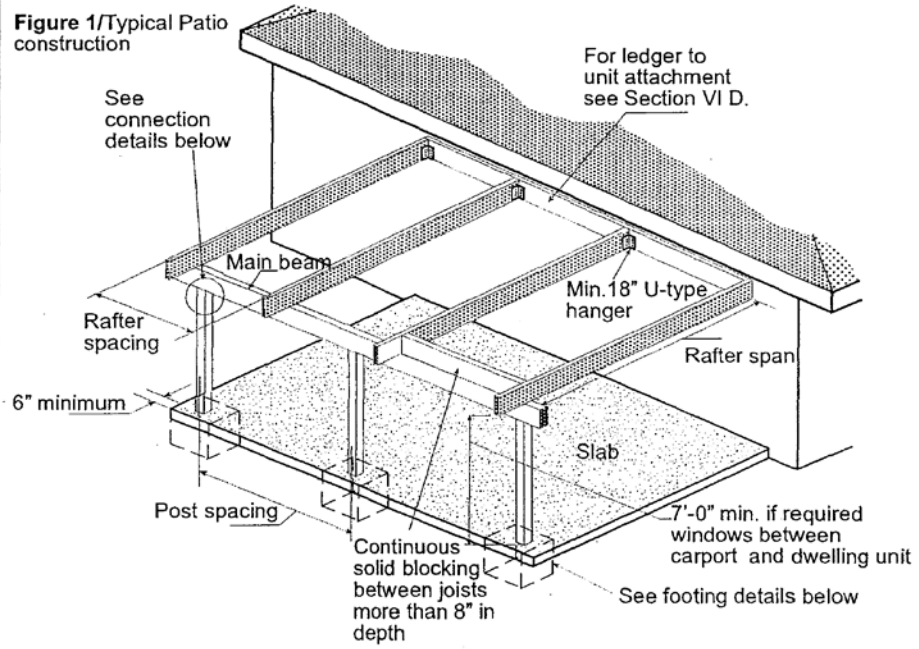
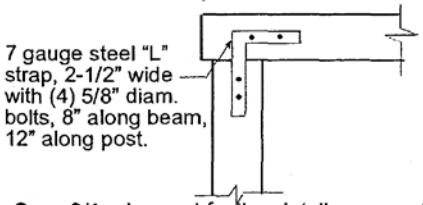
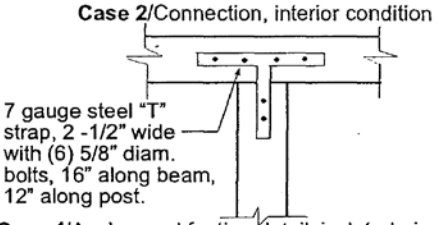


Figure 2/Connection, anchor and footing details

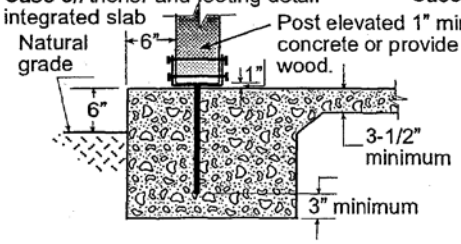
Case 1/Connection, end condition



Case 2/Connection, interior condition



Case 3/Anchor and footing detail integrated slab



Case 4/Anchor and footing detail, isolated pier

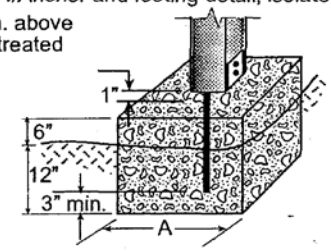
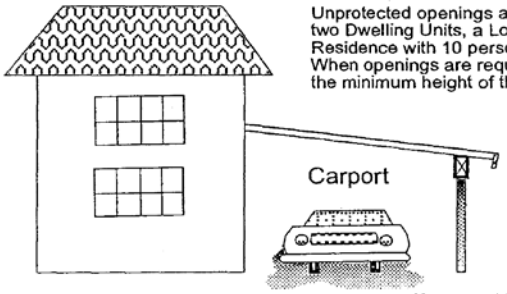
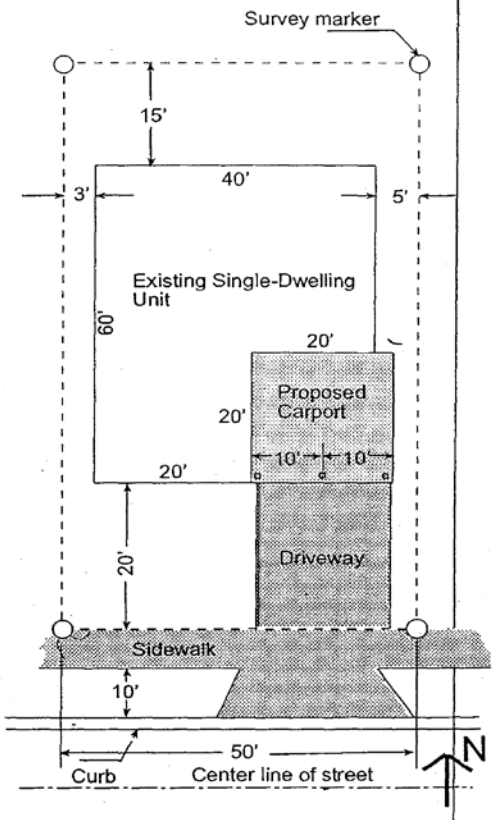


Figure 3/Elevation view of Carport



Unprotected openings are permitted between one or two Dwelling Units, a Lodging House or a Congregate Residence with 10 persons or less and a carport. When openings are required for light and/or ventilation the minimum height of the carport roof is 7'-0".

Figure 4/Sample Carport Plot Plan



Scale: 1 inch equals 20 feet

Three copies of a plot plan are required for a permit. You must include information on each of the following items on the plot 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: 1 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. Existing survey hubs, pipes, and similar permanently installed property line identification.
14. 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. See Section VI.