BUILDING PERMIT REQUIREMENTS FOR:

CARPORT

20 lb. live load 10 lb. dead load

INFORMATION GUIDELINE

8C

January 2014

CITY OF ESCONDIDO • BUILDING DIVISION • 201 N. BROADWAY, ESCONDIDO, CA  92025 • (760) 839-4647

PLEASE COMPLETE THE ITEMS BELOW AND READ THE GENERAL NOTES

Job Address ___________________________ Owner ________________

Carport Dimensions: Length __________ Width __________ Total Square Feet __________

Inspection Requests: (760)839-4646 (24-hr. recorder) Building Inspectors: (760)839-4647

Inspector's Phone Hours: 8:00-8:30 AM and 4:00-5:00 PM, Mon.-Fri.

Upon permit issuance, this Guideline will serve as your approved plan.

High or Very High Fire Severity Zone: YES ____ No ____

Permit Validation: ____________________________________ Roof Covering: ______________

GENERAL NOTES

1. To expedite the permit process, please circle or highlight the appropriate rafter, beam and footing sizes on Tables I, II, III or IV.

2. Construction of a carport by any method other than those outlined herein are required to be designed and must be submitted for plan check.

3. Carports are not to be enclosed. Carports are to remain entirely open on any two or more sides with no enclosed uses above.

DESCRIPTION OF CARPORT

A carport is a one-story structure not more than 1,000 square feet in area and used for parking of private vehicles, and is considered an alteration to the existing structure to which it is attached. It is open on at least two sides with a clear height, from the floor to the soffit of the supporting members, of not less than 7 ft. 0 in. and a minimum height of 7 feet to the bottom of the rafters. The roof covering will consist of solid sheathing with an approved roofing material applied per manufacturer's specifications. The carport is attached to and permitted as an accessory to a single-family dwelling, a duplex or to a residential garage. Carports shall not to be used as a habitable room or storage for Class I, II or III-A liquids.

LOCATION

Except for allowed overhang, carports shall not encroach into the required setbacks. Contact the Planning or Building Division for post setback and overhang requirements.

CONCRETE

Foundation concrete shall consist of 1 part cement, 3 parts sand and 4 parts gravel, volumetric measure, with not more than 7-1/2 gallons of water per sack of cement (min. f, 2,000 psi at 28 days). Floor surfaces shall slope toward the carport vehicle entrance.

LUMBER

Structural lumber shall be Douglas Fir or Larch No. 2 or better. All lumber shall be grade marked.

FOUNDATION

1. Carport footings are to be sized per Table III.

2. All footings are to extend 12 inches into undisturbed soil or a minimum of 90% compacted fill. Soil bearing pressure assumed at 1000 psf

POST ANCHORAGE AND BRACING

The support posts are to be anchored at the lower end by any method shown in details A through E. The post is to be braced at the upper end by any method shown in details F through I.

BUILDING ATTACHMENT

A minimum of one side of the carport shall be attached to the existing structure. One of the two methods described below shall be used:

1. The rafters of the carport may be attached directly on top of the double top plates of the existing structure or

2. Attach the rafters to a ledger that attached to the structure. Refer to Details J through M.

ROOF AND COVERING

The minimum slope for a carport roof is 1/4 inch in 12 inches. Rafter and beam sizes and spacing are determined by Tables I and II. The roof sheathing shall consist of solid lumber of standard dimensions, plywood or OSB board applied perpendicular to the rafters with an approved covering applied per manufacturer's installation instructions. Roof sheathing spans will be determined by our SPAN TABLES (Information Guideline No. 17) for nominal 1-inch lumber and Table No. R503.2.1.1(1), from the California Residential Code, for plywood (Information Guideline No. 5). Roof Covering per Chapter 9 CRC.
**INSPECTIONS**

1. A foundation inspection is required after excavation of footings and prior to placing concrete.
2. A ledger and roof sheathing inspection
3. A final inspection shall be requested and approved when all work is complete and weather-protected.
4. The approved plans and inspection card must be on the job for the inspector.

**CURB CUTS**
Cutting a curb, closing an existing curb cut or paving a driveway on public property requires an Encroachment Permit. Please contact Field Engineering at 760-839-4664.

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**RAFTER TO BEAM CONNECTIONS**

DETAIL #3

- 1" POST TO SLAB
- STAND-OFF BASE
- REQUIRED (MIN.)
- 12" MIN. DEPTH
- PER TABLE

MAINTAIN 8" CLEARANCE FROM FINISH SLAB TO FINISH GRADE OR USE REDWOOD OR PRESSURE TREATED POSTS

FOR ISOLATED POSTS (NOT PART OF A SLAB), A SEPARATION OF 8'
MUST BE MAINTAINED BETWEEN WOOD AND EARTH OR USE RED WOOD OR PRESSURE TREATED POSTS

**POST BASE CONNECTION**

DETAIL #4

NEW RAFTER AND APPROVED ROOFING WITH WEATHER FLASHING WHERE NECESSARY

NEW LEDGER

PER DETAIL #2

HOUSE WALL

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**LEDGER ATTACHMENT**

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**STAGGER 1/2" X 5" LAG BOLTS:**

- @ 32" O.C. MAX. 10" RAFTER SPAN
- @ 24" O.C. MAX. 15" RAFTER SPAN
- @ 16" O.C. MAX. 20" RAFTER SPAN

**JOIST HANGER**

**2X LEDGER**

"LAG BOLTS TO BE PLACED WITHIN 12" OF ALL ENDS AND BREAKS IN LEDGER.

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**CONNECTION TO BUILDING**

DETAIL #2

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Guideline #8C (01-14).doc
NEW RAFTER AND APPROVED
ROOFING WITH WEATHER
FLASHING WHERE NECESSARY

RAFTER/TRUSS

RAFTER TAIL BEYOND
(USUALLY REMOVED)

HOUSE WALL

TOP PLATE ATTACHMENT

Post cap
installed per
manufacturer’s
installation
instructions

Provide 4x4
knee
brace on the
interior side of
all post-to-beam
connections

Two ½” lag
bolts top and
bottom typical

Freestanding Structure
ALL posts must be braced as shown

NOTES:
1. All bases, caps and connectors, are to be approved
   and listed products. Use manufacturer’s specified
   fasteners per the product listing.

2. All bases, caps and connectors to be galvanized or
   coated with a corrosion resistant paint.
TABLE 1 Minimum Rafter Sizes (Inches)

<table>
<thead>
<tr>
<th>Rafter Span (Feet)</th>
<th>Rafter Spacing Center-to-Center (Inches)</th>
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Table III Minimum Square Footing Sizes (Inches)

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<th>Post Spacing (Feet)</th>
<th>Rafter Span (In Feet)</th>
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FOOTINGS ON EXPANSIVE SOILS

Footing systems on expansive soil shall be constructed in a manner that will minimize damage to the structure from movement of the soil.

1. Depth of footings below the natural and finished grades shall not be less than 24 inches for exterior and 18 inches for interior footings.
2. Exterior walls and interior bearing walls shall be supported on continuous footings.
3. Footings shall be reinforced with four 1/2-inch diameter deformed reinforcing bars. Two bars shall be placed 4 inches from the bottom of the footing and two bars within 4 inches from the top of the footing.
4. Concrete floor slabs on grade shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3-1/2 inches thick and shall be reinforced with 1/2" diameter deformed reinforcing bars. Reinforcing bars shall be spaced at intervals not exceeding 16 inches each way.

5. The soil below an interior concrete slab shall be saturated with moisture to a depth of 18 inches prior to placing the concrete.

Table II Minimum Beam Size (Inches)

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Table IV 4 x Rafters

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<th>Maximum Span (Feet)</th>
<th>Maximum Spacing Center to Center (Inches)</th>
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DIRECTIONS for TABLES I thru IV:

1. Footings to extend 12" minimum into undisturbed soil.
2. Please indicate appropriate rafter, beam and footing size with a circle around the appropriate spacing and span numbers on each chart.

GENERAL NOTES:

1. Maximum span for 1-inch nominal solid sheathing is 24 inches.
2. 2-inch nominal solid sheathing will span 48 inches.
3. Plywood or OSB sheathing is to comply with Table No.R503.2.1.1(1), California Residential Building Code, for span index.

High or Very High Fire Severity Zones

Structures located in High or Very High Fire Severity Zones shall be of ignition-resistant construction. Roof Coverings to be Class A.