

This Information Bulletin describes the minimum requirements for obtaining patio cover permits for residential buildings using this information bulletin, International Code Council Evaluation Services (ICC-ES) reports, or designed using conventional light-frame wood construction. For clarification of the permit process, visit the Development Services Department, third floor, 1222 First Avenue, or telephone (619) 446-5000.

- I. DEFINITION
- A. Patio covers are one-story structures not more than 12 feet in height above grade and used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms.

B. Patio covers may be attached or detached and are permitted only as accessory to dwelling units such as one- or two-family dwellings or lodging houses or to individual dwelling units in multiple dwelling-unit buildings.

C. Patio covers must be open on one or more sides. (CBC Appendix I section 102 and 103).

- II. WHEN IS A PERMIT REQUIRED?
- Patio structures may extend over existing exterior wall openings.

2. Patio covers shall not be enclosed in any manner and shall remain open when exterior openings in an existing building provide access for emergency egress or rescue from sleeping rooms.

3. An enclosed patio structure is permitted if it covers exterior wall openings that only provide light and ventilation for the residents.

4. Openings surrounding patio covers may be enclosed by the following methods: (a) insect screening, (b) approved translucent or transparent plastic not more than 0.125 inches in thickness, (c) glass conforming to the provisions of Chapter 24, or (d) any combination of the noted methods.

5. Means of egress conforming to the requirements of Chapter 10 are to be provided from the enclosed patio

- Documents Referenced in this Information Bulletin
- California Residential Code (CRC)
  - San Diego Municipal Code (SDMC)
  - Project Submittal Manual
  - Information Bulletin 117, Regulations Covering Permit Expiration and Extension
  - Information Bulletin 123, Minimum Standards for Renewal of Roof Covering
  - Information Bulletin 501, Fee Schedule, Construction Permits - Structures
  - General Application, DS-3893

- structure.
6. Enclosure walls must have a clear height of not less than 6'-0" measured from the floor to the soffit of the supporting members.

7. Enclosure walls may have any configuration, provided the open or glazed area of the longer wall and one additional wall is equal to at least 65 percent of the area below a minimum of 6 feet 8 inches (2032 mm) of each wall, measured from the floor.

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DS-5206 (10-16)

(PIRD) permit.

Please telephone (619) 446-5000 to verify if the proposed location is in one of these areas.

A final inspection must be approved before the work is considered complete by the City of San Diego.

- III. YOUR OPTIONS FOR SERVICE
- Patio Cover permits may be obtained over-the-counter when using this information bulletin, ICC-ES evaluation reports or designed using conventional light-frame wood construction. All other projects shall be submitted for review. Refer to the Project Submittal Manual section 2A.

Appointments are recommended for over-the-counter plan review and submitted projects. Telephone (619) 446-5300 to schedule an appointment.

- IV. PROJECT FEES
- Fees which include Plan Check, Permit and Inspection are charged at initial review. For more information, refer to Information Bulletin #501.

- V. 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 2007 California Building Code, Zoning Ordinances, and all other relevant laws, ordinances, rules, and regulations. Zoning information is available at the Development Service Department, 1222 First Avenue, 3rd floor or call (619) 446-5000.

Plans have to be submitted because of customized design of the patio, provide three copies of plan documents. These plans should include a roof framing plan, foundation plan, elevations, cross-sections, connection details, and structural calculations.

- C. Floor Plan
- For patio covers within 6'-0" of a dwelling, include a floor plan and show the following information:

  - Use and dimensions of all rooms adjacent to the patio cover.
  - Size and type of all windows and doors from those rooms.

- D. Permit Application
- All projects must be submitted with a Permit Application. Instructions can be found on the reverse side of the application. If you intend to obtain your permit on the same day as plan review, the application must be fully completed.

Three copies of a site plan are required for a permit. You must include information

on each of the following items on the plot plan:

- Name of owner.
- Address and Accessor's Parcel Number, where the patio is to be built.
- Legal description of property.
- North arrow and scale. Suggested scale: 1 inch equals 20 feet.
- Boundaries and dimensions of property.\*
- Names of bordering streets.\*
- Width of alley(s), if any.\*
- Location and width of easements. Private easements should be shown on the property's deed.\*
- Location and dimensions of existing buildings, structures, retaining walls, paved parking, and driveways. Include distance from property lines.
- Location and dimensions of proposed patio.
- Existing survey hubs, pipes and similar permanently installed property line identification.

\*This information is available from the Records Section, (619) 446-5200.

- B. Foundation and Framing Plans
- Provide three copies if this information bulletin or (ICC-ES) evaluation reports approved plan available from your material supplier is used for the patio design.

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.

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**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. This information bulletin recommends that all patio structures be located at least 5 feet from assumed or real property lines.

Additional requirements of the building code related to fire separation distance, opening protection and parapet requirements may need to be addressed, based on the distance of the patio structure from real or assumed property lines. Such requirements include limitations on new and existing exterior wall openings of 25% of the wall area, fire protection ratings of supports and walls. Refer to CBC Tables 602 and 704.8.

- center;
4. The height of the roof of the patio shall not exceed the roof eave or the sill plate of the second floor, whichever is lower.

- F. Patio covers located in the environmental sensitive lands and brush management zones must comply with sections 143.0101 and 142.0412 of the SDMC.

- G. Structures located in a Very High Fire Hazard Severity Zone or Brush Management Zones, governed by the City of San Diego's Brush Management Ordinance, may need to meet additional fire protection requirements.

- VII. CONSTRUCTION SPECIFICATIONS
- Following are the minimum construction specifications for patio covers.

- 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. (CBC Section 2304.11).

- C. Post size is based on the height of the floor above the slab (at the highest point):

- D. The post anchorage and bracing details shown on the following sheets have been approved by the City of San Diego for unenclosed patio covers.

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 3. Decorative-type bracing may be substituted if the same resistance to lateral loading is provided.

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

- A. When the load on supporting post does not exceed 750 pounds per posts, a minimum 3 1/2-inch-thick concrete slab-on-grade may be substituted for the pad footings shown on the typical framing details. (CBC Appendix 104.2).

E. When it is desired to connect and support one side of the patio cover 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 3/8" x 5" lag screws spaced at 16" maximum on center. See Figure 7 and 8. Patio rafters may not be solely supported by the existing rafter tails or fascia of the house.

The size of the existing headers at openings adjoining the proposed patio covers may need to be verified base on the configuration of an existing building and the depth of the patio cover.

- F. Specify roof covering when submitting plans. If nominal one-half-inch-thick roof sheathing is used, the roof may have rafters spaced not more than 24" on center. Patio covers constructed of light-transmitting plastics shall comply with Sections 2505 and 2605 of the California Building Code and to the manufacturer's installation instructions. 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. Framing hardware and fasteners shall be hot-dipped galvanized or stainless steel if in preservative-treated wood. (CBC 2304.5.5).

- VIII. 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. Refer to Information Bulletin 117, Regulation Covering Permit Expiration and Extension, for more information.

- A. When footing has been excavated but before concrete is placed,

- B. When ledgers are attached to an existing structure, and

- C. When work is complete.

**Note:** The project is not legally complete until there is an approved final inspection. Call (858) 581-7111 to schedule inspections.

- IX. 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 (repetitive member use):  
F<sub>v</sub> = 900 psi  
F<sub>c</sub> = 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)*													Table B/Minimum Rafter Sizes (Inches) <sup>1,2</sup>				
Post Spacing (Feet)	Rafter Span (Feet) <sup>1,2</sup>												Rafter Span (Feet)	Rafter Spacing (Center-to-Center) (Inches) <sup>1,2</sup>			
	6	8	10	12	14	16	18	20						12" sheathing	16" sheathing	24" sheathing	32" sheathing
4	5	5	5	5	5	5	5	5	6	2x4	2x4	2x4	2x4	2x4	2x4	2x4	2x4
6	5	5	5	5	5	5	5	5	7	2x4	2x4	2x4	2x4	2x4	2x4	2x4	2x4
8	12	12	12	12	12	14	14	14	8	2x4	2x4	2x6	2x6	2x6	2x6	2x6	2x6
10	12	12	12	14	14	14	16	16	9	2x4	2x6	2x6	2x6	2x6	2x6	2x6	2x6
12	12	12	14	14	16	16	18	18	10	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6
14	12	12	14	16	16	18	18	20	11	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6
16	12	14	14	16	18	18	20	20	12	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6
18	12	14	16	18	18	20	20	22	13	2x6	2x6	2x8	2x8	2x8	2x8	2x8	2x8
20	14	14	16	18	20	20	22	24	14	2x6	2x6	2x8	2x8	2x8	2x8	2x8	2x8
									15	2x6	2x8	2x8	2x8	2x10	2x10	2x10	2x10
									16	2x6	2x8	2x8	2x8	2x8	2x8	2x10	2x10
									17	2x8	2x8	2x10	2x10	2x10	2x10	2x10	2x10
									18	2x8	2x8	2x10	2x10	2x10	2x10	2x10	2x10
									19	2x8	2x10	2x10	2x12	2x12	2x12	2x12	2x12
									20	2x8	2x10	2x10	2x12	2x12	2x12	2x12	2x12

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

<sup>1</sup> 12" Patio supported on a concrete slab on grade without footings.

<sup>2</sup> Assume reinforcing bar size #4 top and bottom, rebar yield F<sub>y</sub> 60 ksi

<sup>3</sup> Deflection based on U360 (LL only)  
Load Duration Factor = 1.35.

Table C/Minimum Beam Sizes (Inches)													Span of Rafters (in Feet) <sup>1,2</sup>				
Post Spacing (Feet)													4	6	8	10	12
	4	6	8	10	12	14	16	18	20								
4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4
6	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4	4x4
8	4x4	4x4	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6
10	4x4	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6
12	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6	4x6
14	4x6	4x6	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8
16	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8	4x8
18	4x8	4x8	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
20	4x8	4x10	4x10	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12	4x12
	4x8	4x8	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10

<sup>1</sup> If joists are within 18 inches of grade, use pressure-treated, Douglas fir-larch or Foundation-Grade redwood.

<sup>2</sup> CAPS (LL) based on U360 (LL only).

<sup>3</sup> Load Duration Factor = 1

Figure 1 / Sample Patio Site Plan

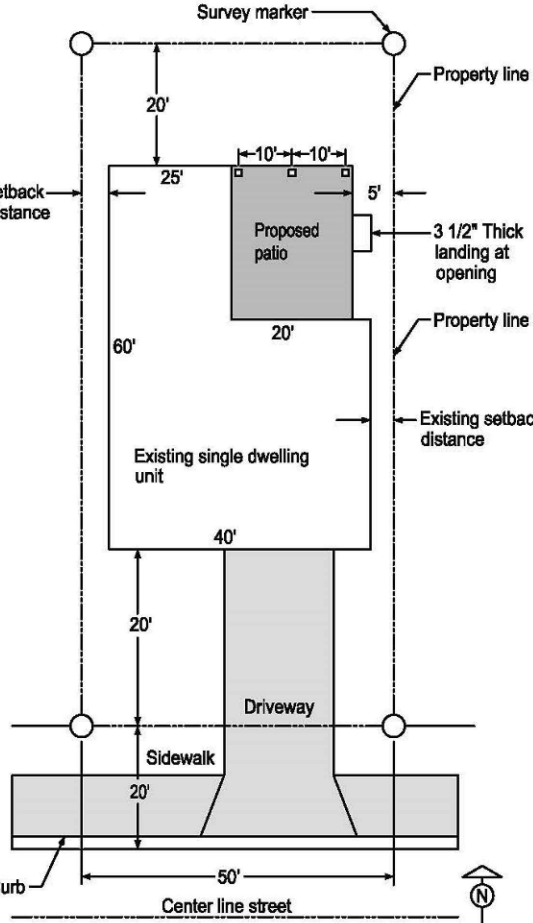


Figure 2 / Typical Patio

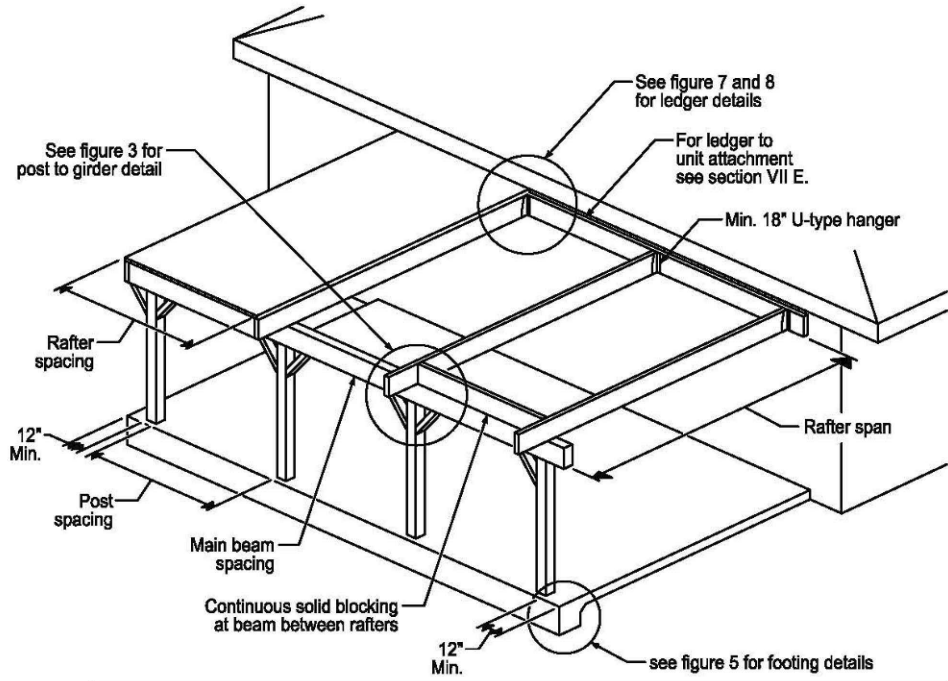


Figure 3 / Post-to-Girder Connection

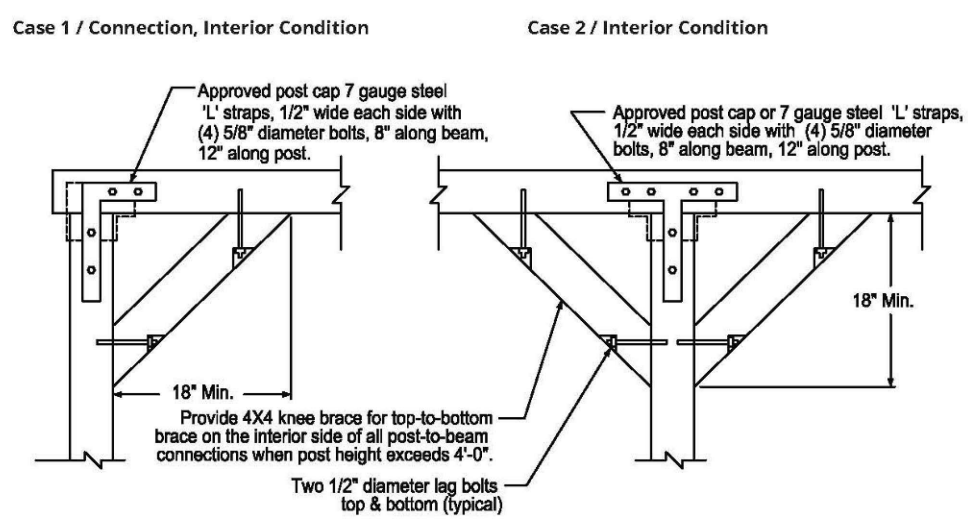
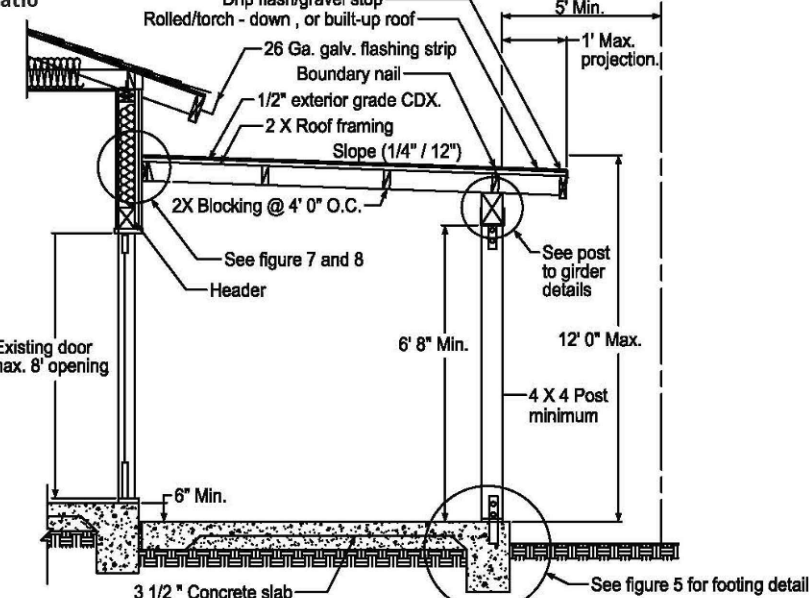
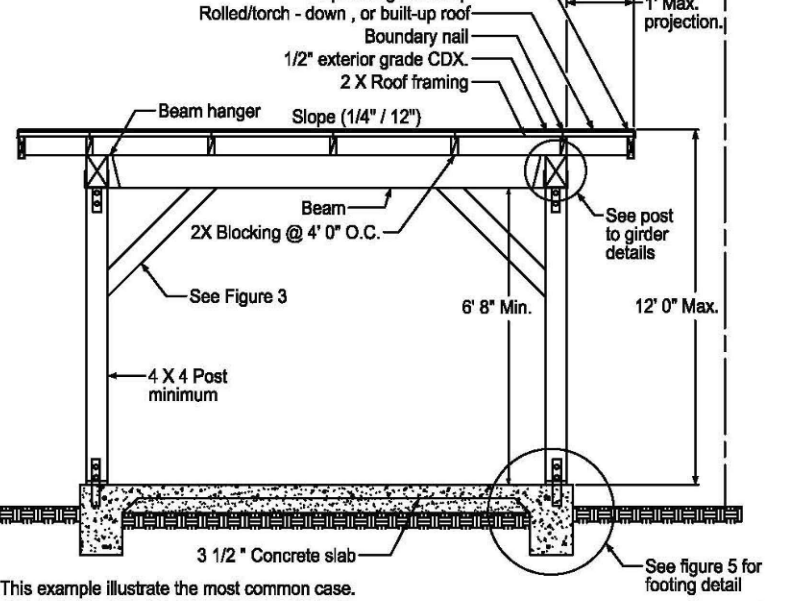


Figure 4/ Section View of Patio A / Attached Patio



B / Detached Patio



Note: This example illustrates the most common case.

WOOD PATIO COVERS IN AREAS WITHIN VERY HIGH FIRE HAZARD SEVERITY ZONES OR CITY OF SAN DIEGO BRUSH MANAGEMENT ZONES MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS

Figure 5 / Typical Footing Details

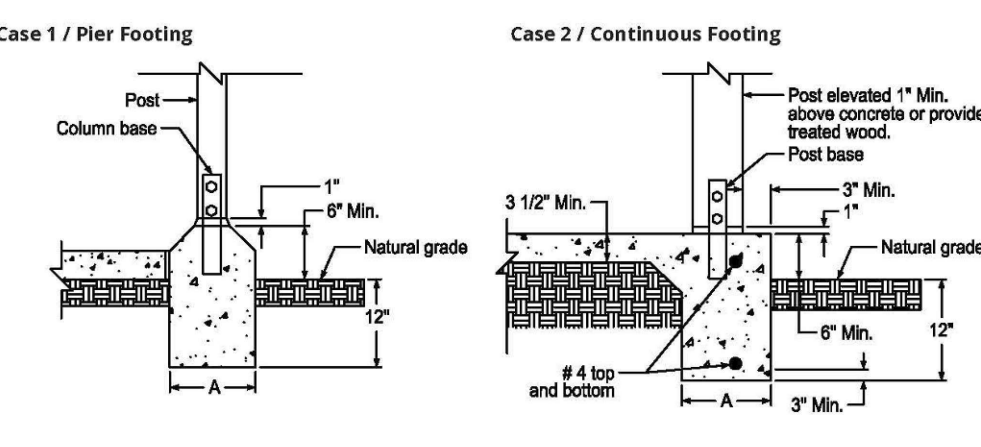
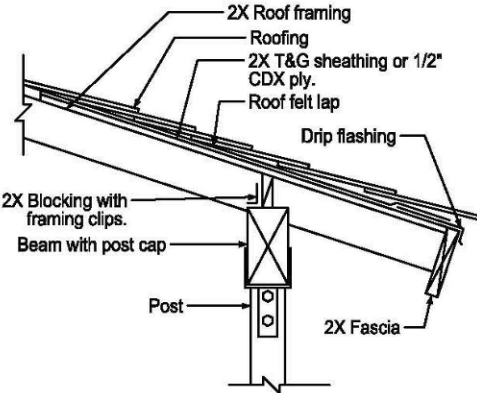


Figure 6 / Typical Eave Detail



WOOD CARPORTS IN AREAS WITHIN VERY HIGH FIRE HAZARD SEVERITY ZONES OR CITY OF SAN DIEGO BRUSH MANAGEMENT ZONES MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS

Figure 7 / Typical Rafter Attachment Details

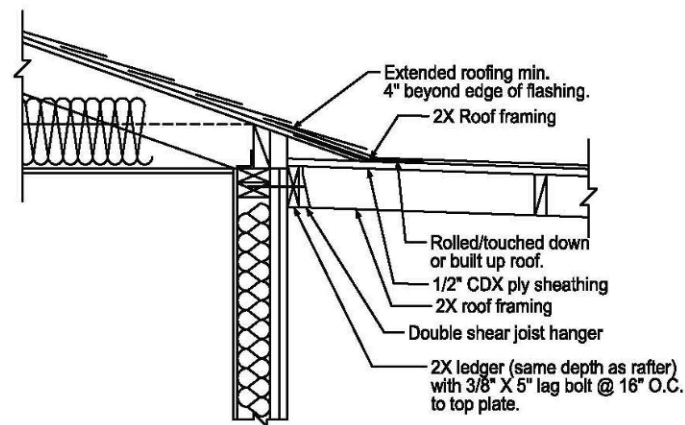
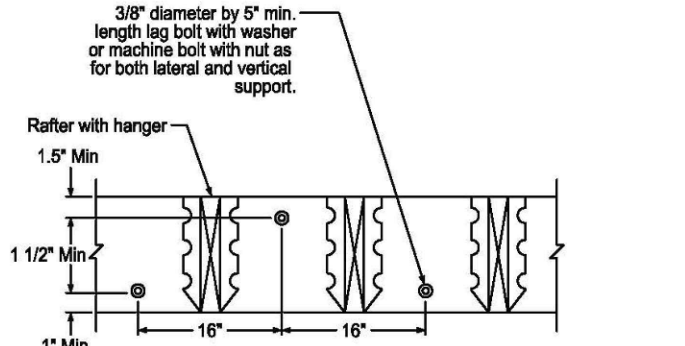


Figure 8 / Typical Ledger Details



WOOD PATIO COVERS IN AREAS WITHIN VERY HIGH FIRE HAZARD SEVERITY ZONES OR CITY OF SAN DIEGO BRUSH MANAGEMENT ZONES MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS

SHEET: PATIO COVER - INFO BULLETIN 206  
PROJECT NAME:  
ADDRESS:

SHEET \_\_\_\_ OF \_\_\_\_  
PRJ-

CITY APPROVAL STAMP

CS-05