

City of Anderson Development Services Division

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Attached Patio Cover Worksheet

Information Bulletin

BP-01

Eff. 06-05-2018

Attached Patio Cover Worksheet

June 2018

General

Purpose

The sample illustrations show how an <u>attached</u> unenclosed patio structure may be built utilizing the <u>2016 California Residential Code (CRC) & 2016 California Building Code (CBC)</u> "Conventional Light Wood-Frame Construction Guidelines". The conventional method allows "repetitive" members in the designs of walls, floors and ceiling, are prescriptive, and ordinarily do not require a structural design to comply with the code. For information regarding plan submittals and specific design limitations for residential patio covers refer to Policy & Procedure No. BP-04 "Plan Submittal for Patio Covers and Similar Accessory Buildings (Sheds • Arbors • Trellises).

Design Provisions

Patio Cover Limitations

The following patio cover illustrations are only applicable in residential dwellings classified as R-3 Occupancies.

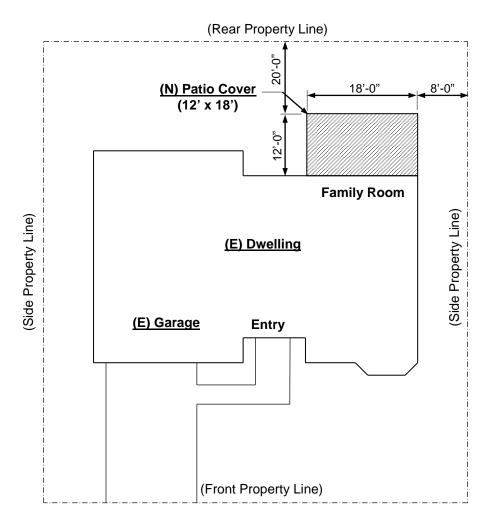
Patio covers are <u>not</u> designed or intended to be used as room additions which require compliance with code provisions such as heating, waterproofing, and normal live and wind loads. Furthermore, patio covers cannot always be converted to complying room additions.

What information is needed to obtain a building permit?

Included in the plan submittal should be the following information which clearly depicts the proposed patio cover construction and its relationship to the entire lot. Information such as the size and spacing of all framing members; attachment detail to the exterior wall; roof covering material, connection specifications for beam to post, and for post to footing, etc.

If the patio structure consists of a simple design complete the **site plan** on page 6 (see example on page 2). You may refer to the tables on pages 4 and 5 and **highlight** proposed structural members for allowable size & spacing. Otherwise, a structural analysis/evaluation may be required by a professional engineer licensed in the State of California for the design of structures of unusual shape and/or structures supporting tile roofing materials (i.e., cellulose, cement).

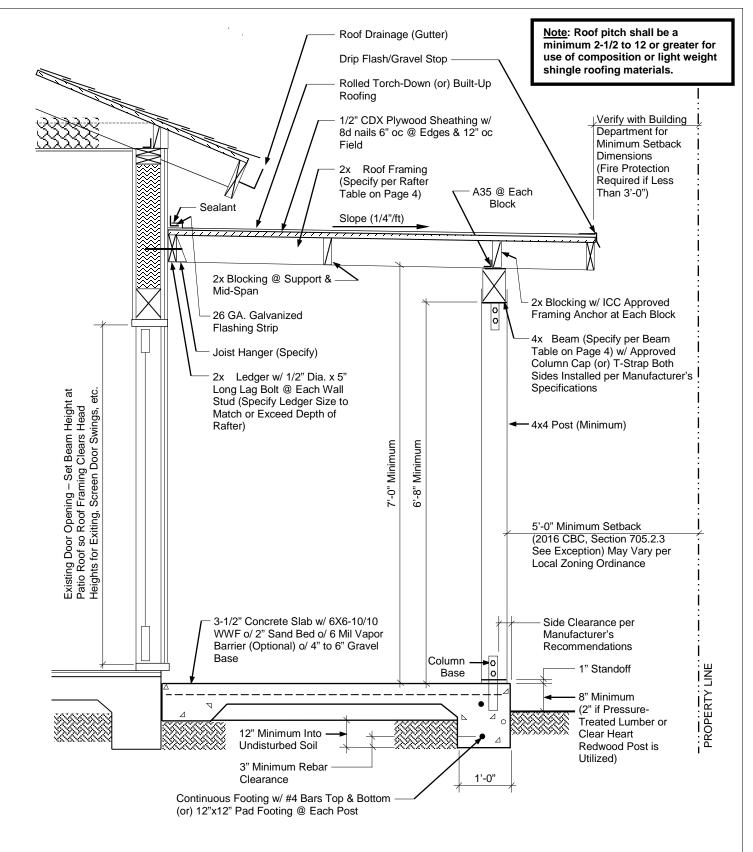
- Site Plan
- Elevation(s)
- Roof Framing
- Cross-Section
- Framing Details



Pleasant Street

Mr. & Mrs. Right 100 Pleasant Street, Anderson, CA A.P.N. 00-100-2000 Scope of Work: New Attached 12'x18' Patio Cover Designed by *Ideal Patios*

Site Plan Scale: 1" = 20'-0"



<u>Cross-Section</u>
(Refer to Tables on Page 4 for Member Sizes)

ALLOWABLE SPANS FOR DF #2 ROOF RAFTERS

Dead Load = 10 psf & Includes Maximum Roofing Material Load = 6 psf (Built-up or Composition Shingle Roofing) Live Load = 20 psf

ALLOWABLE SPANS FOR DF #2 CEILING JOISTS

Dead Load = 10 psf Live Load = 10 psf

RAFTER SIZE	SPACING	ALLOWABLE SPAN	JOIST SIZE	SPACING	ALLOWABLE SPAN
	24"	10'-6"	00:0: 0:==	24"	7'-9"
2x6	16"	12'-3"	2x4	16"	8'-11"
	12"	13'-6"		12"	9'-10"
	24"	14'-0"		24"	12'-3"
2x8	16"	16'-0"	2x6	16"	14'-9"
	12"	17'-9"		12"	15'-5"
	24"	18'-0"		24"	15'-9"
2x10	16"	20'-7"	2x8	16"	18'-6"
	12"	22'-8"		12"	20'-4"
	24"	21'-4"		24"	19'-3"
2x12	16"	25'-0"	2x10	16"	23'-6"
	12"	27'-7"		12"	26'-0"

Type V construction is a classification of buildings by construction materials and methods. It is the least restrictive permitted by the 2016 California Residential Code (CRC) and includes light wood-frame construction. This sheet is for information and reference only and is not a substitute for accurate drawings prepared for each proposed construction project.

ALLOWABLE SPANS FOR BEAMS w/o CEILING

Based on Maximum Tributary = 10'-0" (Span = 20'-0")

SPAN	BEAM SIZE
Up to 5'-4"	4x4
5'-5" to 7'-9"	4x6
7'-10" to 10'-6"	4x 8
10'-7" to 12'-9"	4x10
11'-10" to 15'-0"	4x12*

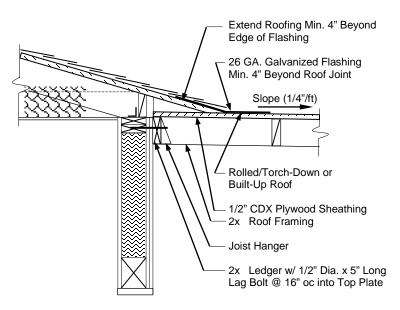
^{*4}x12 DF #1 may be used over a 16'-0" garage door in onestory open patio or carport structures.

ALLOWABLE SPANS FOR BEAMS w/ CEILING

Based on Maximum Tributary = **10'-0**" (Span = 20'-0")

SPAN	BEAM SIZE
Up to 4'-8"	4x4
4'-9" to 6'-10"	4x6
6'-11" to 9'-0"	4x 8
9'-1" to 11'-0"	4x10
11'-1" to 13'-0"	4x12*

^{*}For spans greater than the table values, engineered calculations are required.



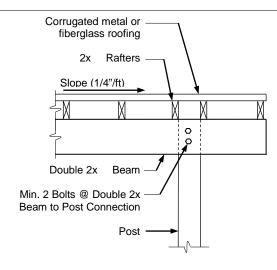
Alternate Connection Detail

(Typical for Patio Covers)

ALLOWABLE SPANS FOR DF #2 ROOF RAFTERS

Dead Load = **5** psf & Includes Maximum Roofing Material Load = **2** psf (Light Corrugated/Fiberglass Roofing or Lattice) Live Load = **10** psf

RAFTER SIZE	SPACING	ALLOWABLE SPAN
	24"	8'-6"
2x4	16"	9'-10"
	12"	10'-10"
	24"	13'-6"
2x6	16"	15'-5"
	12"	17'-0"
	24"	17'-9"
2x8	16"	20'-4"
	12"	22'-5"
	24"	22'-8"
2x10	16"	26'-0"
	12"	28'-7"

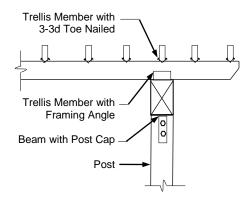


Patio Cover Detail (w/ Light Roof Covering)

ALLOWABLE SPANS FOR DF #1 BEAM

Based on Maximum Tributary = 10'-0" (Span = 20'-0")

SPAN	BEAM SIZE
Up to 6'-9"	4x4
6'-10" to 10'-0"	4x6
10'-1" to 13'-3"	4x 8
13'-4" to 16'-3"	4x10
11'-1" to 19'-0"	4x12



Trellis Detail

Rear Property Line

Front Property Line