

**CITY OF WINNEMUCCA BUILDING DEPT.
PATIO COVER HANDOUT**

It is the owner or contractor's responsibility to become familiar with the adopted code requirements. Patio covers shall only be used for recreational outdoor use and not for carports, garages, storage, or habitable rooms. The following are the minimum plan requirements:

1. **Site plan.** Indicate the location of the patio cover, distance to other buildings, and distance to property lines (contact the Planning Dept. at 623-6392 for setback requirements).

2. _____ Width _____ Headroom between walking surface and beams)
_____ Length _____ Height to eave (max. 10')

3. Approved foundation

- A. 18"x18"x24" footing _____
- B. Pressure treated posts buried 3 feet _____
- C. It **may** be possible for a patio cover complying with this handout to be supported on a minimum 3½" concrete slab without footings providing the columns (posts) support a load of less than 750 lbs. per column (spans are generally very small). Provide calculation. _____
- D. Code complying deck construction. _____

4. Posts

- A. Posts shall be pressure treated if in contact with the earth or concrete; or specify model of post base with standoff _____
- B. Size of posts _____
- C. Distance between posts _____

5. Headers (See attached header schedule)

- A. Required header size _____
 - B. Specify positive connection between posts and headers _____
- NOTE: If using engineered headers (versalams, LVL's, etc.) the headers must be protected from the weather. This requires total encasement of the header with weatherproof materials.**

6. Rafters (See attached rafter schedule)

- A. Size, spacing and span of rafters _____
- B. Specify positive connection between rafters and headers _____

7. Roofing

- A. Type of roofing _____
 - B. Roof pitch _____
- Note. Asphalt shingles cannot be used as a roof covering if the roof pitch is less than 2:12

8. Attached or free-standing. Specify: _____
NOTE: Attachment to the structure is **only** allowed as follows:

A. Stick built house. No support is permitted from the ends of the eaves or ends of trusses. Specify attachment, including ledger board size and lag size: _____

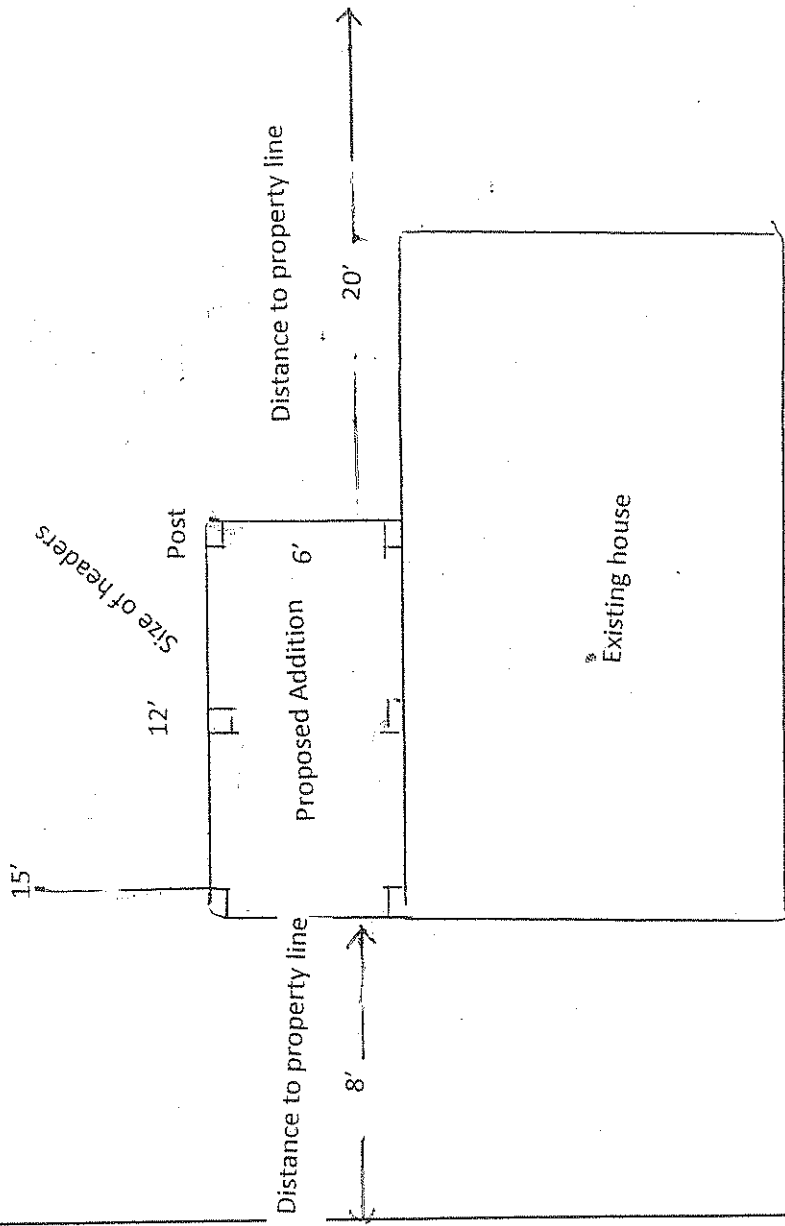
B. Mobile home, manufactured homes, trailers. The patio cover may not be attached to the structure unless the following criteria is met:

1. A building or patio cover cannot be attached to a manufactured home that is under warranty, unless a letter of approval is provided by the manufacturer.
2. The walls of the manufactured home must be supported on a full foundation. The owner shall provide evidence of support, **and**
3. The walls of the manufactured home shall be a minimum of 2 x 4 @ 24" o.c., **and**
4. Ledgers to the wall of the manufactured home shall be attached with 1/4" lag bolts attached to each stud, **and**
5. No support is permitted from the ends of the eaves or ends of trusses of the manufactured home, **and**
6. The manufactured home must meet real property conversion standards to allow a load to be added to the mobile home.
7. Singlewide's typically will not be permitted to add load to the manufactured home unless a Nevada Engineer's stamped drawing is submitted.
8. Plans are required for overbuild projects. Construction of overbuilds, which hip back onto the manufactured home roof must comply with the following:
 - a. Trusses of the manufactured home roof shall be a min. of 2 x 4 or 30lb roof.
 - b. Home must support on a full foundation.
 - c. A minimum of 1/2 the load of the overbuild shall be cantilever type construction, which distributes most of (or at least 1/2) the load back to the new patio covers support members.
 - d. Size of the overbuild may also affect the requirement for engineering.
 - e. As an alternative to the above plans may be wet stamped by a NV. Engineer.
9. A lightweight metal/aluminum premanufactured patio cover less than 1 pound per square foot (no wood rafters or headers) can be supported on a manufactured home (max. 12' in height). Provide manufactures spec sheet specifying weight.

GENERAL NOTES:

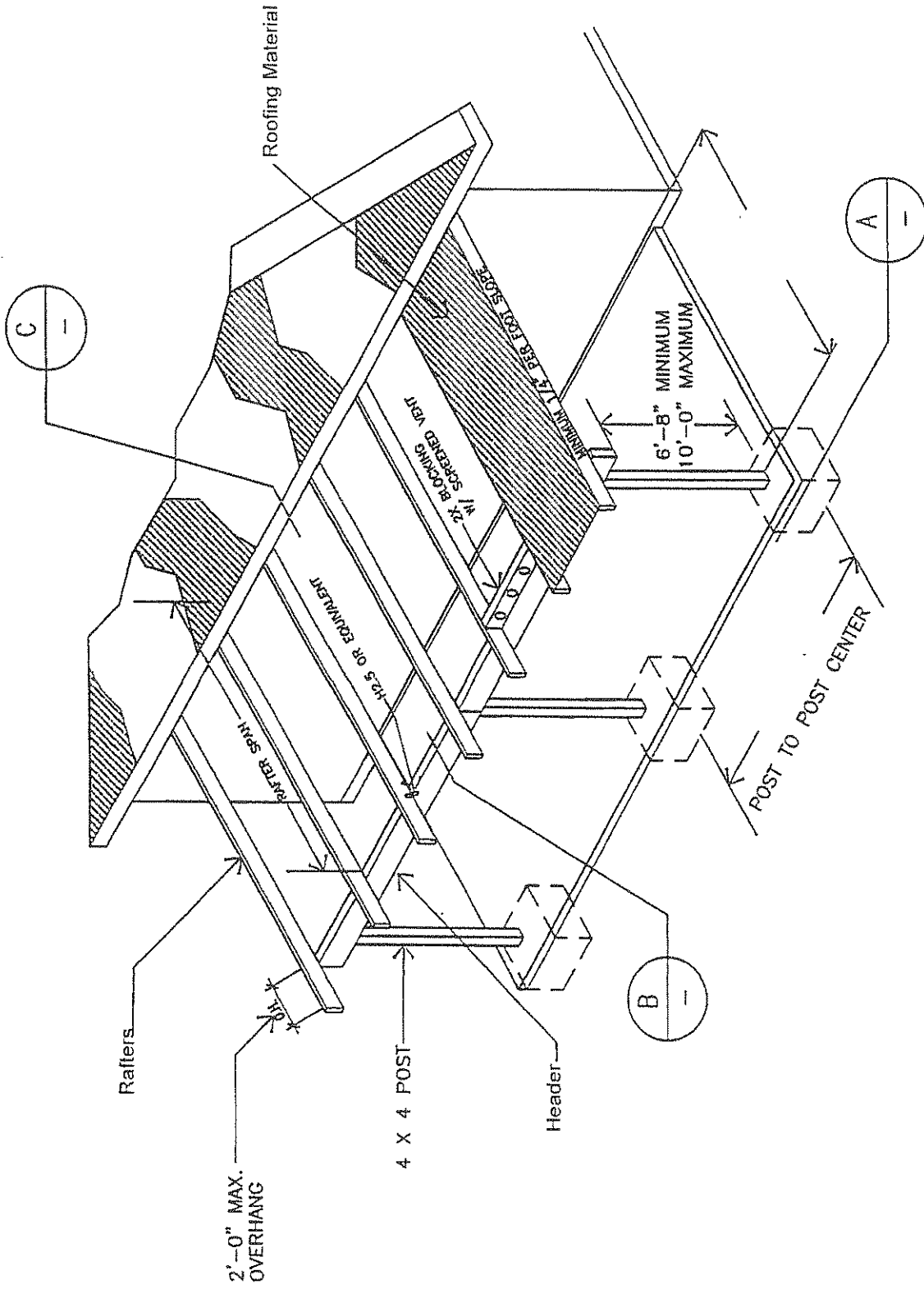
1. Patio cover shall not support on a manufactured home unless the above criteria is met.
2. If electrical is installed or relocated a permit is required. All work shall comply with the latest adopted edition of the National Electrical Code.
3. Building pads shall have a drainage gradient of 6" in the first 10' away from the patio cover.
4. A permit is required if, in the future, you enclose the patio cover for a porch, sunroom, or addition. If the enclosure is more than 150 square feet, a full foundation with footings placed below frost depth (24" below grade) will be required. Egress windows from the existing bedrooms are required to open directly outside. Plan accordingly for this requirement when designing your carport/future garage.

Provide a site plan showing the dimensions of your project or additions and its relationships to existing buildings or structures on the property and the distance to property lines.



On the site plan indicate details such as post locations and spacing, joist and beam spans, and any other pertinent information.

Name of Street



PATIO COVER

Single Family Residential Patio Covers & Carports

Directions

Address: _____

1. Fill in the blanks with dimensions and materials which will be used to build the structure. Please print legibly.
2. Indicate in the check boxes which details from page 3 will be used. Please note if any of the sides of your carport addition are closer than 5'-0" to the property line, that side of the carport must be enclosed with a solid 1 hour fire rated wall as shown in Alternate Details B and C. You must however, keep at least two sides of the carport open to conform to the building code requirements. Zoning approval is required.
3. Roofing to be installed per manufacturer's instructions, including low slope application and required inspections made.

Roof covering _____
(example: Class A 3 tab shingles)

Underlayment _____
(example: 15# felt with 19" laps)

Size and Amount of Lags _____
(example: Two 1/2"x 4 1/2" lags @ 16" O.C.)

Sheathing _____
(example: 1/2" exterior plywood)

12 pitch _____

2x _____ rafters spaced _____" O.C.
(example: 2 x 8 rafters spaced 24" O.C.)

Note: Walls, posts, and overhang closer than 5' to be 1hr. rated

No closer than 2 feet to property line

Beam splices to occur over posts with 1 1/2" bearing

() "x () "beam
(example: (2) 2"x10")

Span _____
(example: 12' 0")

Siding _____
(for Alternate B only)

"x" posts spaced _____ apart
(example: 4"x4" spaced 6')

Footing _____ "x" _____"
(for Alternate C only)

Patio Section

Existing building

Span

Maximum rise 7 3/4" at top of door threshold

Slope

Concrete Slab

Overhang

6'-8" minimum

Check one: Detail A Alternate A (see page 3)

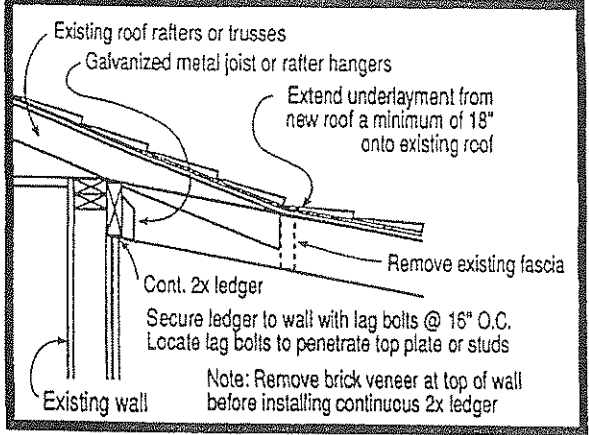
Check one: Detail B Alternate B (see page 3)

Check one: Detail C Alternate C (see page 3)

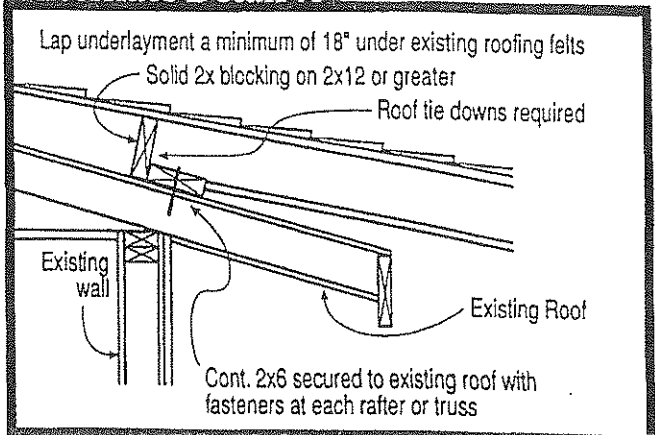
Manufactured Homes: Post are required against the MH unless a full perimeter foundation is provided. The patio cover cannot hip back on to the MH unless the MH has a 30 lb roof load.

Single Family Residential Patio Covers & Carports

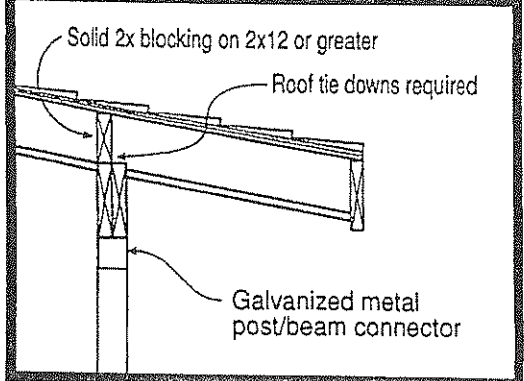
Detail A



Alternate Detail A



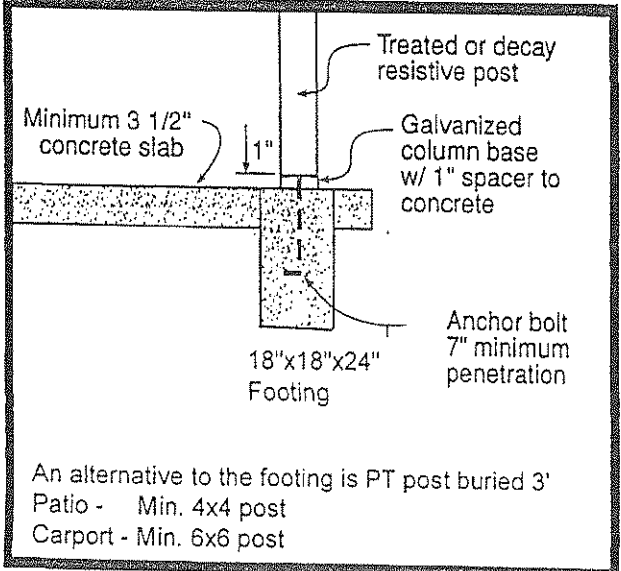
Detail B



Note: Rafters shall not be hung off existing fascia/ truss tails. They shall be installed:

1. by the use of a ledger
2. installed on the top of the existing wall
3. post & header against existing wall.

Detail C



HEADER SCHEDULE

LOAD BEARING EXTERIOR HEADERS-ROOF & CEILING ONLY (IRC TABLE R502.5(1))

BUILDING WIDTH						
	20'		28'		36'	
Size	Span	# of Jack Studs	Span	# of Jack Studs	Span	# of Jack Studs
2-2x4	3'6"	1	3'2"	1	2'10"	1
2-2x6	5'5"	1	4'8"	1	4'2"	1
2-2x8	6'10"	1	5'11"	2	5'4"	2
2-2x10	8'5"	2	7'3"	2	6'6"	2
2-2x12	9'9"	2	8'5"	2	7'6"	2
2-2x8	8'4"	1	7'5"	2	6'8"	2
3-2x10	10'6"	1	9'1"	2	8'2"	2
3-2x12	12'2"	2	10'7"	2	9'5"	2
4-2x8	9'2"	1	8'4"	1	7'8"	1
4-2x10	11'8"	1	10'6"	1	9'5"	2
4-2x12	14'1"	1	12'2"	2	10'11"	2

LOAD BEARING INTERIOR HEADERS-ROOF & CEILING ONLY (IRC TABLE R502.2(2))

BUILDING WIDTH						
	20'		28'		36'	
Size	Span	# of Jack Studs	Span	# of Jack Studs	Span	# of Jack Studs
2-2x4	3'1"	1	2'8"	1	2'5"	1
2-2x6	4'6"	1	3'11"	1	3'6"	1
2-2x8	5'9"	1	5'0"	2	4'5"	2
2-2x10	7'0"	2	6'1"	2	5'5"	2
2-2x12	8'1"	2	7'0"	2	6'3"	2
3-2x8	7'2"	1	7'7"	2	6'9"	2
3-2x10	8'9"	1	7'7"	2	6'9"	2
3-2x12	10'2"	2	8'10"	2	7'10"	2
4-2x8	9'0"	1	7'8"	1	6'9"	1
4-2x10	10'1"	1	8'9"	1	7'10"	2
4-2x12	11'9"	1	10'2"	2	9'1"	2

SPANS FOR MIN. #2 GRADE SINGLE HEADER SUPPORTING ROOF & CEILING ONLY (IRC TABLE R602.7.1)

BUILDING WIDTH			
	20'	28'	36'
2x8	5'3"	4'6"	4'0"
2x10	6'8"	5'8"	5'1"
2x12	8'1"	6'11"	7'2"

See IRC or header handout for construction of single header

RAFTER SPAN TABLES
2012 INTERNATIONAL RESIDENTIAL CODE

Rafter Spans for Douglas Fir-Larch #2 – Ceiling not attached to rafters (R802.5.1(1))

Rafter Spacing	2x6	2x8	2x10	2x12
12" o.c.	16'7"	21'	25'8"	*
16' o.c.	14'4"	18'2"	22'3"	25'9"
19.2 o.c.	13'1"	16'7"	20'3"	23'6"
24" o.c.	11'9"	14'10"	18'2"	21'0"

*Span exceeds 26 feet in length

2x4's can be used in limited situations with reduced span; higher slope; light roof covering. Table cannot be used to determine rafter sizes for tile or other heavy roof coverings.

Rafter Spans for Douglas Fir-Larch #2 – Ceiling attached to rafters (R802.5.1(2))

Rafter Spacing	2x6	2x8	2x10	2x12
12" o.c.	15'6"	20'5"	25'8"	*
16' o.c.	14'1"	18'2"	22'3"	25'9"
19.2 o.c.	13'1"	16'7"	20'3"	23'6"
24" o.c.	11'9"	14'10"	18'2"	21'

*Span exceeds 26 feet in length

2x4's can be used in limited situations with reduced span; higher slope; light roof covering. Table cannot be used to determine rafter sizes for tile or other heavy roof coverings.

Rafter Ties:

Where ceiling joists are not parallel to rafters, the rafters shall be tied to 2"x4" minimum size rafter ties and installed in accordance with the connection requirements in Table R802.5.1(9) or connections of equivalent capacities will be provided. (R802.3.1)

Collar Ties:

Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space in accordance with Table R602.3(1). Collar ties shall be a minimum of 1"x4", spaced not more than 4 feet on center. (R802.3.1.)