

CITY OF WINNEMUCCA BUILDING DEPT.
CARPORT HANDOUT
2012 International Residential Code

This handout is for a structure open on two or more sides used for parking vehicles on residential property. **YOU MUST SUBMIT A CONSTRUCTION DRAWING (DO NOT JUST FILL IN THE BLANKS).**

The following are the minimum plan requirements:

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

2. _____ Width _____ Length _____ Eave Height (max. 10')

3. Approved foundation

A. 18"x18"x24" (square) or 22" diameter x 24" (round) sonatube footing with post connectors _____

B. Pressure treated posts buried 3 feet _____

4. Posts

A. Posts shall be pressure treated if within 8" of exposed earth or 1" of concrete;

B. Specify model of post base (unless buried 3') _____

C. Size of posts (min. 6"x 6") _____

D. Distance between posts _____

E. Height of post _____

5. Headers (see attached table)

A. Required header size _____

B. Specify positive connection between posts and headers _____

NOTE: If using engineered headers (verslams, 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 span tables)

A. Size, spacing and span of rafters; or premanufactured truss _____

B. Specify positive connection between rafters and headers _____

C. Ridge board size (if applicable) _____

7. Roofing

A. Type of roofing and sheathing _____

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.** No support is permitted from the ends of the eaves or ends of trusses. Specify attachment, including ledger board size and lag size and spacing on plans.

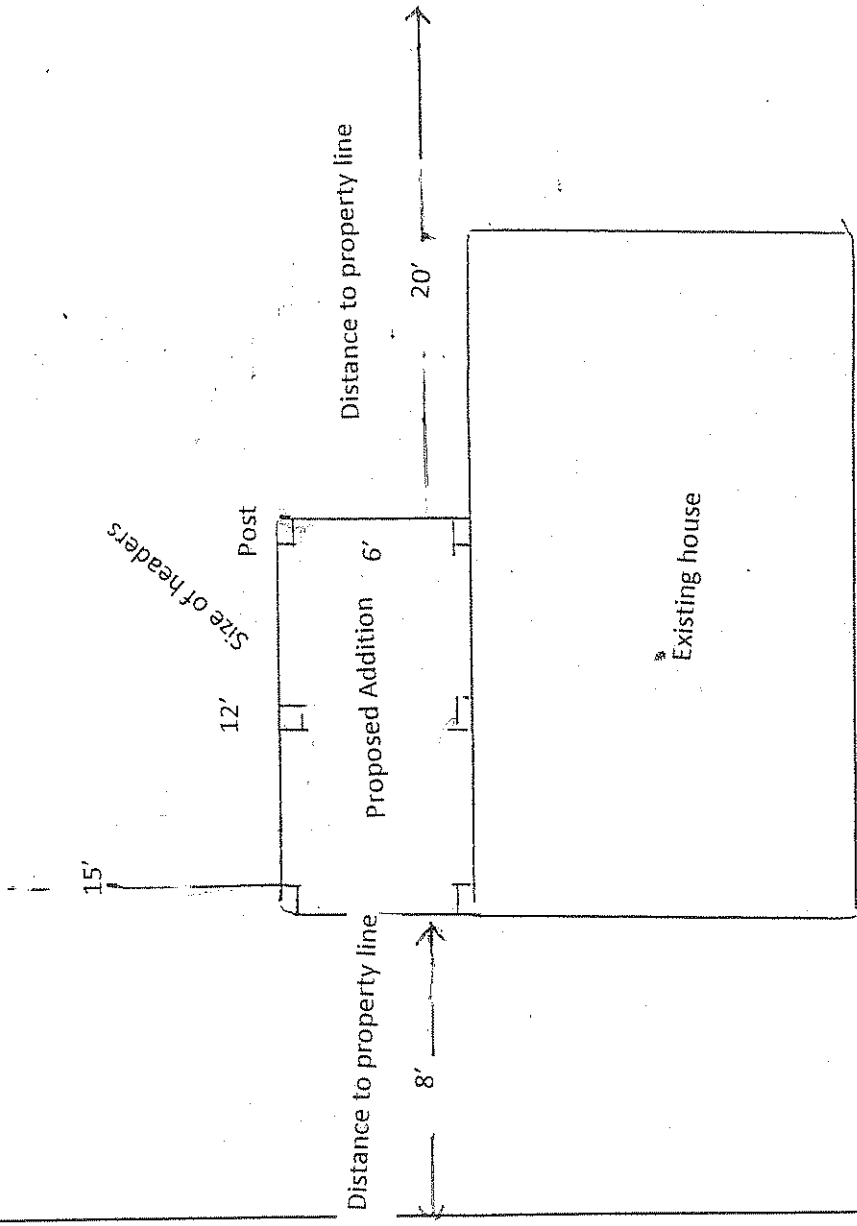
B. **Mobile home, manufactured homes, trailers.** **The carport may not be attached to the structure unless the following criteria is met.**

1. The walls of the manufactured home must be supported on a full foundation. The owner shall provide evidence of support, **and**
2. The walls of the manufactured home shall be a minimum of 2 x 4 @ 24" o.c., **and**
3. Ledgers to the wall of the manufactured home shall be attached with 1/4" lag bolts attached to each stud, **and**
4. No support is permitted from the ends of the eaves or ends of trusses of the manufactured home, **and**
5. The manufactured home must meet real property conversion standards to allow an added load onto the manufactured home.
6. Single wide's typically will not be permitted to add load to the manufactured home unless a Nevada Engineer's stamped drawing is submitted.
7. Plans are required for roof 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 carport's support members.
 - d. Size of the overbuild may also affect the requirement for engineering.
 - e. As an alternative, the plans may be wet stamped by a NV. Engineer.
8. A lightweight metal/aluminum premanufactured carport 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.
9. Egress windows must be maintained from existing bedrooms in a manufactured home.
10. Two exits are required from the manufactured home and must be maintained.

GENERAL NOTES:

1. The carport 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 carport.
4. A permit is required if, in the future, the carport is enclosed into a garage. A firewall may be required depending on the distance of the garage to the residence. Be aware that no windows are allowed in the firewall of the garage. Egress windows from existing bedrooms are required to open directly to the outside. Plan accordingly for this requirement when designing your carport/future garage. Additional foundation/footings may also be required if converting a carport to a 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.

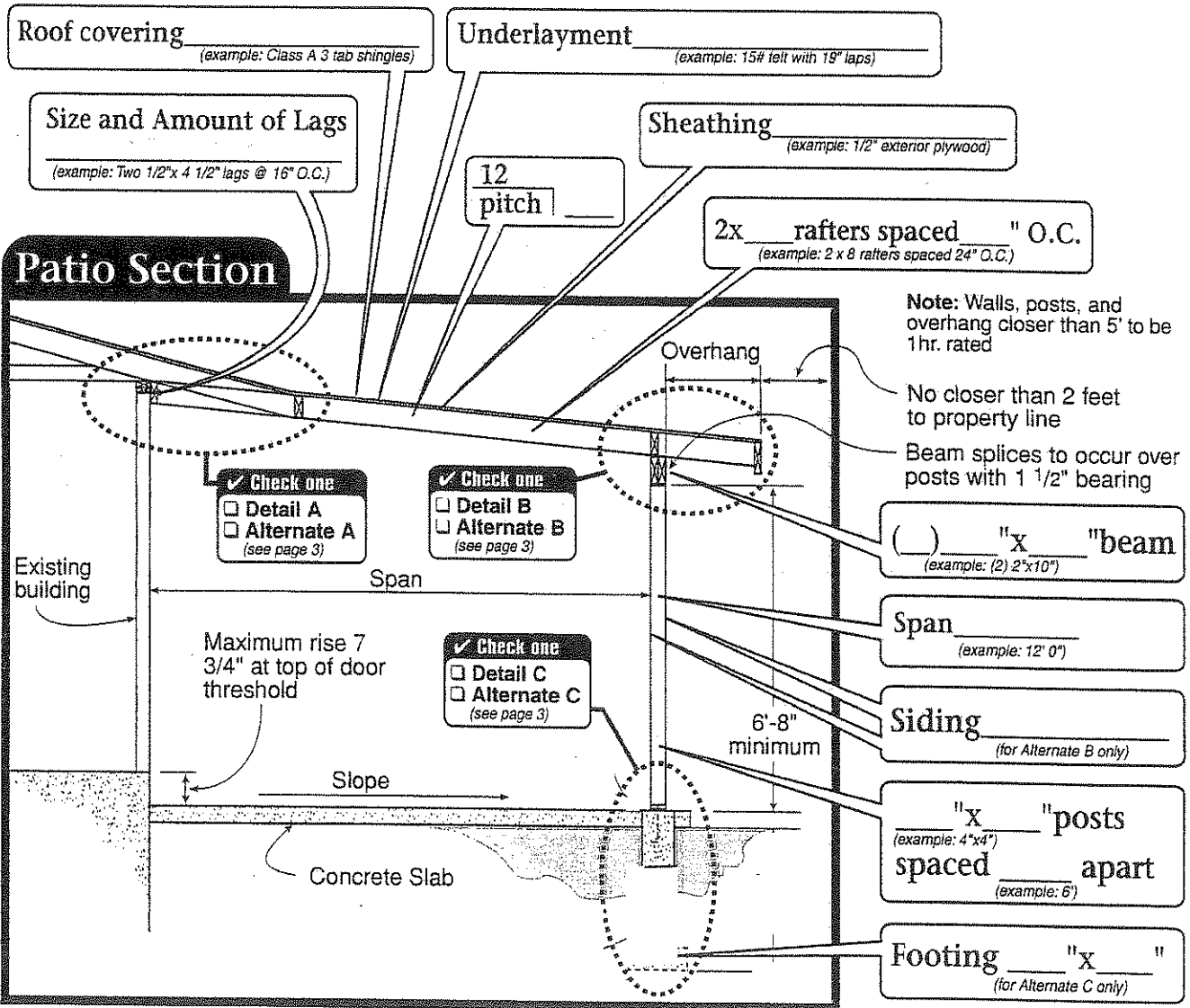
Name of Street

Single Family Residential Patio Covers & Carports

Directions

Address: _____

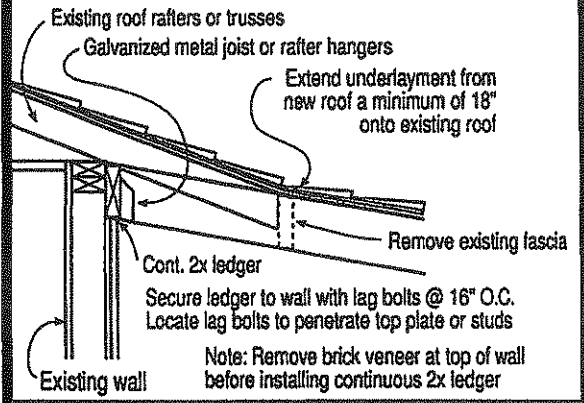
1. Fill in the blanks with dimensions and materials which will be used to build the structure. Please print legibly.
2. Indicate in the check boxes which details from page 3 will be used. Please note if any of the sides of your carport addition are closer than 5'-0" to the property line, that side of 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.



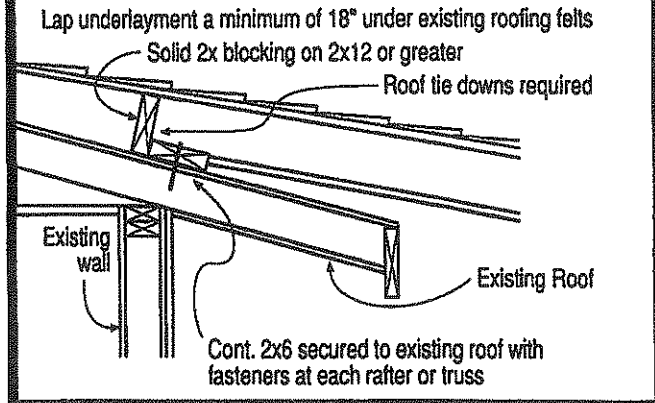
Manufactured Homes: Post are required against the MH unless a full perimeter foundation is provided. The patio cover cannot hip back on to the MH unless the MH has a 30 lb roof load.

Single Family Residential Patio Covers & Carports

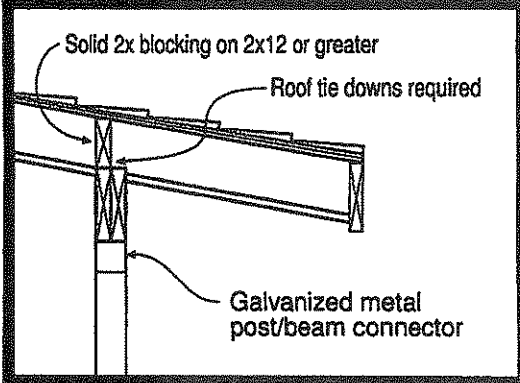
Detail A



Alternate Detail A



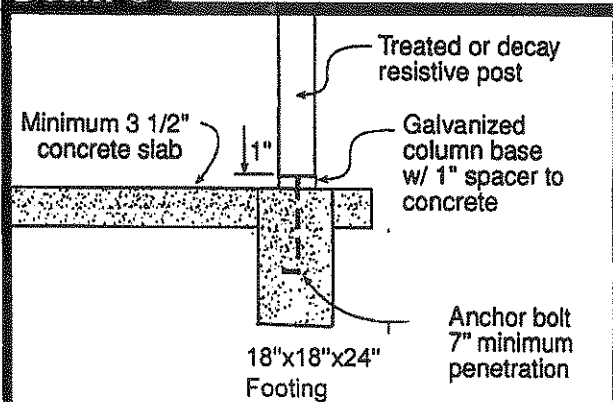
Detail B



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



An alternative to the footing is PT post buried 3'
Patio - Min. 4x4 post
Carport - Min. 6x6 post

HEADER SCHEDULE

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

BUILDING WIDTH						
Size	20'		28'		36'	
	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						
Size	20'		28'		36'	
	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.)