

**HUMBOLDT COUNTY BUILDING DEPARTMENT  
CITY OF WINNEMUCCA BUILDING DEPARTMENT  
PATIO COVER HANDOUT AND PLAN REVIEW  
2006 INTERNATIONAL RESIDENTIAL CODE**

It is the owner or contractor's responsibility to become familiar with the adopted code requirements of Humboldt County. The owner or contractor shall become familiar with requesting required inspections. We encourage you to ask questions and utilize available handouts. These plans were checked for code/life safety and regulation compliance only. Patio cover shall only be used for recreational outdoor use and not used for carports, garages, storage room or habitable room.

**1. Using the charts below fill in the blanks on the worksheet.**

A. Site plan indicating location of patio cover. Please contact the Planning Department (623-6393) for their requirements for setbacks from the property line.

B. \_\_\_\_\_ Width  
\_\_\_\_\_ Length

C. Approved foundation

\_\_\_\_\_ 18"x18"x18" footing with eave height less than 10 feet.

\_\_\_\_\_ Pressure treated posts buried 3 feet with eave height less than 10 feet

\_\_\_\_\_ A minimum 3 1/2" patio slab with roof load of less than 750 lbs. per column (post). Patio/awning covers less than 12 feet in height. Design shall comply with IRC Appendix Chapter H. Adequate grade & drainage shall be provided in order for a slab to be used as a footing. Frost heave could occur when the footing is not to frost line.

\_\_\_\_\_ Code complying deck construction

D. Posts

Post shall be pressure treated if they come in contact with the earth or concrete

\_\_\_\_\_ Size of posts

\_\_\_\_\_ Distance between posts

E. Header Sizes – See attached header schedule

\_\_\_\_\_ Required header size

Positive connection between posts and headers is required.

If using engineered headers (versalams, LVL, etc) the headers are required to be protected from the weather. This requires total encasement of the header with weatherproof material.

F. Rafter Sizes – see attached rafter schedule

\_\_\_\_\_ Size and spacing

\_\_\_\_\_ Positive connection between rafters and headers

G. Roofing

\_\_\_\_\_ Type of roofing

Shingles shall not be used as a roof covering if the roof pitch is less than 2:12.

**2. If attaching patio cover to the manufactured home the following criteria must be met. Every project shall be reviewed individually. Plans are required for overbuild construction.**

- A. A building or patio cover shall not be attached to any manufactured home that is under warranty.
- B. The walls of the manufactured home have to support on a full foundation. The owner shall provide evidence of support.
- C. The walls of the manufactured home shall be min. of 2x4, 24" o.c.
- D. No support is permitted from the ends of the eaves or ends of trusses of the manufactured home.
- E. The manufactured home has to meet real property conversion standards to be able to add load on to the manufactured home.
- F. Singlewide's typically will not be permitted to add load to the manufactured home unless a Nevada engineer's stamped drawing is submitted.
- G. Construction of overbuild, which valley back on to the manufactured home roof.
  - a. Trusses of the manufactured home roof shall be a min. of 2x4 or 30 lb roof.
  - b. Support on a full foundation.
  - c. A minimum of ½ the load of the dormer shall be cantilever type construction, which distributes most of or ½ the load back to the new building's roof.
  - d. Size of the overbuild may also effect the requirement for engineering.
  - e. Or plans are wet stamped by a Nevada Engineer
- H. Ledgers to the wall of the manufactured home shall be attached with ¼" lags and lags shall connect to every stud
- I. Egress windows must be maintained from existing bedrooms in a manufactured home.
- J. Two exits are required from the manufactured home and must be maintained
- K. One egress may pass thru a patio cover, porch or garage if directly accessible to an exterior door from the room.

**3. General notes**

- A. Patio cover shall not support on a manufactured home unless the above criteria is met or if the awning weights less than 1 lb per square foot. This generally is a prefabricated metal awning. Manufacturer's instructions shall be submitted for a metal awning.
- B. If electrical is installed or relocated a permit is required and shall comply with the 2005 National Electric Code.
- C. Building pads shall have a drainage gradient of 6" in the first 10' away from the awning.
- D. A permit will be 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 to the outside. Plan for this requirement when designing your addition

**RAFTER SPAN TABLES**  
**2006 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"	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"	Note b
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  
 Tables cannot be used to determine rafter sizes for tile or other heavy roof covers.

**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)

## Header Tables

Header Table for Roof Spans Up to 16'

Length of Span	Load Bearing Header Size		Non-Load Bearing Header Size	
4' or less	4"x4"	*****	4"x4"	*****
4' to 6'	4"x6"	*****	4"x4"	*****
6' to 8'	4"x8"	6"x6"	4"x6"	6"x6"
8' to 10'	4"x10"	6"x8"	4"x6"	6"x6"
10' to 12'	4"x10"	6"x8"	4"x8"	6"x6"
12' to 14'	4"x12"	6"x10"	4"x8"	6"x6"
14' to 16'	4"x14"	6"x12"	4"x10"	6"x8"

Header Table for Roof Spans Over 16'

	BUILDING WIDTH					
	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
3-2X8	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

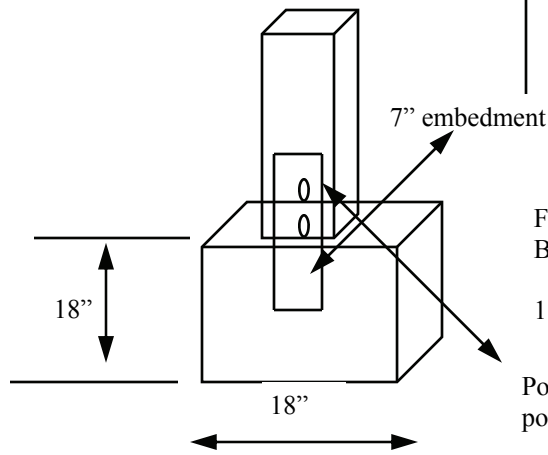
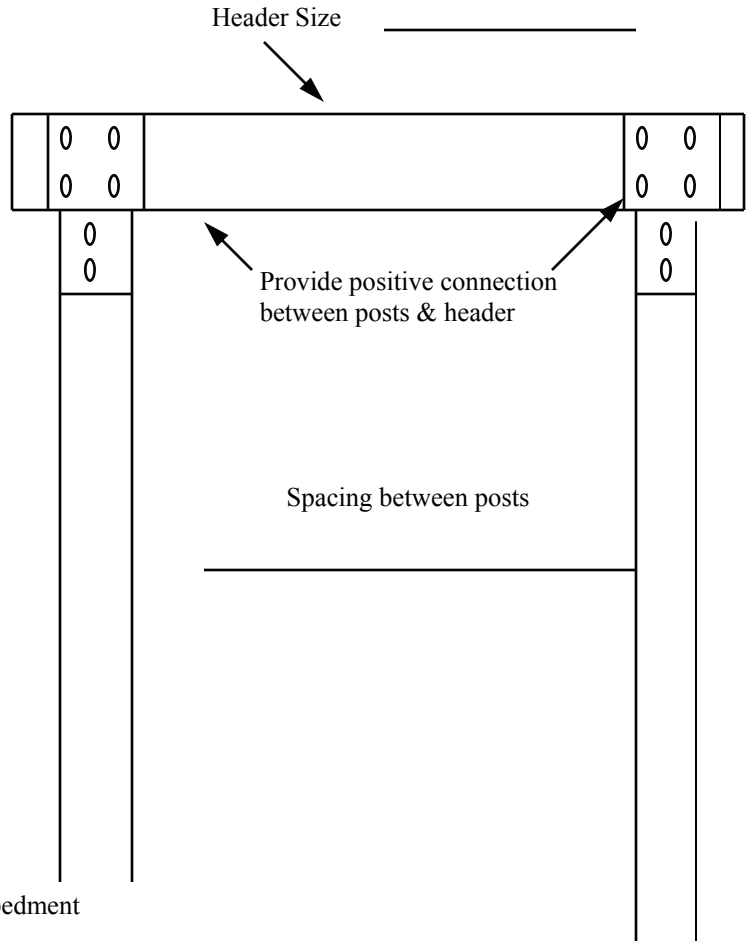
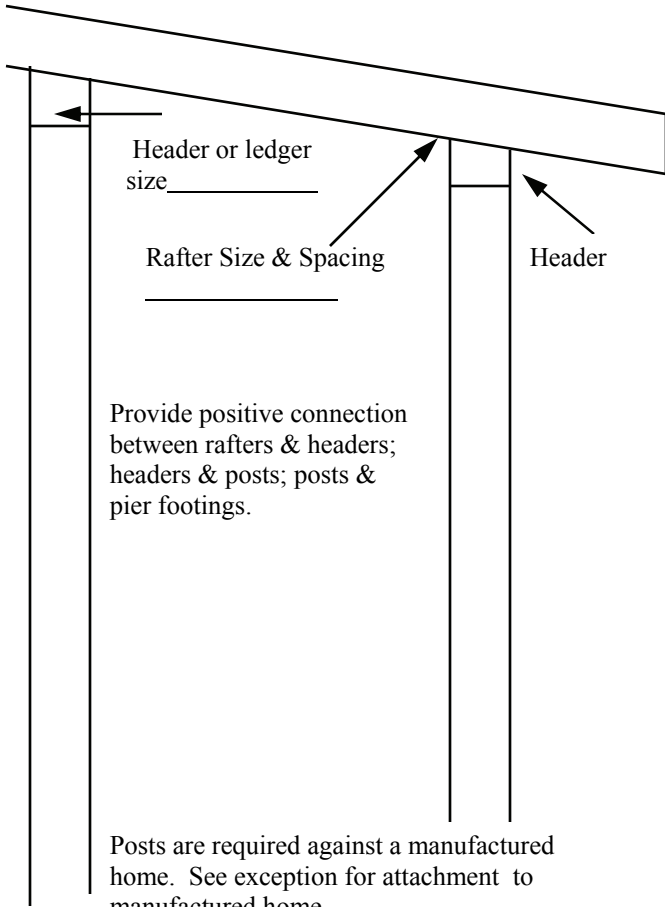
AWNING WITH SLOPED ROOF DETAIL

Type of roofing \_\_\_\_\_

Thickness & type of roof sheathing \_\_\_\_\_

Width \_\_\_\_\_

Length \_\_\_\_\_



Foundations:  
 Bury post 3' \_\_\_\_\_  
 18"x18"x18" footing \_\_\_\_\_  
 Post Connectors—both sides of post

AWNING WITH GABLE ROOF

WIDTH \_\_\_\_\_

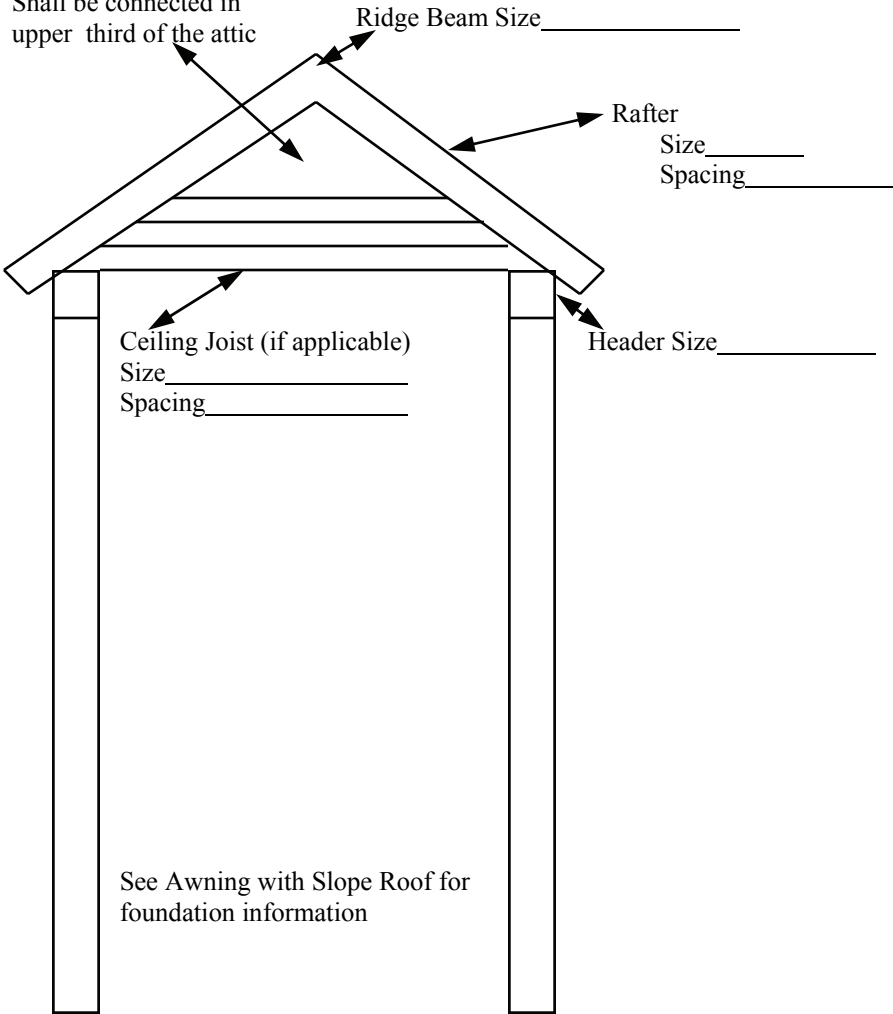
DEPTH \_\_\_\_\_

Roof Pitch \_\_\_\_\_

Roof Sheathing \_\_\_\_\_

Type of roofing \_\_\_\_\_

If not installing ceiling joists:  
 Rafter ties Min. 2"x4" - 4' o.c.  
 Collar ties or ridge strap  
 Shall be connected in upper third of the attic



Provide Positive connection between rafters & headers; rafters and ridge beam; headers & posts