



Carson City Building Division

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SITE BUILT PATIO COVER AND CARPORT RESIDENTIAL PLAN SUBMITTAL REQUIREMENTS

Scope:

The requirements of this handout are only applicable to structures regulated by the 2012 International Residential Code ('12 IRC), for construction within those portions of Carson City having a Ground Snow load of no more than 30 PSF.

Any modification of these requirements will nullify the use of this prescriptive design, and require that the applicant submit Patio Cover / Carport plans designed by a Nevada licensed Registered Design Professional (Engineer, Architect, or Residential Designer). Specifically, the applicant may not mix engineered materials (Pre-manufactured trusses, LVL, GluLam, etc) with dimensioned lumber.

General Information:

- A minimum residential plan submittal shall include the following items, incomplete plan submittals will not be accepted:
 - Two (02) **complete sets of plans** – Properties on well and/or septic shall submit one (01) additional Site Plan, which will be reviewed by the Carson City Health & Human Services Dept. (CCHHS)
- Plans shall be on **11" x 17" or larger** paper sizes, and all design sheets within the plan set should be the same size. The plans shall be designed to comply with applicable minimum approved scale.
- Plans **shall be photocopies, or original blue or black ink drawings**. The use of colored ink, other than blue or black, or the use of colored ink beyond that which is used for licensing seals and/or original signatures on plan sets, would constitute grounds for an automatic rejection of the application.
- Plans shall be fully dimensioned, and drawn to an **approved architectural scale 1/4"=1'-0" minimum**. Interior elevations or details may use 1/2"=1'-0" or greater scale. The scale shall be indicated on each page, and separate detail or elevation.
- Site plans shall be fully dimensioned and drawn to one of the following **approved engineering scales: 1"=10', 1"=20' & 1"=30'**
- **When plans are prepared by an Owner/Builder**, in compliance with Nevada Revised Statute (NRS), the plan set must have the owner's name and address printed title block labeled "Designer" the cover sheet. Below this information shall be an original signature with date of signing.
- **Plans prepared by a Nevada licensed General Contractor** shall have the following information on the printed in a block labeled "Designer" on the Cover Sheet of the plan set:
 - Business Name
 - Business Address
 - Bid Limit
 - License Classification Type
 - License Number
 - License Expiration Date
 - Name of Qualified Employee, with an original signature

Sheets That Constitute a Complete Plan Set:

Plans and specifications shall be of sufficient quality to clearly indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the technical codes and all relevant laws, ordinances, rules and regulations. The following information shall be incorporated on the plans as outlined below:

- **Cover Sheet** (When the Site Plan is acting as the "Cover Sheet", include this information)
 - Project Address
 - Project Assessor Parcel Number (APN)
- **Site Plan (Modified for Patio Covers)**

- Provide North Arrow
- Site plan shall be drawn to an approved engineering scale (1"=10', 1"=20' & 1"=30'). Indicate on the Site Plan the approved engineering scale used.
- Provide APN (Assessor Parcel Number) and address of proposed project.
- Show the complete parcel, with all property lines dimensioned
- Show all easements
- Show all existing structures on the property.
- Indicate by hatching, shading, or coloring the proposed structure or addition
- Provide dimensioned minimum Planning Division established setback lines around inside perimeter of the property line – this is commonly referred to as the “Building Envelope”.
- Provide dimensioned setback lines between the proposed construction and the property lines
- **Utilities:** Show all utility laterals to the building (water, sewer, power, TV, phone, septic, replacement field). For parcels served by City water and sewer, a completed Water and Sewer Application must accompany the permit application. Show proposed fire hydrants, water mains, sewer mains, service laterals, and points of connection (if applicable).
- **Wells and septic systems:** Existing and proposed wells and septic systems shall be shown. Show all wells within 100' of septic systems. For parcels utilizing wells or septic systems one (01) additional Site Plan will be required.

• **Cross Section**

This a “side” view of the Patio Cover / Carport. The detail shall clearly show the roof framing, the beam, post, and footing.

- Indicate the rafter size, wood species and grade, with On Center spacing. (Ex.: 2 x 4 DF-L #2 @ 12” O.C.)
- Call out roof sheathing type and size.
- Call out roof slope and type of roof covering.
- Call out the hardware for the mechanical connections at the posts (top and bottom), rafters and beams. The hardware callout shall include the manufacturer and product name or number. Ex.: “Simpson PB44”, “USP Connectors PA44”, etc
- Provide dimensions for all points of construction.

• **Foundation Plan**

This is a plan view of the footing layout, with a detail for the footing.

- Dimension all construction points.
- Provide a plan view of the foundation footprint, with the location and size of all piers and column footings
- Provide footing sectional detail, which shall be to scale and fully dimensioned with all reinforcement steel and hardware indicated.
- Indicate the manufacturer and product number of all structural hardware
- Indicate the location of all structural hardware required to be installed within the foundation.

Structural Design:

- The structural design of the proposed Patio Cover/Carport shall comply with the prescriptive design requirements, as outlined below.

PRESCRIPTIVE RAFTER SPAN TABLE				
Wood Species & Grade	Max. On Center Spacing	Max. Span (Feet – Inches)		
		2 x 4	2 x 6	2 x 8
Douglas Fir – Larch (DF-L) #2 - MINIMUM	12” O.C.	7-10	11-6	12-0*
	16” O.C.	6-10	9-11	12-0*
	24” O.C.	5-7	8-1	10-3

*- The maximum span is 12'-0", with a maximum overhang of 2'-0"

PRESCRIPTIVE BEAM SPAN TABLE	
Max. Span	Douglas Fir – Larch (DF-L)
6'-0"	4 X 8 DF-L#2
8'-0"	4 X 10 DF-L#2
10'-0"	4 X 12 DF-L#2

Roof Framing General Notes

- Extra weight hanging from or on the roof surface, such as large plants, will require additional support.
- Designs for freestanding patio covers shall include wall bracing.
- Any spacing exceeding 24" O.C. (on center) is not covered in the Rafter Span Table and may not be used under this prescriptive method.
- Please note that the IRC and manufacturers do not accept the installation of composition shingles at a slope less than 2:12. For those slopes, an approved roofing membrane shall be installed, per manufacturer's instructions.
- Roofs shall be designed to have a minimum 1/4": 12" slope to maintain drainage.

Foundation Design

- Footings shall extend a minimum of 24" below grade
- The combined area of the footings shall not be less than 1 ft² of footing area for each 40 ft² of roof area, with the individual footing size being not less than 12" round by 24" deep.