Residential Design Criteria & Checklist
One & Two Family Dwellings

General Information:

The following codes have been adopted:

1997 Uniform Administrative Code
2003 Uniform Mechanical Code
2003 International Residential Code (Building & Electrical Chapters)
2003 Uniform Plumbing Code
2003 International Building Code (as referred by IRC)
2002 National Electrical Code (as referenced)

The minimum design criteria for Elko County are as follows:

1. Roof Live & Roof Snow Loads:

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Roof Live Load</th>
<th>Roof Snow Loads</th>
<th>Ground Snow (can be used when designing steel buildings or cut and stacked roofs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 6,000 ft elevation</td>
<td>Minimum 30 lbs PSF</td>
<td>Minimum 30 lbs PSF (un-reduced)</td>
<td>50 lbs PSF</td>
</tr>
<tr>
<td>6,000-7000 ft elevation</td>
<td>Minimum 30 lbs PSF</td>
<td>Minimum 50 lbs PSF (un-reduced)</td>
<td>70 lbs PSF</td>
</tr>
</tbody>
</table>

2. Seismic Zone - D 1 or 2 (as determined)

3. Wind Load - 75 mph, exposure “C” (90 mph, 3 second gust)

4. Frost Depth - 36” minimum (vertical)

5. Soil Bearing Pressure - 1500 lbs. maximum without a designed soils report

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**GROUND SNOW LOAD**

<table>
<thead>
<tr>
<th>GROUND SNOW LOAD</th>
<th>SUBJECT TO DAMAGE FROM</th>
<th>WINTER DESIGN TEMP</th>
<th>ICE SHIELD UNDERLAYMENT REQUIRED</th>
<th>FLOOD HAZARDS</th>
<th>AIR FREEZING INDEX</th>
<th>MEAN ANNUAL TEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Above</td>
<td>Severe</td>
<td>36” minimum</td>
<td>None to Slight</td>
<td>Yes</td>
<td>AS REQUIRED</td>
<td>1500</td>
</tr>
<tr>
<td>See Above</td>
<td>Severe</td>
<td>None to Slight</td>
<td>None to Slight</td>
<td>None</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

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Elko County’s objective is to provide you, the applicant, with a guideline of necessary information to be submitted in order to ensure that your application is processed in a timely and professional manner. **It is the responsibility of the contractor or owner-builder to become familiar and comply with the adopted codes, ordinances and the manufacturer’s requirements for the specific product and processes as approved by the ICC Evaluation Service as adopted by Elko County.** This checklist is specific to the actual construction requirements to the structure itself. Other requirements for Zoning, FEMA or State Health are to be addressed also at the time of permit application. Additional construction information will be required when located within a flood zone.

Plans and Specifications shall be drawn to scale (minimum 1/4" per foot) and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations, 1997 U.A.C., section 302.3

The following information is required and must be submitted for the plan review of the proposed structure. **Please provide two identical sets of plans for review.** An “APPROVED” job copy will be returned to the applicant as required by U.A.C., section 303.1. **The applicant must check each area below to indicate the documentation is provided as set forth in this checklist.** When not applicable please indicate so by “N/A”.

☐ Design plans and supporting documents must be prepared, signed and stamped by a Nevada Registered Architect or Professional Engineer.

OR

☐ Residential Designers may submit design plans for single family or multifamily structures as authorized by NRS 623.330.

OR

☐ Licensed Contractors may submit their own plans provided they are signed by the contractor and meet the conditions specified in NRS 623.330.

OR

☐ Owner/Builders may prepare and submit their own plans for their own private residential use. Plans must be titled without reference to being prepared by a party other than the property owner who is building or overseeing the building activity. The plans must have the owner/builder’s original signature.

The building construction plans prepared by a Nevada licensed design professional must be wet stamped with an original signature that states conditions are met.

**Plot Plan:** (separate from the building plans)

☐ Accurate representation of the legal description - including property dimensions or acreage for large parcels over 40 acres

☐ Location all buildings and attached structures

☐ Show all setback distances to property lines from the proposed building and to other buildings within 20'

☐ Location of the main electrical service and electrical line, including wire size to the building with distances for possible voltage drop calculations for new electrical installations over 400 feet

☐ Location of applicable utilities: well, water lines, septic tank & lines, gas tank & lines, etc.

☐ Original signature of preparer
Building Construction Plans:

Cover Sheet
___ Design Criteria list:
a. Occupancy group  
b. Type construction of  
c. Seismic zone  
d. Square footage, total of all floors and accessory areas  
e. Height and number of stories  
f. Roof Snow/Live Load  
g. Wind Load  
h. Occupant load (Duplexes or Multi-Family)  
i. Code editions used

Floor Plan:
___ Building dimensions, including all room dimensions  
___ Room designation - (i.e.: living room, kitchen, bedroom, etc.)  
___ Light and ventilation per section R303, 2003 IRC  
___ Door and window sizes, designation of required egress windows, and required safety glazing  
___ Fire wall construction, fire rated door type (i.e.: metal or wood) and penetration rated materials - (for attached garages)  
___ Show crawlspace and attic access size and locations

Footing Plan:
___ Show Dimensions for continuous footings or pier pad footings (Table R403.1) including decks/porches  
___ Footing elevations that are stepped down due to changes in grade shall be shown on foundation plan  
___ Show depth below outside finished grade  
___ Show reinforcement iron size and spacing  
___ Show the Ufer ground size and location (if applicable)

Foundation Wall Plan:
___ Foundation wall height and thickness and PSI rating (Tables R404.1.1 & 402.2)  
___ Show reinforcement iron size and spacing (both vertical & horizontal), including any additional reinforcement iron as required by code at top of wall and around all window and door openings  
___ Anchor bolt & washer size, spacing and the embedded depth to comply with section  
___ Show underfloor ventilation method (in wall or rim) to comply with section R408, 2003 IRC  
___ Show underfloor access size and location including access through any supporting walls

Monolithic Foundation (if designed)
Show dimensions for the continuous footings (typically located at the top of the foundation)
Show dimensions for the frost wall below the footings
Show the depth below grade and foundation height above grade (6" minimum)
Show reinforcement iron size and spacing (both vertical & horizontal)
Foundation hold down devices shown when used with the alternate braced wall panels for the shear wall requirements as allowed by section R602.10.6, 2003 IRC or R602.10.6.2, 2004 IRC Supplement

Cross Sectional Plan:
A complete cross sectional drawing detailing construction methods from the footing and foundation wall through the floor(s) and wall(s) to the roof structure shall be provided with full detail, including anchorage and all connections from foundation through roof structure and all changes in floor elevations. This applies to both the dwelling and garage; this will require two cross section plans.
A complete stairway construction detail - (showing type of material, rise and run, headroom height, handrail, guardrail and direction of travel)

Framing Plan:
Conventional floor framing showing size of joists used, spans, spacing, bearing locations and hangers
Engineered floor framing showing manufacturer’s series and size of joists used, spans, spacing, bearing locations, and hangers
Exterior and interior shear wall bracing locations shown with method of shear panel, stud wall size and spacing
Header sizes, spans and bearing to foundation for all specific locations (i.e.: doorways, windows, arch ways, overhead doors and covered porches/decks)
Stairway construction details; rise and tread dimensions, vertical head clearance dimension, guard and handrail details
Manufactured roof truss layout, spacing and slope(s) - showing uplift protection, bearing locations & girder truss placement and type of hangers Note: Must provide a separate roof sectional for multiple roof layouts.
Engineered designed truss plans may be a deferred submittal; must be submitted at least one week prior to rough (four-way) inspection; original signature of design engineer required.
Roof rafter framing layout - showing size, spacing, spans of members and roof slope(s). Show ridge beam size, bearing locations with method of connections and provide a separate roof sectional in multiple roof layouts, or when used on a truss roof for over framing. NOTE: Cut and stacked roofs shall be designed by a registered architect, residential designer or engineer prior to the plan submittal unless approved otherwise by the building official.
Provide an analysis for bearing stud wall height greater than 10' and non-bearing stud wall greater than height listed in Table R602.3(5), 2003 I.R.C.

Plumbing Plan: (shown on separate plan)
Water heater location(s) and type of fuel source and BTU rating(s)
Plumbing fixture locations and types - (sinks, toilets, lavs, tubs, showers, floor drains, water softeners)
Plumbing diagrams for water, drain/waste and venting, gas piping and list the type of materials used and pipe size.
**Mechanical Plan:** (shown on separate plan)
- FAU location(s) and size(s) (BTU rating) of furnace, boiler or equivalent and type of fuel source
- Fireplace location(s) - type of fuel source and BTU rating(s) (gas, oil, pellet, or wood)
- BTU rating for all fuel fired appliances, i.e.: ranges, ovens, clothes dryers, etc.
- Show combustion air complying with the requirements of Chapter 7 of the U.M.C.
- Exhaust fans
- Duct diagram showing size and type of materials used, ie: supply air, return air, combustion air and duct sizes.
- Flue sizes for all fuel fired appliances

**Electrical Plan:** (shown on separate plan)
- Location of lights, fans, switches, receptacles and fixed appliances
- Location and amp ratings of all panels - (outside disconnect and load centers)
- List of all branch circuit schedule including circuit amperage size, wire size and type of materials.
- Location of smoke detectors (indicate wall or ceiling mount)
- Baseboard heating

**Elevation/Architectural Views:**
- Exterior final grading elevations shown around the building (including finished floor elevations from grade for multiple stories - unless located in a flood zone)
- Exterior landings & steps showing type of material (concrete or wood), rise and run, handrail, guardrail
- Exterior deck (including roof covering) construction showing type of material, bearing location, with attachment connections, handrail and guardrails (if applicable)
- Exterior porch construction showing type of material, bearing location, with attachment connections
- Roof material type
- Exterior siding material - provide evaluation report for the types of exterior wall covering and supply all certificates of installation (if applicable)

When the building official issues the permit where plans are required, the building official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specifications shall not be changed, modified or altered without authorization from the building official, and all work regulated by this code shall be done in accordance with the approved plans. - Section 303.1, 1997 U.A.C. Additional plan review fees will apply to changed, modified or altered plans.

All construction or work for which a permit is required shall be subject to inspection by the building official and all such construction or work shall remain accessible and exposed. - Section 305.1, 1997 U.A.C.

Work requiring a permit shall not be commenced until the permit holder or an agent of the permit holder shall have posted or otherwise made available an inspection record card as to allow the building official to conveniently make the required entries thereon regarding inspections of the work - Section 305.2, 1997 U.A.C. (NOTE: Failure to post permit documents shall be subject to re-inspection fees.)
It shall be the duty of the person doing the work authorized by a permit to notify the building official that such work is ready for inspection - Section 305.3, 1997 U.A.C. Elko County requires all inspection requests to be scheduled 24 hours in advance by **4:00 pm**. Inspections will be done the following working day between **8:00 am - 5:00 pm**.

Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official – Section 304.4, 1997 U.A.C.

Every permit issued by the building official under the provisions of this code shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days - Section 303.4, 1997 U.A.C.

I, _________________________________ do hereby verify that all necessary and required information has been submitted for plan review on this date of ______________________, 20___.

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