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**Town of Pagosa Springs  
Department of Building  
and Fire Safety**

## **RESIDENTIAL (1 & 2 FAMILY DWELLINGS ) PLAN SUBMISSION REQUIREMENTS**

Permit applicants shall submit two (2) *COMPLETE SETS* of plans and specifications with each application for a permit. Plans and specifications may be required to be prepared by a qualified *Architect or Engineer* licensed by the State of Colorado to practice as such. Contact the building department to verify if your construction project requires an architect or engineer. Plans prepared by an architect or engineer shall have the *stamp or seal* of the architect or engineer responsible for preparation of the plans, applied directly to 1) each sheet of the reproduced drawings, 2) addenda and revisions, 3) the cover, title page, and table of contents of specifications, and 4) the title page of engineering reports. Through the seal shall appear the *signature* of the architect or engineer and the *date* of signature.

**Stamps or seals shall not be placed on reproducible drawings used to make multiple copies!(This is a violation of Colorado State Law)**

### ***AN ARCHITECT OR ENGINEER WILL TYPICALLY BE REQUIRED AS FOLLOWS:***

- *Building plans and specifications shall be prepared and sealed by a qualified architect or engineer when required by Title 12, Article 4 of the Colorado Revised Statutes. (i.e., Commercial and industrial occupancies, multifamily residential, etc.)*
- *Foundation plans and details shall be sealed by a qualified engineer 1) when the soil report indicates that the soils exhibit swell potential with a minimum dead load requirement in excess of 500 pounds per square foot, or 2) when basement or retaining walls exceed 4'-0" in height and retain more than 4'-0" of soil, vertically.*
- *Structural plans and details shall be sealed by a qualified engineer when required by the building department due to complexity of design.*

Plans shall be ***drawn to scale*** and shall clearly indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the adopted model codes and standards and all other relevant laws, ordinances, rules and regulations. Plans shall be submitted on a minimum of 18 inch by 24 inch size sheets. (*Plans or details may be submitted on smaller size sheets when approved by the building department*).

### **A COMPLETE SET OF PLANS SUITABLE FOR REVIEW SHOULD INCLUDE:**

*(Some projects will not require all of the following information on the plans or details. Please examine the information listed below; information not applicable to a given project need not be included in the plans. Please check with the plans examiner FIRST to determine what information will be required to be submitted)*

**Soils Report.** Soils reports may be required for all new construction if the Plans Examiner deems it necessary to substantiate the foundation design or if the design has an assumed soil bearing capacity in excess of 1500psf.

**Structural Design Criteria.** The following information regarding structural design shall be included on the plans:

- Soil bearing capacity (If a soils report is required include the min. dead load requirement).
- Lateral earth pressure for basement and retaining walls.
- Roof design snow load.
- Floor design live loads.
- Wind design speed and exposure.
- Seismic zone.

**Site Plan.** Site plans shall include the following information:

- Site orientation. (*North arrow*)
- Legal description and property address.
- Lot lines and property size in square feet.
- Adjacent road and street names.
- Easements, right of ways, building setbacks, water body setbacks, and building envelopes.
- Proposed and existing utility improvements. (*utility poles, transformers, culverts, etc.*)
- Proposed and existing structures.
- Existing waterways and drainages and related Base Flood Elevations, Flood Plain and Flood Way delineation (if located near McCabe Creek or San Juan River)
- Access driveways and their grades, sidewalks, parking, paving and curb cut locations.
- Location of wells and individual sewage disposal systems.
- Top of foundation wall elevation related to contours on site plan.

**Foundation Plan and Details.** Foundation plans and details shall include the following information:

- Foundation material description and specifications.
- The location and size of piles and drilled caissons.
- The location and size of footings.
- The depth of footings, piles and drilled caissons.
- The location and size of all foundation walls and piers.
- The location, size, grade, and spacing of all reinforcing steel.
- Material and fasteners specifications for wood foundation systems.
- Anchor bolt size and spacing.
- Framing anchors and connectors to be embedded in concrete or masonry.
- Concrete and masonry beam pocket locations and sizes.
- Concrete slab thickness and reinforcement.

**Structural Framing Plans and Details.** The structural framing plans and details shall include the following information:

- The location of exterior and interior columns, beams and girders, headers and lintels.
- Construction details and material specifications for columns, beams, girders, headers and lintels. Grade and species of all wood components. All steel strengths and welding specifications.
- The location of all exterior and interior bearing and shear walls.
- Bearing and shear wall construction details and material specifications.
- Floor construction details and material specifications.
- Roof construction details and material specifications.
- Exterior deck and porch construction details and material specifications.
- Bearing and connection details for structural members and assemblies.

**Floor Plans.** Floor plans shall be provided for each individual floor (*including basements, lofts or mezzanines, decks and porches, etc.*). The plans shall be dimensioned so as to clearly show the following:

- Exterior and interior walls and partitions.
- Exterior and interior wall opening locations and sizes (*windows, doors, etc.*)
- The use of each room or space.
- Exterior decks.
- Exterior and interior stairs and landings.
- Exterior and interior guardrails.
- Plumbing fixtures. (*Sinks, lavs, tubs, showers, toilets, cloths washer, water heaters, etc.*)
- Mechanical appliances and equipment. (*furnaces, boilers, fireplaces, woodstoves, etc.*)
- Permanent counters and cabinets.
- Square footage of each floor from exterior wall to exterior wall including stairs, mechanical rooms, storage, and unfinished areas.

**Elevations.** Exterior building elevations shall be provided for each individual elevation and shall show the following:

- Windows and doors.
- Porches, decks and guardrails.
- Finish grade, existing grade, and the line of the foundation below finish grade for each elevation.
- Roof pitches. (*rise and run*)
- Chimneys or vents for fuel burning devices and any other permanent equipment installed on the exterior of the building.

**Building Sections And Details.** Architectural building sections and details shall include the following information:

- Foundation drainage details. (*draintiled*)
- Interior wall and ceiling framing and finishes. (*stud sizes and spacing, drywall, paneling, etc.*)
- Exterior wall framing and finishes. (*stud sizes and spacing, siding, veneers, etc.*)
- Roofing details. (*underlayments and roof covering materials*)
- Fireplace construction details.
- Stairway construction details. (*material specifications, stair width, rise and run, handrails*)
- Guardrail construction details. (*material specifications, guardrail height, spacing of intermediate rails*)

**Fire-Resistive Design Criteria (for 2 family or duplex units).** Plans and specifications for buildings requiring fire-resistive construction shall include the following information:

- Fire-resistive wall and partition details.
- Penetration fire stop details. (*electrical, plumbing, mechanical and communication conduits, cables, pipes and similar systems*)
  - ***Materials and systems used for fire-resistive purposes shall be limited to those specified in Chapter 7 of the Building Code. Other properly tested and listed systems and assemblies will be accepted, provided they have been listed by an approved testing laboratory. The listing number and laboratory responsible for the listing as well as the installation details shall be included on the plans!***

**SUBMITTALS FOR BUILDING PERMITS WILL NOT BE ACCEPTED  
WHEN THEY ARE NOT BOUND OR DO NOT CONTAIN ALL OF THE  
APPLICABLE INFORMATION AS REQUIRED ABOVE!!!**



# Town of Pagosa Springs, Colorado

## Building Design Criteria

**Roof Snow Load:** 65 psf -100% Duration (Projects submitted under the IBC must have Roof Snow Loads determined per ASCE 7. The Ground Snow Load (Pg) = 93 psf)

**Frost Depth:** 42" min (Frost Protected Shallow Foundations accepted in most cases for residential construction)

**Wind Speed:** 90mph -exposure "B"

**Seismic Design Category:** B - Must be determined per sec 1613 IBC 2015

**Heating Degree Days:** 8323

**Winter Design Temperature:** -15°F (-26°C) (Ice Shield Underlayment Required)

**Air Freezing Index:** 1634°F      **Mean Annual Temperature:** 42.2°F

**Max Soil Bearing:** 1500psf (other soil bearing capacities allowed when accompanied with a soils report from a Colorado licensed geotechnical engineer. **NOTE:** Soils reports are **REQUIRED** for all **new** buildings except for 1 & 2 family dwellings)

**Current Model Codes:** Please note that there are local exceptions and amendments to the International Codes as adopted by Town Ordinance No. 868.

2015 International Building Code (IBC), including appendix A, B, C, D, E, F, G and J

2015 International Residential Code (IRC), including appendix C, E, F, J, L, M, R and S

2015 International Energy Conservation Code (IECC)

2015 International Existing Building Code (IEBC)

2015 International Fuel Gas Code (IFGC)

2015 International Fire Code (IFC), including appendix A-J

2015 International Mechanical Code (IMC)

2015 International Swimming Pool and Spa Code (ISPPSC)

**Plumbing and Electrical Permits:** Must be obtained through the State of Colorado Department of Regulatory Agencies. (303) 894-2300 or division website at:

**Plumbing:** <http://www.dora.state.co.us/plumbing/onlinepermitsystem.htm>

**Electrical:** <http://www.dora.state.co.us/electrical/onlinepermitsystem.htm>

**Manufactured Homes (HUD and Modular UBC):** are regulated under the State of Colorado Division of Housing and the Colorado Manufactured Housing Installation Program (MHIP) and permits for installations can be obtained through the town office or downloaded from the town web site. Installation requirements can be found on the division website at:

<http://www.dola.state.co.us/cdh/codes/index.htm>