



## BUILDING CODES & DESIGN CRITERIA

### Adopted Building Codes:

- 2006 International Building Code (IBC)
- 2006 International Residential Code (IRC)
- 2006 International Mechanical Code (IMC)
- 2006 International Plumbing Code (IPC)
- 2006 International Fuel Gas Code IFGC)
- 2006 International Energy Conservation Code (IECC)
- 2006 International Fire Code (IFC)

Adopted amendments to these codes are available on the County website: [www.co.rio-blanco.co.us](http://www.co.rio-blanco.co.us)

### ROOF SNOW LOAD BY ELEVATION (for reference only)

ELEVATION	MINIMUM ROOF SNOW LOAD	MINIMUM FROST DEPTH
Below 6,000	40 psf	36 inches
6,000 to 6,500	50 psf	42 inches
6,501 to 7,000	60 psf	42 inches
7,001 to 7,500	70 psf	42 inches
7,501 to 8,000	80 psf	48 inches
8,001 to 9,000	90 psf	48 inches
Above 9,000	115 psf	48 inches

**Actual roof snow load will be determined by the RBC Building Official**

Climate Zone-6

Wind design 90 mph (3 sec) Exposure B or C

Seismic Design Category-TBD per site

Weathering Probability for concrete- Severe

Ice Barrier underlayment required

Floodplain (Section 245 RBC Land Use Resolution)

# RESIDENTIAL CONSTRUCTION PLAN CHECKLIST

(One and two family dwellings)

The Building Division requires that you submit **complete application package**. To avoid delays in the issuing of the Building permit, Please use the following checklist as a guide. If the construction plans, application and other required information of the application package are determined to be incomplete the applicant will be notified and the application will be returned to be completed.

## **Please submit the following**

- Two (2) complete sets of construction plans with all applicable information from this checklist

## **Information required in your construction plans:**

**Site plan** (include all applicable information from the site plan checklist)

### **Construction plans**

- Floor plans for each level, complete dimensions, drawing scale noted, each room clearly labeled, e.g. Bedroom, living, kitchen etc.
- Minimum of four (4) elevations N, S, E, W.
- Building Cross-Sections and construction details.
- Location of all mechanical equipment, vent exhaust, etc. shown on plans.
- Gas line and HVAC system calculations.
- Window sizes and types shown on floor plans and elevations with rough opening sizes, and window operation clearly indicated.
- Complete stair guardrail and handrail details shown.
- Roof and wall covering type.
- Roof slope/pitch.
- Attic and crawlspace ventilation.
- Minimum insulation or documentation showing compliance with the Energy Code.
- Fireplaces and wood stoves; provide make, fuel type and model #.
- All site built fireplaces, require full code compliant detailed plans.

### **Structural Sheets**

- Where required all sheets of the plan must be wet stamped/ signed by a Colorado State Licensed Engineer or Architect.
- Where required foundation design wet stamped and signed by a Colorado Licensed Engineer, must reference site specific soils investigation. (please contact the Building Division to determine what plans are required to be designed by a Colorado Licensed Engineer or Architect)
- Plans must show; snow load, floor/deck live load, wind design. (Roof Snow load must be determined by the Building Official)
- Complete framing details, showing all connections, and supports.
- Site specific Truss drawings.

### **Additional information required to be included in the application package**

- Site Plan submit (1) copy showing all applicable information from the site plan checklist.
- Soils Investigation (1) copy manufacture Truss drawings, if being used (must be site specific and wet stamped and signed)

**Please Contact the RBC Building Division with any questions (970) 878-9450 phone or email at:**

**[building@co.rio-blanco.co.us](mailto:building@co.rio-blanco.co.us)**

# COMMERCIAL/INDUSTRIAL/MULTI-FAMILY CONSTRUCTION PLAN CHECKLIST

The Building Division requires that you submit a **complete application package**. To avoid delays in the issuing of the Building Permit, Please use the following checklist as a guide. If the construction plans, application and other required information of the application package are determined to be incomplete the applicant will be notified and the application package will be returned to be completed.

- Commercial/Industrial/Multi-Family (3) sets of for construction plans.

## **Information required in your construction plans:**

**Site plan** (include all applicable information from the site plan checklist)

### **Construction plans**

- Cover sheet: Wet-stamped and signed by a Colorado State Licensed Engineer.
- Project Summary: Including area calculations, actual square footage/allowable, occupancy classification summary, type of construction, height, fire sprinklers etc.
- Complete Project Manual and specifications including window and door schedules (sizes, hardware and fire rating schedules), construction details, and construction and materials specifications.
- Two (2) current soils/geotechnical project specific report copies for the building site.

### **Architectural sheets**

- Where required all sheets of plans wet stamped and signed by a Colorado State Licensed Architect
- Complete Floor plans for each level, complete dimensions, drawing scale noted
- Complete Minimum (4) Elevations N, S, E, W
- Complete Building Cross Sections and construction details
- All rooms/areas clearly shown on the floor plan with labeled use of each room/area. Include seating plans for any assembly areas. Clearly show all equipment rooms (mechanical, electrical, elevator, etc.)
- All wall types clearly labeled and referenced on floor plans. Identify all fire resistive wall construction
- Complete construction details for all fire resistive elements of the building referenced on floor plans and cross-sections. Include wall assemblies, floor/ceiling assemblies, roof/ceiling assemblies, shaft wall assemblies, structural frame etc. all construction details must have the fire resistive listing number referenced on each assembly detail
- All doors and windows clearly labeled and referenced to the door and window schedules. All door swings shown per exiting requirements
- Complete stairway and guardrail details and construction plans
- Roof covering exterior wall covering and interior finishes clearly shown on the plans
- Floor finish plans
- Reflected ceiling plans
- Accessibility: plans must show compliance with accessibility requirements for all elements of the building

### **Structural sheets**

- All sheets of the plans must be wet stamped by a Colorado Licensed Engineer
- Design specifications sheet including: Roof live/dead-load, roof snow load
- Floor/deck/corridor, stairway live/dead-loads, Special loading (parking garages, etc.)
- Wind and Seismic design

- Foundation design criteria per soils report with soil/geotechnical report referenced
- Footing/foundation reinforcement details (must reference site specific soils report)
- Framing plans for each level of building with all walls, columns, beams, joists, rafters and other structural elements clearly shown
- Complete construction details showing connections of structural framing elements; including details for special connections (welding, bolting etc.)

### **Mechanical**

- All sheets of the plans must be wet stamped and signed by a Colorado Licensed Engineer
- Floor plans for each level with single line drawings overlaid showing the following:
  - Size, location and materials of all ductwork, plenums, registers, return air,
  - Outside air intake registers
  - Size and location of all combustion air ductwork and openings size, type and termination of appliance flues/vents
  - Locations of all fire and combination smoke/fire dampers and ceiling dampers
- Complete equipment schedules for all mechanical equipment (e.g. Boilers, furnace, exhaust fans, etc.)
- Commercial kitchen hoods: information regarding hood sizes, duct sizes, CFM calculations etc.
- Gas line and HVAC equipment calculations

### **Plumbing**

- All plan sheets must be wet stamped and signed by a Colorado Licensed Engineer
- Floor plans for each level with single line drawings overlaid showing the following:
  - Drain, waste, vent layout and sizing; materials, drainage slope, sewer location, etc.
  - Water piping and sizing: materials, length and size of pipe, water meter location, fixture unit demands; locations and type of all backflow prevention devices
  - Gas piping and sizing: materials, length and size of pipe, gas meter location, BTU/hour demands
  - Any additional piping plans (roof drains, medical gas, condensate etc.)
- Complete plumbing fixture schedules for all plumbing equipment
- Commercial kitchens: additional information is required on plumbing fixtures, food preparation of serving equipment, grease interceptors, etc.

### **Electrical**

- Complete Electrical plan, wet stamped and signed by a Colorado State Licensed Engineer

### **INSULATION**

- Documentation showing compliance with the 2006 IECC

# BUILDING PERMIT REQUIREMENTS

## ALL BUILDING PERMIT APPLICATIONS MUST INCLUDE THE FOLLOWING:

- \_\_\_\_\_ 1. PROOF OF PROPERTY OWNERSHIP
- \_\_\_\_\_ 2. SITE PLAN SHOWING ALL APPLICABLE INFORMATION FROM THE FOLLOWING LIST:
  - a. Dimensions of all property lines (in feet) or acreage of property
  - b. Scale used
  - c. North arrow
  - d. Easements and utilities; if none, please state so
  - e. Dimensions, square footage, use, and height of all existing and proposed structures
  - f. Distances (in feet) between your well/cistern and septic system, other structures, property lines, and water features
  - g. All adjacent roads with names, and the driveway location, width and slope
  - h. Elevation of proposed building site
  - i. The distance from the proposed structure to all property lines within 100 feet
  - j. Parking/loading and accesses with dimensions. If your project is other than single family or duplex residential units: see Section 270 Rio Blanco County Land Use Resolution
  - k. Exterior lighting location and type, if none please state so
  - l. Proposed landscaping; if none, please state so
  - m. Drainage Plan for multi-family, commercial, or industrial developments
  - n. Any planned signage; if none, please state so
  - o. Any proposed fencing, type and height
- \_\_\_\_\_ 3. COMPLETED SIGN OFF SHEET SHOWING APPROVAL BY THE APPROPRIATE AGENCY(S). (If applicable)  
(Please contact the Building Division to determine requirements)
- \_\_\_\_\_ 4. TWO (2) SETS OF BUILDING PLANS SHOWING ALL THAT APPLY FROM THE LIST BELOW.

## RESIDENTIAL (ONE AND TWO FAMILY DWELLINGS, ADDITIONS, GARAGES, REMODELING)

Construction plans: (Drawings must include all applicable information from the list below)

- a. Floor plans for each level, complete dimensions, with drawing scale noted, each room clearly labeled, e.g. Bedroom, living, kitchen etc.
- b. Minimum of four (4) elevations N,S,E,W
- c. Building Cross-Sections and construction details.
- d. Location of all mechanical equipment, vent exhaust, etc. shown on plans.
- e. Gas line and HVAC system calculations.
- f. Window sizes and types shown on floor plans and elevations with rough opening sizes, and window operation clearly indicated.
- g. Complete stair guardrail and handrail details shown.
- h. Roof and wall covering type.
- i. Roof slope/pitch.
- j. Attic and crawlspace ventilation.
- k. Minimum insulation or documentation showing compliance with the Energy Code.
- l. Fireplaces and wood stoves; provide make, fuel type and model number.
- m. All site built fireplaces, require full code compliant detailed plans.

Structural Sheets:

- a. Where required all sheets of the plan must be wet stamped/ signed by a Colorado State Licensed Engineer or Architect.
- b. Where required foundation design wet stamped and signed by a Colorado Licensed Engineer, must reference site specific soils investigation. (please contact the Building Division to determine what plans are required to be designed by a Colorado Licensed Engineer or Architect)
- c. Plans must show: snow load, floor/deck live load, wind design. (Roof snow load shall be determined by the Building Official)
- d. Complete framing details, showing all connections and supports
- e. Site specific truss drawings

**COMMERCIAL AND INDUSTRIAL PROJECTS PLEASE CONTACT THE BUILDING DIVISION FOR SPECIFIC SUBMITTAL REQUIREMENTS AT 970-878-9450 AND FOR REPAIR WORK, SMALL CONSTRUCTION PROJECTS, OR FENCES REQUIRING A BUILDING PERMITS PLEASE CONTACT THE BUILDING DIVISION FOR MINIMUM REQUIREMENTS AT 970-878-9450 OR EMAIL AT [BUILDING@CO.RIO-BLANCO.CO.US](mailto:BUILDING@CO.RIO-BLANCO.CO.US)**

**NOTE: Incomplete plans will be rejected and returned to the applicant to complete**

## BUILDING CODE REQUIREMENTS

1. All work that requires a permit must remain accessible and exposed for inspection purposes until approved or must be removed, made accessible or exposed for inspection at the permit holder's expense.
2. Concrete which requires reinforcement that has been placed without being inspected must be removed, inspected, and replaced at the permit holder's expense. Upon approval by the Rio Blanco County Building Official the inspection may be waived if approved by a Colorado Licensed Engineer. NO EXCEPTIONS
3. A re-inspection fee may be required if an inspection has been scheduled and work is not ready for inspection or the approved plans are not on site when the Inspector arrives for the Inspection.
4. Any permitted project must pass an inspection every 180 days or it will be considered suspended or abandoned and the permit will be revoked. A new application fee and permit will be required to complete the project unless otherwise approved by the Building Official, before the 180 days have expired.
5. All work must conform to the approved plans. If any changes from the approved plans are required, documents and plans showing compliance with the RBC Building Code must be submitted to the Building Official for review. Any changes to the approved plans must be reviewed and approved by the Building Official before any work is started on any portion of the project associated with those changes. Additional review and permit fees will apply. Failure to comply may result in the issuance of a Stop Work Order for all or a portion of the project.
6. The permitted structure may not be used for any purpose or occupied until a Certificate of Occupancy or Letter of Completion has been issued by the Building Official. Occupancy without approval may result in a penalty equal to the original permit fee.
7. The property owner agrees to allow access to the property at reasonable times to Rio Blanco County Personnel who in the performance of their duties are required to inspect or complete an assessment of the property associated with this permit.
8. It shall be the responsibility of the Owner or their agent to inform those involved with the work associated with any RBC permit of the inspection requirements.
9. The Rio Blanco County Building Division is aware that not everyone will understand the application and inspection process and is here to assist you. Please contact us or come to the office with your questions or concerns, and we will do our best to answer them or find alternative solutions. The entire project from application to finish will go much smoother and more efficiently with good communication.

## BUILDING PERMIT SITE PLAN CHECKLIST

### Site Plan must show:

- Dimensions of all property lines (in feet) and acreage of property
- Scale used
- North arrow
- Easements and utilities; if none, please state so
- Dimensions, square footage, use, and height of all existing and proposed structures
- Distances (in feet) between your well/cistern, septic systems, structures property lines, and water features
- All adjacent roads with names and the location, width and slope of your driveway
- Elevation of proposed building site
- The distance from the proposed structure to all property lines within 100 feet
- Parking/loading and accesses with dimensions other than single family or duplex residential units:  
Please see Section 270, RBC Land Use Regulation (LUR)
- Exterior lighting location and type
- Any planned landscaping; if none, state so
- Drainage plan for multi-family, commercial, or industrial developments
- Any planned signage if none, state so (Section 271 RBC LUR)
- Any proposed fencing, type and height

## **AGRICULTURE EXEMPT BUILDING PERMIT BUILDINGS**

**Rio Blanco County Regulations exempts certain agricultural buildings from the necessity of having a building permit. In order to qualify for the exemption, a proposed agricultural building must meet the definition of such buildings contained in Section 202 of the RBC Building Code as well as the specific criteria in the RBC Land Use Resolution. The definition of an Agricultural Building in Section 202 is as follows:**

**AGRICULTURAL BUILDING** a structure designed and constructed to house farm implements, livestock and feed; not a place of employment, business, not a work shop or to be used by the public.

### **RULES FOR AGRICULTURAL BUILDING EXEMPTIONS**

- The building must be located meeting all applicable requirements of Section 266 of the RBC Land Use Resolution.
- The building must be located out of any special flood hazard areas. (approval may be possible if additional documentation showing compliance with Section 245 of the RBC Land Use Resolution)
- The building permit exemption does not apply to any proposed plumbing, electrical or mechanical work that will occur within or in conjunction with the building. Such work can still be done only after approval and issuance of a plumbing, electrical, mechanical or woodstove permit. (Note: Electrical permits must be obtained from the State of Colorado Electrical Board)
- The building must be constructed to meet all requirements of the RBC Building Code, since an exempted building will not be inspected, it shall be the responsibility of the owner to construct the building, to meet all applicable RBC Building Codes.

If the use of the building you are proposing to construct meets the definition and rules above, it may be possible to construct the agricultural building without being issued a Building Permit. Please follow the instructions below.

### **INSTRUCTIONS FOR APPLICATION**

Complete and submit the following information to the RBC Building Division,

1. A completed, initialed and signed Agricultural Building exemption application. (both pages must be completed and signed) If the application is to be signed by the owners authorized agent, documentation by the owner must be received approving the person to act for the owner.
2. A site plan including any applicable information from the RBC Agricultural building Site Plan Checklist.

After a complete application has been received, it will be reviewed to determine if all of the requirements of the RBC Land Use Resolution for this type of work has been satisfied. Examples of requirements would be: Setbacks, size, height, floodplain, Access permits etc.

If the application is approved you will receive a letter verifying compliance with RBC requirements. If the application is not approved you will be notified by letter that the proposed construction does not comply with RBC requirements, the letter will state the reasons why, and may request additional information to be submitted.



## AGRICULTURE SITE PLAN CHECKLIST

**SITE PLAN CHECKLIST** (can be drawn on an aerial photo, please come to the office if you would like some help with this)

- Dimensions of all property lines (in feet) or acreage of property
- Scale used
- North arrow
- Easements and utilities; if none, please state so
- Dimensions, square footage, use, and height of all existing and proposed structures
- Distances (in feet) between your well/cistern and septic system, other structures, property lines, and water features.
- All adjacent roads with names, and the driveway location, width and slope.
- Elevation of proposed building site
- The distance from the proposed structure to all property lines within 100 feet
- Any planned signage; if none, please state so
- Any proposed fencing, type and height, if none please state so