

# Pikes Peak REGIONAL Building Department

## **ADDITION PLAN REVIEW**

*This packet is provided to assist in assembling a successful residential plan review submittal. The information is a summary of plan review requirements and is not intended as a substitute for the Code. Consult government departments in the jurisdiction of the site for additional criteria to meet their requirements.*

### **UNCONVENTIONAL CONSTRUCTION**

Residential plans that differ from conventional construction must be sealed and signed by a design professional licensed by the state of Colorado. Examples of unconventional construction include:

- Block or poured concrete walls, including approved insulated concrete forms (ICF), that extend beyond foundation
- Earth-sheltered or bermed
- Steel stud or post-and-beam
- Pre-engineered metal
- Structural Insulated Panel (SIP)
- Log
- Adobe or masonry brick
- Straw or tire bale
- Pole barns

### **PLAN REVIEW FEES**

The plan review fee is paid when the submittal is checked in at the front counter or online prior to completing an electronic submittal. Residential additions cannot be reviewed as a walk-thru, and must be submitted. The fee is calculated as a percentage of the building permit fee that is based on the square footage of the proposed construction (refer to the current permit fee schedule). Regional Building Department may also assess additional fees in the following circumstances:

- Review of changes to an approved and permitted plan is \$50 per hour; payable prior to the next

inspection. See splice procedures.

- After the third review of a plan, a \$100 per hour fee is assessed for each additional review.

*Plan review or other fees may be charged by the zoning department in the jurisdiction where the site is located*

### **PREPARING THE PLAN PACKAGE**

One complete plan is required. After approval and the permit is issued, the plan will be scanned and the original returned to the permit holder. You must keep the plan on the building site at all times and accessible to the inspectors. The scanned image will be retained at Pikes Peak Regional Building Department. Electronic submittals will need to be printed and on site at all times.

### **HOMES WITH MORE THAN ONE KITCHEN**

If the scope of the work includes the addition of a second kitchen or kitchenette in which a permanent 220v or gas cooktop, stove, or range is being installed, approval through the Zoning Authority is required. Depending on the property location and current zoning, a second kitchen may be prohibited or require additional modifications. Please contact the property's Zoning Authority for additional information.

### **DRAWINGS**

The plan must be in a clear and legible format on substantial paper, plastic or fabric material, or electronic means as approved by the Regional Building Official.

## **DRAWINGS (CONT)**

With the exception of the site plan, plans are drawn to a scale no smaller than 1/8 inch = 1 foot, (1/4 inch = 1 foot is preferred). Lettering must be no smaller than 1/8 inch in height. Clarity is important for accurate review and transfer of plans to public record. Plans that do not meet these criteria can be rejected.

## **ATTACHMENTS**

*Staple the following items to your plans. All documents can be reached at (<https://www.pprbd.org/Download/ResidentialHandout#residentialHandouts>)*

- International Energy Conservation Code Certificate (or REScheck printout from Dept. of Energy website)
- Residential HVAC Equipment Certificate
- Duct layouts and associated calculations for large additions and Heat Loss Calculations for small additions

## **RESUBMITTAL PROCEDURES**

Plans are required to go through the entire initial review process before they can be checked back out to the applicant. Once that initial review has occurred, the applicant will need to pick the plans up from our office. If corrections are needed in order to complete the plan approval, the corrections can either be done as markups or page replacements. If the corrections needed are minor and can be done with a handwritten note, the DESIGN PROFESSIONAL OF RECORD can make the change then date and initial the change on the existing sheet. If the correction warrants a page replacement, the new page is to be inserted into the plan set and the old page removed. ALL old pages are to be returned with the corrected set upon plan resubmittal, regardless of the reason the page was

replaced. This procedure is to occur PRIOR to the plan being resubmitted

## **SPLICE (PLAN CHANGE) PROCEDURES**

Plans may be modified after the Permit is issued, and is referred to as a "splice". Splices may be submitted electronically through the permit holder's dashboard when they are logged into their PPRBD.org account. The "ADD SPLICE" button can be found on the Permit Details screen for each project. To process a paper splice, present one copy of the revised sheet(s) to the permit counter to obtain your Plan Labels. Paper splices will need to be scanned after final approval. There will be a fee to process a splice, with the minimum being \$50.

# PLAN REQUIREMENTS

## PLOT PLAN

Scaled to standard engineer's scale (1" = 20' recommended), site/plot plan review is required for all new construction plans. Contact the zoning department having jurisdiction for additional information.

Calhan	719-347-2586
Colorado Springs	719-385-5982
El Paso County	719-520-6300
Fountain	719-382-8521
Green Mountain Falls	719-684-9414
Manitou Springs	719-685-4398
Monument	719-481-2954
Palmer Lake	719-481-2953
Woodland Park (City limits)	719-687-5202

- **Complete street address.**
- **Legal description of property.**
- **Property lines and dimensions.** Include side, front and rear yards.
- **All site improvements**, including existing and proposed new construction (deck, patio enclosure, garage, etc.)
- **Tax Schedule number** (County Clerk & Recorder)

## FOUNDATION PLAN

- Type of foundation
- Type of under floor space
  - Basement
  - Crawl space (specify conditioned or vented)
  - Not excavated

**Structures will be required to have a soils report and engineered foundation design at the time of first inspection.**

## FLOOR PLANS

Complete architectural floor plan for each level, including basement of the addition along with the adjacent spaces of the existing structure, that identifies:

- All interior dimensions

- Intended use of each room or area
- Location and dimension of each door
- Location and dimension of each window and type:
  - Single hung, double hung, slider, etc.
- Window well size
- Safety glass (tempered) where required
- Mechanical equipment location specified as:
  - Furnace/boiler, gas or electric indicated with thermal input values in BTU/hr
  - Water heater, gas or electric indicated
  - Floor drain
  - Vent stack
- Attic access, location and size
- Crawl space access, location and size
- Fireplaces as listed appliances
- Smoke and carbon monoxide detector locations
- Area in square feet of each habitable room

## ROOF PLAN (SOLAR READY)

- Show orientation of building indicated in degrees from true north to determine solar ready zones
- Where roof slopes fall within 110 and 270 degrees and exceed 600 square feet, 300 square feet of solar ready zones must be indicated
- Solar ready zones must be a minimum dimension of 5' and equal 80 square feet to qualify. Multiple zones are allowed.

## EXTERIOR ELEVATIONS

Illustrate all sides of the addition along with enough of the adjacent structure to provide adequate context. Include:

- Finished grade (if known)
- Floor and plate heights
- Roof slope or pitch
- Roof material
- Exterior finish (wood, stucco, etc.)
- Attic ventilation information
- Crawl space ventilation information
- Chimney heights & distance to roof
- Roof drainage requirements

# PLAN REQUIREMENTS (CONT)

## INTERIOR SECTIONS/DETAILS

A minimum of one dimensioned section through the addition is provided that identifies:

- Foundation
- Elevations of each level
- Framing material/description
- Floor levels
- Number of plates
- Finish grades, if known
- Insulation (match or exceed Energy Certificate)
- Stairs
  - Material
  - Rise/run dimensions
  - Handrail, guardrail
  - Head clearance
  - Landing
  - Stringer connection detail
  - Fire protection on underside, if any

## FLOOR FRAMING PLAN

Complete structural plan of the addition, per floor, that identifies:

- Framing material:
  - Dimensioned lumber
  - Engineered product (I joists)
  - Pre-manufactured product (floor trusses)
- If engineered material, include manufacturer and model description
- Spacing
- Post, beam and header size and locations
- Bearing walls, indicate stud size and spacing
- Number of trim & king studs for beams and headers
- Hangers and tie downs (either at location on plans)
- If framing involves any steel to steel connections, provide details. Drawings may require the seal of

a design professional licensed by the state of Colorado.

## ROOF FRAMING PLAN

Complete structural plan of the addition, and any portion of the adjacent structure being modified due to the addition, that includes:

- Framing material:
  - Rafters
  - Engineered product (I joists)
  - Pre-manufactured product (roof trusses)
- Spacing
- Over-framing shaded and noted
- Post, beam and header locations, size & material
- Bearing walls, indicate stud size and spacing
- Number of trim & king studs for beams and headers
- Hangers and tie downs (either at location on the plans or as a schedule on the plans)
- If engineered wood trusses are used, provide the following information. (**Note: Truss manufacturer layouts are not accepted in lieu of framing plans.**)
  - Detail of each truss component produced by the manufacturer, stamped by a Colorado licensed design professional
  - Label all trusses on the roof framing plan with alphanumeric labels corresponding to the details
  - Label all girder trusses with the number of plies
  - Indicate size and species of bearing chord or web

## PLUMBING AND ELECTRICAL PLANS

See the following sheets for plumbing and electrical plan requirements.

**ELECTRICAL PLANS**

- Provide overall floor plan, minimum scale 1/8" = 1'-0", with 1/8" minimum lettering.
- Show interior and exterior lighting controls, when required by unamended 2021 IECC R404.2 and R404.3.
- Show location of electrical emergency disconnect and electrical panel location.
- Provide generic fixture schedule.
- Show kitchen cabinet layout.
- If using Total Building Performance compliance path per 2021 IECC R405, indicate the requirement for an air barrier installed behind the electrical or communications box or air-sealed boxes.

**SOLAR READY REQUIREMENTS**

- Pathway shown for future routing of conduit from the roof to the electrical service panel.
- Number and location of EV ready spaces(s) in garage and locations of conduit and termination points serving the aforementioned parking space(s). A minimum 2-pole 40 amp GFCI breaker, conduit, conductor, and receptacle for EV charger.
- Plan note requiring a 2-pole breaker space for each proposed combustion appliance and 2-pole breaker space at the opposite end of the buss for solar ready.
- Plan note requiring compliance with 2021 IECC R402.4.6 to limit air leakage through electrical and communication outlet boxes installed in the building thermal envelope.

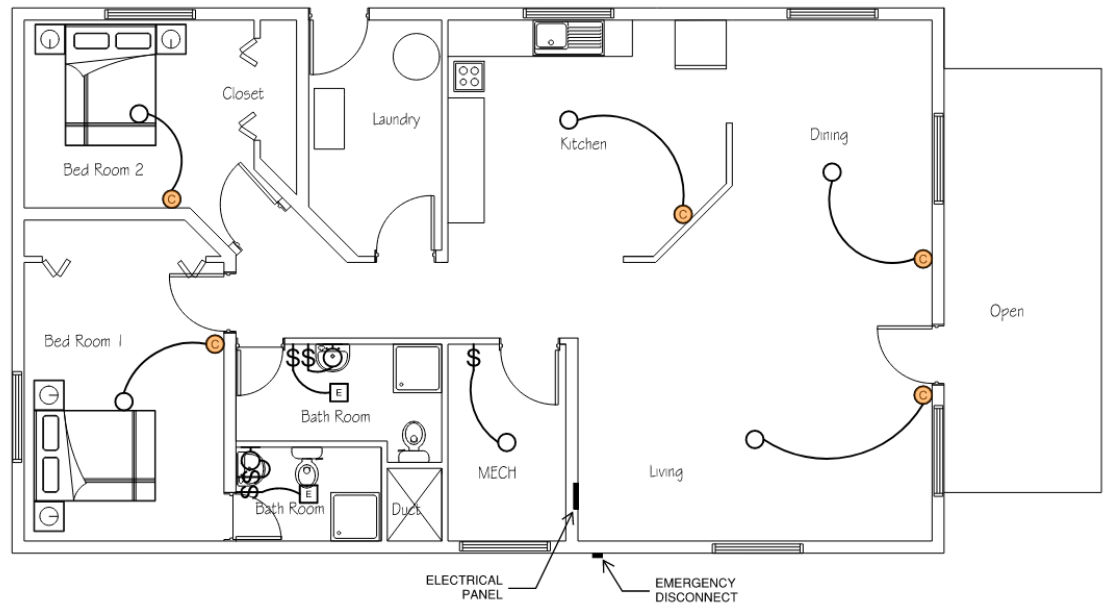
**PER RBC308.4.20 (AMENDMENT)**

R404.1 LIGHTING EQUIPMENT  
 NOT LESS THAN 90% OF ALL PERMANENTLY  
 INSTALLED LIGHTING FIXTURES, EXCLUDING  
 KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL  
 CONTAIN HIGH-EFFICACY LIGHTING SOURCES.

GENERIC FIXTURE SCHEDULE

FIXTURE TYPE	WATTS PER FIXTURE
TYPE X - HIGH EFFICACY	X WATTS
TYPE Y - RECESSED LUMINAIRE	Y WATTS

- EXHAUST FAN
- OCCUPANCY SENSOR - (NOT REQUIRED WHEN USING PPRBC AMENDMENT - RBC308.4.21)
- SWITCH
- RECESSED LIGHT
- WALL MOUNTED LIGHT



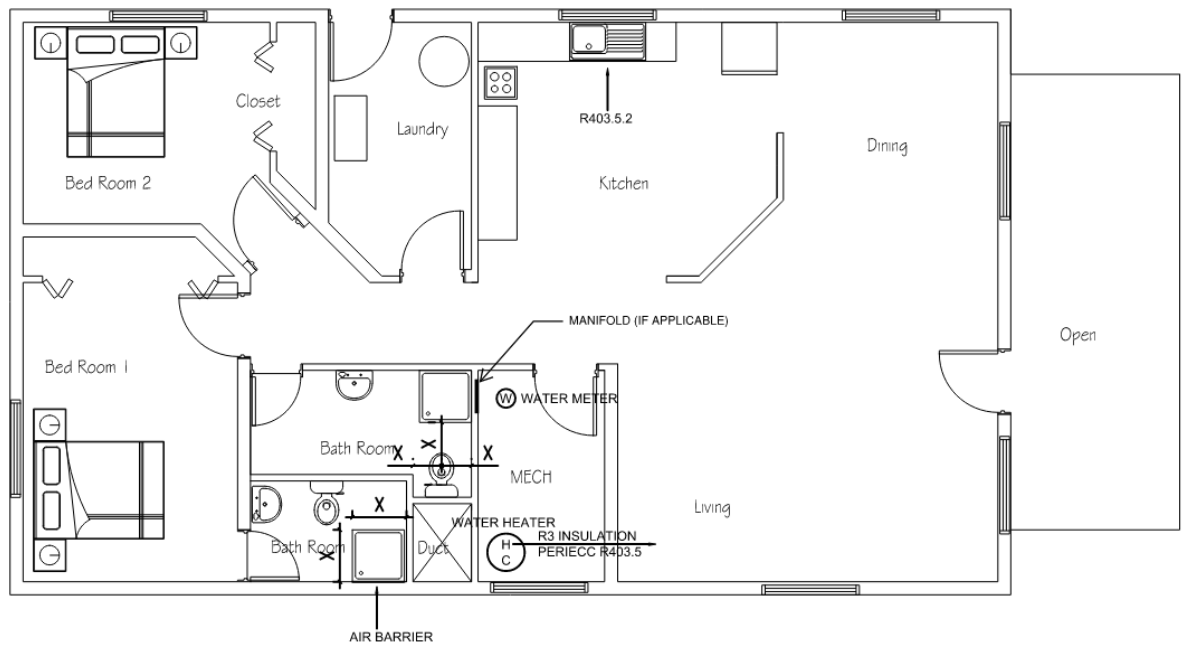
**Electrical Plan (example)**

**PLUMBING PLANS**

- Provide overall floor plan, minimum scale 1/8" = 1'-0", with 1/8" minimum lettering.
- Show locations of hot water pipe insulation per 2021 IECC R403.5.2 on plan or call out required location in note form.
- Show dimension of shower pan(s).
- Show minimum clearances at all water closet(s) per 2021 IRC P2705.1 (Side to side and front).
- Show air barriers for tubs and showers on exterior walls (See 2021 IECC R402.4.1.1).
- Show water meter location and location of manifold (if applicable).
- Include the following notes on the Plumbing Plan:
  - Maximum fixture units allowed per supply water pipe size: 1/2" pipe = 3 fixture units, 3/4" pipe = 9.5 fixture units, 1" pipe = 32 fixture units.
  - All fixtures must be listed by NRTL (Nationally Recognized Testing Laboratory)
- If utilizing a recirculation or demand plumbing system, show the location of the hot water loop on plans.
- If selecting reduced energy use in service water-heating as the Additional Energy Efficiency Option on the 2021 IECC Certificate, per IECC R408.2.3, indicate which of the three efficiencies is being met.

MAXIMUM WATER SUPPLY FIXTURE UNITS PER WATER PIPE SIZE	
PIPE SIZE	FIXTURE UNITS
1/2	3
3/4	9.5
1	32

ALL FIXTURES MUST BE NRTL LISTED.



**Plumbing Plan (example)**