

CHECKLIST FOR COMMERCIAL PLAN REVIEW SUBMITTAL (INCLUDES BUT IS NOT LIMITED TO THIS LIST)

(INCLUDES BUT IS NOT LIMITED TO THIS I

Codes adopted by PRBD.

- 2021 IBC International Building Code
- 2021 Existing building code (IEBC)
- 2021 IECC International Energy Code
- 2021 IMC International Mechanical Code
- 2021 IFGC International Fuel Gas Code
- 2021 IFC International Fire Code
- 2023 NEC National Electric Code Effective on all permits as the State dictates required code cycle.
- 2021 IPC International Plumbing Code Effective on all permits as the State dictates required code cycle.
- 2021 International Swimming Pool and Spa Code Effective on all permits as the State dictates required code cycle.

Basic Design Criteria:

- Snow Load: 20LB Ground load for City & Pueblo West, Variable with altitude in County --> See Snow Load Table at https://prbd.com/pubs/snowloads.pdf
- Wind Load: 115mph
- Frost Line : 26 Inches
- Seismic Zone: B

<u>One Electronic set in PDF format are REQUIRED</u> Submit electronically at PRBD.COM/PLANREVIEW/

IF APPLICABLE, ALL ITEMS BELOW MUST BE INCLUDED WITH SUBMITTAL OR PLANS WILL BE NOT BE ACCEPTED.

Allow up to two weeks for initial comments.

You may check the status of a plan review at <u>https://prbd.com/searches/prsearch.php</u>. The site address or plan review number is required to obtain access to the review.

Be aware a Required Agency Approvals – Project Routing, may be required and should be created at time of submittal.

- Stamped and signed plans as required on PDF. ALL PAGES TO BE STAMPED AND SIGNED.
 Shall require original Colorado Engineer's or Architect's stamp.
 When a Colorado Architect or Engineer stamp is required, it must be an original seal and signature dated and must appear on each sheet of design drawings and all other documents submitted.
- □ Jobsite name/project name, property owner name, and tenant name where applicable.
- Jobsite legal description/address/parcel #. Drawings need to be site specific.
 An address must be assigned before plans are submitted. See address application form.



<u>Plan Review Fee must be paid prior to Plan Review Commencing</u> <u>Plan Review Application must be completely checked</u>

Code study to include:

- □ Occupancy classification: Chapter 3 2021 IBC
- Occupant Load w/area calculations & factor rating using Table 1004.5 2021 IBC
- □ Floor Area
- □ Type of Construction: Chapter 6 2021 IBC
- □ Height & Number of Stories
- □ If applicable, show basement space, upper stories, and adjoining spaces with area square footages & occupancy Group.

Drawings to include:

- □ Overall site plan- fully dimensioned. Include all utilities if applicable 11" x 17" Min. size
- □ Key Plan showing adjoining units or overall building when project is a remodel or tenant finish.
- □ Elevations—interior & exterior if applicable
- □ Structural cross sections if applicable
- Engineered foundation if applicable
- □ Soils report if applicable
- Energy Analysis: building envelope, electrical/lighting and mechanical portion (ComCheck) if applicable (2021 IECC) free web app at website http://www.energycodes.gov
- □ Handicap accessibility per ICC standards (ICC A117.1-2017)
- □ Electrical plan if applicable (see below)
- Mechanical plan if applicable (see below)
- Plumbing plan if applicable (see below)

*******Submittal of corrections: Corrections shall be submitted as a new revised set of plans and must include any Architectural, Electrical, Mechanical, or Plumbing corrections as reported on plan review status comments. Partial plans will not be accepted. Corrections cannot be uploaded until after the overall status is changed to Rejected and the notice sent to project contact. Please be advised that revised plan review may take two (2) weeks for re-review.

*****Revised plans after approval or permit issue:** Any changes to approved plans are subject to resubmittal for plan review. If plans were previously permitted additional plan review fee of <u>\$120.00 per revision</u> will be assessed. Plan review may also include an hourly rate of \$30.00 per hour, or part thereof, for each division reviewing the plans.

***Approved plans must be on job site during inspections.



Plumbing plan to include:

- □ Civil drawings showing all utilities to structure w/sizing i.e. water, sewer, storm, & fire main
- □ Size and location of drain, waste, and vent lines within building, when applicable.
- □ Include isometric drawings.
- Restroom facilities with fixture units.
- □ Location of drinking water facility.
- □ Sand traps and grease traps with sizing calculations, when required.
- □ Location of back-flow prevention devices.
- □ For remodels and additions show all existing fixtures.
- □ Water pipe drawings with sizing & calculations

Mechanical plan to include: (Check all boxes that are applicable.)

Mechanical plan reviews are based on the specified edition of the International Mechanical Code (IMC) and International Fuel Gas Code (IFGC) unless otherwise directed. In order to perform a thorough Mechanical plan review, the following specifications, drawings and details should be submitted.

- □ Location, size and type of supply and return ducts.
- □ Location and size of gas lines and location of Gas meter.
- □ Location and access for mechanical equipment.
- □ Combustion air source.
- Complete signed and sealed (as required by applicable laws) plan and specifications of all heating, ventilating and air conditioning work.
- Complete information on all the mechanical equipment and materials including listing, labeling, installation and compliance with referenced material standards.
- Details on the HVAC equipment including the equipment capacity (Btu/h input), controls, equipment location, access and clearances.
- □ A ventilation schedule indicating the outdoor air rates, the estimated occupant load/1,000 ft² the floor area of the space and the amount of outdoor air supplied to each space.
- □ The location of all outdoor air intakes with respect to sources of contaminates.
- Duct construction and installation methods, flame spread/smoke development ratings of materials, flexible air duct and connector listings, sealing of duct joints seams and connections and duct support spacing.
- □ Condensate disposal, routing of piping and auxiliary and secondary drainage systems.
- □ Required exhaust systems, routing of ducts and termination to the exterior.
- Complete details of all Type I and Type II kitchen hoods, grease duct construction and velocity, clearance to combustibles and fire suppression system.
- Details of all duct penetrations through fire-resistance rated assemblies including locations for all fire dampers, smoke dampers and ceiling radiation dampers along with applicable fire protection ratings and labeling requirements.
- Method of supplying combustion air to all fired appliances, the location and size of openings and criteria used to size the openings.
- Details on the vents used to vent the products of combustion for all fuel burning appliances including the type of venting system, the sizing criteria required for the type of vent and the routing of the vent.
- Boiler and water heater equipment and piping details including safety controls, gauges, valves and distribution piping layout.
- Details on the type and quantity of refrigerant, calculations indicating the quantity of refrigerant and refrigerant piping material and the type of connections.
- Complete details on the gas piping system including materials, installation, valve locations, sizing criteria and calculations (i.e. the longest run of piping, the pressure, the pressure drop and applicable gas piping sizing Table(s) in the IFGC



Electrical plan to include:

ONE LINE, (from transformer to electrical equipment for new and existing electrical system)

- □ Wire size, type, and quantity for service and sub panel feeders.
- □ Conduit size, type, and quantity.
- Meters, Disconnects and Panels.
- □ Calculated load of service of the entire building.
- □ Fault current calculations for all new service equipment and sub panels to include re-fed existing gear (per 110.24 A&B).
- □ Series rating information when used.
- Over current protection showing compliance with NEC 215.10 and 230.95.

PANEL SCHEDULE

- Disconnect and panel size.
- □ Volt amps on all branch circuits and calculated load of panel.
- □ AIC rating and SCA available.

FLOOR PLANS

- □ Location of all equipment on the entire structure (new and existing).
- □ Location of all equipment, lights and panel boards.
- □ Circuit numbers on all receptacle and lighting outlets.
- □ Patient care areas show compliance with Article 517 NEC.
- GFCI protection for other than dwelling units per NEC (GFCI devices must be readily accessible).
- Lighting fixture schedule including fixture and lamp wattage, type of fixture and light details.



www.prbd.com

2021 International Energy Conservation Code

Residential Requirements

Interior Lighting

2021 IECC: 100% permanent lighting shall be high efficacy.

- Does not impact plug-in lighting sources like floor and desk lamps.
- This has been amended to 90% per adopted ordinance.

Interior Lighting Controls

Permanently installed fixtures shall have dimmer, occupant sensor control, or other control installed or built into the fixture.

Exceptions include:

- Bathrooms
- Hallways
- Exterior lighting fixtures*
- Lighting for safety and security

Exterior lighting Controls

Permanently installed outdoor lighting > 30 watts total power, are required to turn off with adequate daylight.

- Can be photocell or time clock.
- Override permitted up to 24 hrs.
- Must then return to automatic operation.

See referenced 2021 IECC - Section R404 on page 2

SECTION R404

ELECTRICAL POWER AND LIGHTING SYSTEMS

R404.1 Lighting equipment. All permanently installed lighting fixtures, excluding kitchen appliance lighting Fixtures, shall contain only high-efficacy lighting sources.

R404.1.1 Exterior lighting. Connected exterior lighting for residential buildings shall comply with Section C405.5.

Exceptions:

- 1. Detached one- and two- family dwellings.
- 2. Townhouses.
- 3. Solar-powered lamps not connected to any electrical service.
- 4. Luminaires controlled by a motion sensor.
- 5. Lamps and luminaires that comply with Section R404.1.

R404.1.2 Fuel gas lighting equipment. Fuel gas lighting systems shall not have continuously burning pilot lights.

R404.2 Interior lighting controls. Permanently installed lighting fixtures shall be controlled with either a dimmer, an occupant sensor control or other control that is installed or built into the fixture.

Exception: Lighting controls shall not be required for the following:

- 1. Bathrooms.
- 2. Hallways.
- 3. Exterior lighting fixtures.
- 4. Lighting designed for safety or security.

R404.3 Exterior lighting controls. Where the total permanently installed exterior lighting power is greater than 30 watts, the permanently installed exterior lighting shall comply with the following:

1. Lighting shall be controlled by a manual on and off switch which permits automatic shut-off actions.

Exception:

- 1. Lighting serving multiple dwelling units.
- 2. Lighting shall be automatically shut off when daylight is present and satisfies the lighting needs.
- 3. Controls that override automatic shut-off actions shall not be allowed unless the override automatically returns automatic control to its normal operation within 24hours.