Boulder County

Boulder County Community Planning & Permitting Publications

Required Inspections & Procedures

Community Planning & Permitting Courthouse Annex Building 2045 13th Street PO Box 471 Boulder, CO 80302

> Building Safety & Inspection Services: EZBP & License Applications, Reports & Letters ezbp@bouldercounty.org 303-441-3926

Plan Review & Building Code Questions: building@bouldercounty.org 720-564-2640 www.bouldercounty.gov

Required Inspections & Procedures

Based on the provisions of the 2015 IRC and 2015 IBC.

Your attention to the following procedures will allow your building inspection process to progress smoothly and could eliminate costly delays.

Step 1: Post the Street Address

Boulder County Building Code requires that you post your address in clear view from the road. Inspections cannot be made if the inspector is unable to locate the site and a re-inspection fee may be charged.

Step 2: Post the Inspection Record

The inspection record must be on site at the time of the inspection. The on-site inspection record will inform the builder of the status of the inspections.

Step 3: Provide County Approved Plans On-Site

You will receive a set of County Approved plans upon issuance of the building permit. This set of plans must be kept on the job site. Failure to have the approved plans on site at the time of an inspection will prevent the inspector from doing the inspection.

Changes may not be made from the approved plans without first obtaining approval from Boulder County Building Safety & Inspection Services. Two sets of revised plans and a written description of the changes must be submitted to the Building Safety & Inspection Services office. Upon approval, the revised plans must be made available to the inspector at the time of the inspection.

Step 4: Verify You have Received the Required Inspection Approvals

The "Inspection Record" lists each of the inspections or series of inspections in the order which they will occur.

Work may not progress on any part of the construction project beyond the approved point indicated on the "Inspection Record." Approval is indicated by the initials and date of a Boulder County Building Inspector in the approval column for each required inspection. It can be very time-consuming and costly for the permit holder to uncover walls or demolish construction that has proceeded past the required inspection point.

Step 5: Follow the Inspection Scheduling Procedures

All inspections must be requested before 3:30 p.m. on a business day in order to be scheduled for the following business day. Requests received after 3:30 p.m. or on weekends will be scheduled for the day after the following business day. An inspection time cannot be pre-arranged or guaranteed. To schedule inspections, call 303-441-3925 and press 1.

Building inspections will only be performed Monday through Thursday with no inspections occurring on Fridays. Building Inspections for Monday should be scheduled by 3:30pm on Thursdays.

It is not advisable to schedule concrete for the same day as the inspection. The inspection time cannot be guaranteed, and inspectors occasionally run late.

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To find the approximate time of inspection, follow these instructions:

On the day of the inspection, after 9 a.m., call 303-441-3925 and press 2. The inspectors generally try to complete their routes by 4:30 p.m., but will inspect as long as daylight permits if necessary. These are approximate times, and not absolute. Circumstances will occasionally cause inspectors to fall behind, or to get ahead of schedule. Every effort will be made to contact you if the inspector is unable to make an inspection due to our workload or to circumstance.

If you Need to Contact an Inspector or Plans Examiner:

You may leave the inspector a voicemail message at any time and they will return your phone call by the morning of the next business day.

Inspectors	Cell Phone	Office Phone
Patrick Delumpa	303-704-0627	720-564-2606
Cary Gaynor	303-548-0097	720-564-2617
Stephen Hennessy	303-548-0096	720-564-2852
Michael Reinwald	720-448-6552	720-564-6482
Taj Yelton	303-548-9589	720-564-2639
Plans Examiners		
Bryon Bennett		303-441-1373
Heather Dodge		720-564-2602
Chad Hagen		720-564-3562
Michelle Huebner		720-564-2616
Jason Schultz		720-564-2637
Joseph Touvell		303-678-6032
Angelina Velasquez		303-678-6114
Wildfire Mitigation Specialists		
Kyle McCatty		720-564-2625
Abby Silver		720-564-2641

Building Safety & Inspection Services Staff

Required Inspections

The following inspections are typically required for a new single family dwelling. Not all inspections are required for remodels, additions, and other projects. If you have questions as to which inspections are required for your project, consult the Building Safety & Inspection Services staff.

1. Temporary Electric Construction Pole

The Temporary Electric Construction Pole Inspection is to be made after all temporary wiring to the circuit panel from the meter housing is in place. Installation shall comply with the utility provider's requirements. Be sure to drive the ground rod the full 8 feet, and be certain installations have been made as required in Chapter 35 of the IRC or Article 590 of the 2014 National Electrical Code.

2. Trenches, Footings, Pads, Caissons, and Helical Pier

The Trenches, Footings, Pads, Caissons, and Helical Pier Inspection is to be made after trenches are excavated, forms are erected, reinforcing steel is in place (in accordance with approved plans), and prior to any concrete placement. When caissons or helical piers are used, the inspection shall be made by a qualified, statelicensed engineer. Original stamped and signed engineers reports for caisson/helical pier inspections must be submitted to the Building Safety & Inspection Services office as soon as possible. Rough inspections cannot be scheduled until the engineers inspection report has been received and approved.

3. Foundation Walls and/or Grade Beam Steel Reinforcement

The Foundation Walls and/or Grade Beam Steel Reinforcement Inspection is to be made after all forms are erected, securely braced, reinforcing steel is in place (in accordance with approved plans), and prior to placement of any concrete. For masonry foundation walls. This inspection is to be made after all masonry units and steel reinforcement are in place, prior to grouting. The time of the inspection cannot be predicted, so it is recommended that you do not schedule concrete for the day of the inspection.

4. Underground Electrical

The Underground Electrical inspection within the building, is to be made prior to backfilling or pouring the concrete floor. If the meter housing is mounted on a pole away from the building, the line must be inspected between the meter and the structure to confirm correct conductors and proper burial depth prior to backfilling. See table 300-5, 2014 National Electrical Code for burial depth requirements.

5. Under Slab Plumbing (and Pressure Test)

The Under Slab Plumbing (and Pressure Test) Inspection is to be made prior to back-filling and pouring of the concrete floor. Drain-waste vents require a 5 psi air test or 10 ft. water stack test, and water piping requires a 50 psi air test.

6. Underground Gas Piping (and Pressure Test)

The Underground Gas Piping (and Pressure Test) Inspection is to be made prior to back-filling. Gas piping requires a 10 psi air test for 15 minutes. Minimum required coverage of earth for trenches is 12 inches. Plastic gas piping requires a minimum 18 gauge yellow tracer wire installed adjacent to the pipe that extends above grade at each end. All underground gas piping must be inspected and tested.

7. Rough Inspections

Note: All Rough Inspections (items A - E) shall be complete, scheduled and inspected at the same time. All previously required inspections must be signed off prior to scheduling the rough inspections. If a fire sprinkler system is required for your project, you must provide proof of the sprinkler plan review and rough sprinkler inspection approval by a certified inspector prior to scheduling the rough inspections.

A. Rough Electrical

The Rough Electrical Inspection is to be made prior to covering or concealing walls, ceilings, and floors. This inspection includes placement of all wiring, outlet boxes, branch circuits, and feeders entering into panel(s). All grounding conductors shall be made up in boxes.

B. Rough Plumbing

The Rough Plumbing Inspection is to be made prior to covering or concealing walls, ceilings, and floors. This inspection includes drain-waste lines, vents, and water supply lines. Drain-waste and vent plumbing requires a 5 psi air test or 10 ft. water stack test. Water piping requires 50 psi air test or must be under normal operating conditions.

C. Rough Gas Piping (and Pressure Test)

The Rough Gas Piping (and Pressure Test) Inspection is to be made prior to covering or concealing walls, ceilings, and floors. Gas piping requires a 10 psi air test for 15 minutes.

D. Rough Heat and Vent

The Rough Heat and Vent Inspection is to be made prior to covering or concealing walls, ceilings, and floors. The code requires that the installer leave the manufacturer's operating and installation instructions attached to each gas burning appliance.

E. Rough Framing

The Rough Framing Inspection is to be made after the roof, all framing, fire blocking, continuous load path columns, blocking, and wind bracing is in place, and all other roughs are completed. Roof covering must be in place in order to pass this inspection. Engineering design and layout for manufacturers' structural components such as trusses or wood "I" joists must be on site at the time of the inspection. If engineered trusses are used, provide the original truss engineered signed and sealed sheets. (these are typically delivered with the trusses).

8. Insulation:

An Energy Rater must perform an insulation inspection. Before drywall inspection, an Energy Rater must provide a copy of the inspection results to the Building Safety & Inspection Services office for review and approval. **Exception:** For Prescriptive Path addition/renovations projects less than 500 square feet. Insulation Inspections will be performed by a Boulder County Building Inspector. An insulation certificate shall be posted in compliance with Section N1101.14.

9. Lath and/or Wallboard

The Lath and/or Wallboard Inspection is to be made prior to taping walls and ceilings after all nails or screws are in place. It is generally acceptable to install corner beads prior to this inspection.

10. Gas and Electrical Meter Release Inspections

The Gas Meter Release Inspection is to be made after the rough gas piping is inspected and approved. All vents must be in place. At least one gas-burning appliance must be completely hooked up. All other gas outlets capped. The Electric Meter Release Inspection is to be made after the rough electric inspection is approved, all branch circuit neutrals and grounds landed at the panel(s), at least one wired GFCI receptacle, furnace or boiler wired, the main disconnect wired, all feeder panel(s) wired, panel covers in place, and all grounding and bonding shall be complete.

11. Final Building Inspection

The Final Building Inspection occurs when the project is fully complete, and all previously-required inspections signed off. The non-code required elements do not need to be completed. These include: interior paint, interior trim, interior doors, floor coverings, cabinets, refrigerator installation, etc.

A. Final Grading

The Final Grading Inspection will confirm positive drainage away from building with no low spots. Gutters and downspouts with downspout extensions or splash blocks shall be in place.

B. Framing

The Final Framing inspection requires all rooms and all areas to be complete in every safety aspect, including; handrails, guardrails, landings, fire separation walls, self-closing doors, and exit requirements.

C. Electrical

The Final Electrical Inspection requires all fixtures and service panel equipment to be complete. All cover plates installed, all devices and lighting functional, circuit breakers in panel labeled, and all circuits energized.

D. Plumbing

The Final Plumbing Inspection requires all fixtures are to be installed, including water heater.

E. Heating and Ventilation

The Final Mechanical Inspection requires all heating and cooling appliances and required ventilation to be installed. Registers and grilles must be in place at this time.

F. Glazing

This glazing inspection requires all window glazing, safety glazing, and egress windows to be in place and etched labels visible.

11. Others Approvals

A. Fire sprinkler inspections.

A final inspection by a certified inspector must be completed, and an inspection report received in the Building Safety & Inspection Office prior to final inspection approval.

B. Boulder County Health Department Inspection.

Septic system inspections are preformed by Boulder County Public Health, 303-441-1190. Notification of their final must be received in the Building Safety and Inspection Services office prior to final inspection approval.

C. Driveway Access

Inspection Driveway access must be inspected by Access & Engineering prior to final inspection approval. The Access & Engineeringinspector will be notified by the Building Safety & Inspection Services staff when the final building inspection is scheduled.

D. Site Plan Review Inspection

All conditions of your Site Plan Review must be inspected and approved prior to the final inspection approval. This inspection will be included with the final building inspection. Call 303-441-3930 with inquiries.

E. Wildfire Mitigation

Refer to the comments on the building permit under Wildfire Mitigation to determine the inspection requirements. Typically two inspections are required – one at the completion of the defensible space work and water supply prior to the rough inspection, and one at the completion of all of the wildfire mitigation requirements specified by the Site Plan Review and wildfire mitigation plan.

Contact Boulder County at 303-441-3925 once the work is completed.

Inspection Results and Correction Notices are available online at www.boco.org/PermitRecords

Certificates of Occupancy

Certificates of Occupancy are issued only for new dwellings, commercial buildings, and change of use for a structure. A Certificate of Occupancy is not issued for a residential addition or remodel project. A Certificate of Occupancy cannot be issued on the same day that the inspection is scheduled. Allow at least two working days after the day in which all inspections and requirements are approved for the issuance of a Certificate of Occupancy.