



CITY PLANNING & DEVELOPMENT

Required Building Inspections
Information Bulletin No. 104

kcmo.gov/planning

Purpose

This document will explain what needs to be inspected by City Planning & Development (CPD) Inspection Division for a typical project, the sequence of the inspections, how to request an inspection, and how to expedite the inspection process for your project. Understanding these procedures will help make the inspection phase of your project run smoothly. Please be aware that a subsequent inspection may not be performed if approval is not obtained for any prior required inspection.

Inspections for work located in the public right-of-way (e.g., public sidewalks and drive approach) are performed by Public Works and Water Services. Contact those departments directly for more information.

Requesting Inspections

To request an inspection, you need to be able to provide the following information when making the request:

- Permit type and number
- Address of project
- Type of inspection requested
- Indicate if request is for reinspection
- Desired date of inspection
- Requestor name, company name, and phone number

When you have determined that the work is ready for inspection, you may request your inspection by one of the following means:

- 816-513-1500 (8:00 am-4:00 pm)
- Email buildinginspections@kcmo.org
- Online via [CompassKC](#) under the permit number

Inspection requests are taken throughout the day, but they will be distributed as work only once a day. If you desire a morning or afternoon inspection, please indicate when making your request and we will try to accommodate your request. We will call you 30 minutes prior to the anticipated inspection time if you request. It is CPD's goal that inspection requests received prior to 4:00 pm will be responded to the next business day 95% of the time. Inspection requests received after 4:00 pm will be scheduled for the second business day.

For inspection requests associated with the placement of concrete (footings, foundations, garage slab, and basement slabs) or masonry throat inspections, CPD will make every effort to respond within two hours of the request. The cutoff time for this type of request is 1:00 pm. If your request is received after 1:00 pm, the inspection will be scheduled between 8:00 am and 10:00 am the following business day. Always call 816-513-1500 and speak to a customer service representative when requesting these types of inspections to help ensure the work is properly dispatched.

All work shall be ready for inspection at the time the request is made. If you wish to use the services of an authorized third-party inspector, see Optional Third-Party Inspections section below.

Identify Lot/Building

It is important to properly identify your project with proper signage (e.g. premises address or lot number) so that the inspector does not waste time trying to find your project, and so that CPD or a third-party does not inspect the wrong project. Failure to comply with this requirement may result in your inspection being disapproved.

Types of Inspections/Sequential Order

The following is a list of typical inspections required for one- and two-family dwellings. Code references are to the 2018 International Residential Code (IRC). Please note that it is the responsibility of the holder of the building permit to coordinate all inspection activity and to ensure that City approved plans (including site plan) are on the job site for inspection purposes. Failure to have City approved plans on the job site or not being ready for the requested inspections may result in disapproval of all inspections that were scheduled and the assessment of a reinspection fee. Exception: Approved plans will not be required to be on the job site for the following types of inspections: backfill, slab where backfill material does not exceed 24 inches of compacted sand or gravel or 8in of compacted earth, electrical service, gas service, plumbing groundwork.

1. Footing Inspection – Made prior to placement of concrete. To be made after all column or wall footings are excavated, forms erected, and any required reinforcing steel is in place.
 - a. Reference code section Chapter 4 foundations
 - i. Concrete to be a minimum of 2500 psi.
 - ii. Foundations shall bear on solid undisturbed soil.
 - iii. Soil bearing capacity is assumed to be 2000 psf.
 - iv. Footings shall be a minimum of 36in below finish grade.
 - v. Concrete encased electrode installed for electrical service.
2. Foundation Wall Inspection – Made prior to placement of concrete. To be made after forms are set and overlapping reinforcing steel is tied together (minimum 20 diameters).
 - a. Reference code section Chapter 4 foundations
 - i. Foundation walls shall be in accordance with Table R-404.1.1(1)-(5), CPD [Information Bulletin \(IB\) No. 114](#), or shall be designed by a registered professional engineer, registered architect, or certified professional building designer.
3. Groundwork Inspection – Made prior to complete installation of base course. To be made after all under slab mechanical or electrical components and plumbing piping have been installed. All material shall be adequately supported and installed according to the code and/or listing.
 - a. The water service line (from the street main to the first valve in the house) shall be inspected by the Water Services Department. The exterior sanitary sewer line may be inspected by the Water Service Department at the time of sewer tap inspection.
4. Floor Slab Inspection – Made prior to placement of concrete. To be made after all reinforcing steel or wire mesh is in place and all under slab mechanical, plumbing, and electrical work has been inspected and approved. If determined by a CPD inspector on a prior inspection that a slab meets the requirements of note i below, the inspector will note on a written report “slab-on-grade, no inspection required.”
 - a. Reference code section R-506
 - i. Fill shall be compacted and shall not exceed 24in of clean sand or gravel or 8in of earth.
 - ii. Where exceeding the limits in note i above, the slab shall be constructed in accordance with [IB No. 114](#), the slab shall be designed as a structural slab by a Missouri registered professional engineer or architect, or the fill shall be monitored as controlled fill in accordance with CPD requirements.
 - iii. Slabs shall have control joints of at least ¼ the slab thickness, and joints shall be spaced at intervals not more than 30ft in each direction unless a welded wire fabric or an equivalent is provided. The use of Fibermesh for crack control is an acceptable equivalent.

- iv. A 4in base course of clean gravel shall be provided when the slab is below grade. A vapor barrier shall be placed between the concrete floor slab and the base course. A 2in layer of sand may be placed on top of the vapor barrier.
 - v. Garage slabs are to be designed for a 50 psf live load and a 2,000 lb concentrated load as a minimum.
5. Backfill Inspection – Made prior to backfilling of foundations. To be made after foundation drain and waterproofing of foundation have been accomplished. Foundations shall be adequately supported before backfilling begins.
 - a. Reference code section R-405 & R-406
 - i. Drains shall be provided around all concrete or masonry foundations enclosing habitable or usable spaces located below grade.
 - ii. Drains shall discharge by gravity or mechanical means. If the drain connects to a sump pit, a pump piped to discharge daylight will be required.
 - iii. Gravel or crushed stone shall extend one foot beyond the outside edge of the footing and 6in above the top of the footing. Perforated drainage pipe drains shall be covered with a minimum of 6in of material and shall have a minimum of 2in of material beneath the drain unless it rests directly on the footing.
 - iv. CPD has determined that all foundation walls may be for habitable rooms located below grade in the future (finished basement), therefore, all are to be waterproofed with membranes extending from the edge of the footing to the finished grade (R-406.2). The membranes shall consist of two-ply hot mopped felts, mix-mil polyvinyl chloride, 55 lb roll roofing or equivalent material approved by the Building Official. Exception: poured concrete foundation walls.
 - v. All poured concrete foundation walls enclosing basements shall be dampproofed in accordance with section R-406.1.
6. Throat Inspection (masonry fireplaces only) – Made after the firebox is built and the 1st flue liner is in place.
 - a. Construction of a chimney may not continue until this inspection is approved.
7. Rough-in/Framing Inspection – Made prior to the installation on insulation material, gypsum wallboard, and/or exterior wall covering that conceals fasteners for exterior wall sheathing.
 - a. This inspection is required after all framing, fire stopping, and bracing are in place and after all electrical wiring, piping, mechanical duct work, vents, and chimneys are completed and ready for rough-in inspection.
 - b. Separate rough-in inspections will not be performed. Should the inspector determine the project was “not ready” in all disciplines, the inspector will “disapprove” the requested inspection and not inspect the building. If desired and requested in advance, a single, courtesy “preliminary framing inspection” will be performed. As all trades are not installed at this time, no approval can be given. However, any deficiencies will be noted in a written report, which will be referenced when the complete rough-in inspection is performed.
 - c. If third-party inspections have been utilized on prior inspections, all associated certification reports shall be submitted to CPD prior to requesting this inspection.
 - d. Gas line and electrical service inspections may be additionally requested with the rough-in inspections or any other time before final inspection as long as there is no concealment of piping or service and grounding conductors.
8. Electric and Gas Service Inspections – For gas service, made when the gas line installation is complete, and the required pressure test is in place and holding pressure. For electric service, made when the service equipment, including system grounding, is in place.
 - a. These inspections shall be requested separately from the rough-in inspection. They may be requested and performed at the same time as the rough-in if ready.

9. Final Inspection - Made prior to the dwelling being occupied.
 - a. A final inspection is made after all work under the permit has been completed.
 - b. Final grading of lot is completed and stabilized.
 - c. All required sidewalks/driveways/trails are completed.
 - d. The water, gas, and electric utilities are energized.
 - e. Separate final inspections will not be performed. Should the inspector determine the project was "not ready" in all disciplines (not including items in notes b and c above). The inspector will "disapprove" the requested inspection and not inspect the building.
 - f. A permit applicant may apply for a temporary certificate of occupancy if all safety-related items are completed, or should weather or other factors make it difficult to complete items identified in notes b and c. Should the lot not be stabilized, erosion control devices must remain in place during the temporary occupancy period.
 - g. Note: all outside or third-party inspections/reports must be received at least 5 business days prior to any Final Inspection or Final Inspection will not be scheduled.

Inspection Reports

Inspection reports will be emailed to the applicant on the case. If someone on site wants a copy, they can request the inspector email them.

Supervisor Contacts

Today's building regulations and standards are more performance orientated and very complex. The inspector must now exercise more interpretation and judgment than ever before. Requiring CPD approved plans on the job site for all inspections will eliminate many problem areas. Occasionally, however, disagreements may arise between the inspector and permit holder. One of our Inspection Supervisors is always available in the office as our "Duty Supervisor" to assist. If that does not resolve the issue, you may also contact the Inspection Division manager or the Building Official (in that order). All these members of our management team may be reached at our main number, 816-513-1500.

Optional Third-Party Inspections

To assist in expediting your project, the following inspections may be performed using inspection companies/individuals authorized to perform these inspections in lieu of CPD performed inspections (see [IB No. 102](#)):

- Footing
- Foundation Wall
- Concrete Slab
- Backfill
- Retaining Wall
- Throat (masonry fireplace)

Questions?

Should you have any questions on the required inspection process for one- and two-family dwellings, please contact the Inspection Duty Supervisor or the Division Manager of Inspections at 816-513-1500.