

## **815 KAR 20:150. Inspections and tests.**

RELATES TO: KRS 318.090, 318.130, 318.134, 318.140, 318.160, 318.170

STATUTORY AUTHORITY: KRS 198B.040(10), 318.130

NECESSITY, FUNCTION, AND CONFORMITY: KRS 318.130 requires the department to promulgate an administrative regulation establishing the Kentucky State Plumbing Code. KRS 318.160 requires a person who constructs, installs, or extensively alters any plumbing, sewerage, or water supply system of any public building or establishment to obtain approval of the department in writing. This administrative regulation establishes the requirements for the tests and inspections that are necessary in order to ensure compliance with 815 KAR Chapter 20, the Kentucky State Plumbing Code.

### **Section 1. Required Inspections and Tests.**

- (1) Required inspections. The department shall inspect the following to ensure compliance with the code:
  - (a) The water distribution system;
  - (b) The soil, waste, and vent system;
  - (c) The fixtures and fixture traps;
  - (d) Appurtenances; and
  - (e) All connections in a plumbing system.
- (2) Required tests. Tests shall be made separately or as follows:
  - (a) The house sewer and its branches from the property line to the house drain;
  - (b) The house drain including its branches;
  - (c) The soil, waste, and vent system;
  - (d) Inside rain water conductors; and
  - (e) The final inspection and air test which shall include the complete plumbing system as required by Section 3(2) of this administrative regulation, exclusive of the house sewer.
- (3) Rough-in inspection.
  - (a) The plumbing system shall not be covered until it has been inspected, tested, and approved.
  - (b) A rough-in inspection shall be conducted prior to the covering or concealment of the plumbing system.
  - (c) If any part of a plumbing system is covered or concealed before being inspected, tested, and approved, it shall be uncovered, or unconcealed and tested as required.
- (4) Condemned buildings. In buildings condemned by other authorities because of unsanitary conditions of the plumbing system, necessary alterations shall be considered a new plumbing system.
- (5) Tests of alterations, extensions, or repairs. Any alterations, repairs, or extensions that require more than ten (10) feet of soil, waste, or vent piping shall be inspected and tested as required by Section 3(2) of this administrative regulation.

### **Section 2. Permit Holder Requirements. The person procuring the plumbing permit shall:**

- (1) Furnish all equipment, material, and labor necessary for inspections and tests;
- (2) Notify the department representative and request a rough-in inspection for the plumbing system prior to the plumbing system being concealed or covered within the floors or walls of a building; and
- (3) Notify a department representative and request a final inspection and air test upon completion of the installation.

### **Section 3. Requirements for Remote Inspection.**

- (1) A master plumber may request a plumbing inspection from the department conducted by live video or submission of recorded video if the master plumber holds a certificate of

completion issued by the department.

(2) Certificate of completion.

(a) The department shall issue a certificate of completion to a master plumber who has successfully completed a training course provided by the department that shall cover the following topics:

1. Technology necessary for effective remote inspection;
2. Information to be conveyed and shown by the master plumber to the department; and
3. How to show corrections made to installations that failed remote inspection.

(b) A certificate of completion issued to a master plumber pursuant paragraph (a) of this subsection shall be valid for a period of three (3) years from the date of issuance, after which the certificate shall expire unless renewed prior to expiration as established in paragraph (c) of this subsection. A master plumber whose certificate of completion has expired shall not be eligible to request or receive remote inspections.

(c) A certificate holder may renew his or her certificate of completion by completing the training course established in paragraph (a) of this subsection.

(3) The department shall deny a request for remote inspection if:

(a)

1. The scope of the work is too complex for remote inspection.
2. Examples of work too complex for remote inspection shall include:
  - a. Medical gas installation inspections; and
  - b. Inspections of plumbing installations that require multiple visits from the inspector prior to the system being placed on a test;

(b)

1. Remote inspection is not feasible or practical.
2. Examples of remote inspections that are not feasible or practical shall include:
  - a. Inspections during which cellular or internet reception is not consistent or reliable;
  - b. Poor video quality; and
  - c. Technical issues that prevent clear inspection; or

(c)

1. The situation would not provide an adequate inspection if done remotely.
2. Examples of situations that would not provide adequate inspection if done remotely shall include:
  - a. Underground plumbing installations that require more than one (1) inspection;
  - b. Rough-in inspections that would require more than one (1) inspection to fully inspect the entire rough-in piping system; and
  - c. Final plumbing inspections on new construction.

(4) Remote inspection seals.

(a) A certificate holder may request numbered remote inspection seals from the department to place on completed plumbing installations that are approved for remote inspection. The request shall be made by submitting a completed form PLB-4, Application for Plumbing Remote Inspection Seals, to the department.

(b) Except for the initial request for remote inspection seals, a certificate holder requesting seals shall submit a completed form PLB-5, Plumbing Remote Inspection Seal Verification, to the department prior to receiving remote inspection seals.

(c) A certificate holder shall:

1. Affix a seal to a completed plumbing installation for which he or she has been approved for remote inspection;
2. Not affix a seal to a plumbing installation if he or she has not submitted videos of the installation to the department or participated in a live video inspection with the department; and

3. Not allow seals he or she received from the department to be used by another.

(d) The department shall:

1. Assign an inspection number to the permit and seal for a plumbing installation that has successfully passed all required remote inspections and tests; and
2. Complete remote inspections that are not live video within three (3) business days of receipt of videos of the completed plumbing installation eligible for remote inspection.

(e) A property owner, property owner's designee, or certificate holder shall write the inspection number assigned by the department on the seal the inspection number is assigned to upon successful passage of all required inspections and tests.

(5) Notification of noncompliance. The department shall immediately issue a notification of noncompliance in writing to the certificate holder upon finding deficiencies in the documentation submitted for remote inspection.

(6) Corrections to noncompliant installations. A plumbing installation found to be noncompliant through remote inspection shall be corrected within ten (10) business days upon receiving notice of noncompliance from the department. Failure to make the required corrections may result in the termination of the certificate holder's certificate of completion.

(7) Penalties. A certificate holder who knowingly engages in activity intended to defraud or deceive a plumbing inspector or any other agent of the department shall be subject to certificate and license revocation or suspension.

(8) Department determinations established in subsections (6) and (7) of this section may be appealed to the department. An appeal shall be conducted pursuant to KRS Chapter 13B.

#### Section 4. Testing of Systems.

(1) The water distribution system, as well as the water service, shall be:

- (a) Tested with air or water under a pressure of not less than the maximum working pressure under which it is to be used; and
- (b) Free from leaks.

(2)

(a) Except as provided in subsection (3) of this section, a water test shall be performed:

1. On the entire soil, waste, and vent system; or
2. In sections.

(b) If it is applied to the entire system, all openings shall be closed, except the highest opening and the system shall be filled with water to the point of overflow.

(c) If the system is tested in sections, each opening shall be tightly plugged, except the highest opening and it shall be tested with not less than a ten (10) foot head of water. In testing successive sections, at least the upper ten (10) feet of the preceding section shall be retested.

(3) In lieu of a water test, an air pressure test may be used by attaching an air compressor or test apparatus to any suitable opening. All other inlets and outlets to the system shall be closed, forcing air into the system until there is a uniform pressure of five (5) pounds per square inch (PSI). The pressure shall be maintained for fifteen (15) minutes.

(4) After the plumbing fixtures have been set and their traps filled with water and before the building is occupied, the final air test shall test the entire soil, waste, and vent system including the fixtures and appurtenances, other than a house sewer, by connecting an air machine to any suitable opening or outlet and applying air pressure equivalent to a one (1) inch water column. It shall be maintained for at least a fifteen (15) minute period. If there are no leaks or forcing of trap seals as may be indicated by the functioning of a drum, float, or water column, the system shall be determined as airtight.

(5) A garage drainage system shall be tested in the same manner as the soil, waste, and vent system.

(6) A house sewer shall be tested by a water, air, or smoke test. A four (4) inch test tee or Y connection shall be provided at the property line for testing.

(7) The department may require the removal of any clean-outs to ascertain if the pressure has reached all parts of the system

(8) A building sewer not drained by gravity shall have a minimum of twenty-four (24) inches of cover and shall be tested with five (5) pounds per square inch for a period of fifteen (15) minutes.

(9) Inside rain water conductors shall be tested with water, air, or smoke test.

Section 5. Defective Work. If an inspection or a test indicates defective work or material, it shall be replaced and the inspection and the test repeated.

Section 6. Testing Defective Plumbing. An air test shall be used in testing the condition of a plumbing system if there is reason to believe it has become defective.

Section 7. Certificate of Approval. The department shall issue a certificate of approval upon the satisfactory completion and final test of the plumbing system.

Section 8. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) "Application for Plumbing Remote Inspection Seals", Form PLB-4, June 2020; and

(b) "Plumbing Remote Inspection Seal Verification", Form PLB-5, June 2020.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Department of Housing, Buildings and Construction, 500 Mero Street, Frankfort, Kentucky 40601-5412, Monday through Friday, 8 a.m. to 4:30 p.m. and is available online at [dhbc.ky.gov](http://dhbc.ky.gov).

(PC-11-1; 1 Ky.R. 487; eff. 3-12-1975; 2 Ky.R. 459; 3 Ky.R.362; eff. 9-1-1976; Recodified from 401 KAR 1:110, 7-5-1978; 11 Ky.R. 77; eff. 8-7-1984; 20 Ky.R. 1394; eff. 1-10-1994; 27 Ky.R. 234; 776; eff. 9-11-2000; 33 Ky.R. 3277; 4183; eff. 7-6-2007; 46 Ky.R. 1686, 2446; eff. 6-2-2020; 47 Ky.R. 1098, 1587, 1967; eff. 6-15-2021.)