



2012 IRC Inspection Checklist Plumbing Final Inspection

This checklist is intended for use to prepare for an inspection. This is only a general list and is not intended to address all possible conditions. References are to the 2021 International Residential Code (IRC). Note: references to the (AHJ) means the Authority Having Jurisdiction.

Permits and Plans

- Job address is posted in a visible location. (R319.1)
- Permit and approved plans are on site and accessible to the inspector.
- Permit information is correct (address, permit number, scope of work etc.)
- Confirm on OTC (over the counter) and E-permits only, that all plumbing fixtures are included.
- When a separate sewer or septic permit is required, confirm that it has been signed off by the authority having jurisdiction.
- Water service and storm drainage system has been inspected and signed off.
- Review the notes from the previous plumbing inspections. Common notes might be that an air admittance valve has been installed which will require a grill to be installed at the location, or that shock arresters need to be installed at the final.
- When an irrigation system is installed check to see that a backflow prevention device has been properly installed and signed off by the AHJ.
- It is required to have adequate backflow prevention when the building has a fire sprinkler system unless an approved combination system is used per standards. A RPBP (reduced pressure backflow preventer) or an air-gap is required when there is a water supply to a hydronic heat boiler. If a backflow device such as an RPBP or DCVA is within the job site, verify that it has been tested and signed off.

Plumbing Vents

- Plumbing vents shall extend at least 6" above the roof and to be 10' away or 3' above windows that open. When doing a walk through, look down on the roof below and check for test plugs left in the vent pipes.

Hose bibs

- Check water pressure at any hose bib to verify that it is 80 psi or less. If it is greater than 80 psi, a pressure-reducing valve is required.

Electric Water Heaters

- If a gas water heater has been installed which doesn't include any plumbing pipe modifications, it is a

mechanical inspection and will be covered on the Residential Mechanical Final Checklist. If an electric water heater has been installed or a gas water heater including pipe modifications it will require a plumbing inspection.

- Temperature and pressure relief valve to be installed per manufacturer's instructions or listing. Typically within the top 6" of the tank.
- Drain must be air gapped.
- The drain from the relief valve must be able to drain by gravity. No part of drain to be trapped.
- The pipe for the drain to be listed for 100psi, at 180 Fahrenheit, and no smaller in diameter as the outlet.
- The drain needs to terminate outside the building 6" to 24" above grade and shall have a soldered/glued on elbow as needed to direct the flow toward the ground or shall terminated at an approved drain. It may not be directly connected to a sanitary sewer. Retrofit water heaters may discharge 6" – 24" off of floor when a relief drain is not available.
- The termination of the drain shall not be threaded.
- Gas water heaters located in a garage need only be raised so that the heating elements and switches (source of ignition) are at least 18" above the floor if NOT listed as flammable vapor ignition resistant (IRC G2408.2)
- A water heater when installed in the normal path of a vehicle requires protection in the form of a wheel stop, bollard or by elevating.
- Water heaters in attics, attic-ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage may result from a leaking water heater, a watertight pan of corrosion resistant material shall be installed with a ¾" drain that is piped to an approved location.
- An expansion tank is only required when the public main pressure exceeds 120 psi or when the house is on a closed system. A closed system occurs when a check valve, backflow preventer or pressure regulating device is installed. Install per manufacturer's specifications.
- When a mechanical room has a floor drain or a standpipe to receive discharge from a condensate drain or water heater relief drain, a trap primer is required. The trap primer valve is accessible. Check to see that it is working by verifying water is in the trap.

Plumbing Fixtures, Caulking & Drains

- Run water at all fixtures and check for leaks. The water temperature shall not exceed 120° F
- Fixture hot water control located on the left hand side of the fixture or per manufacturer's installation instructions. On soaking tubs, the hot water control is required on the left side as seen from inside of the tub.
- Motors on jetted tubs require access and be GFCI protected.
- All fixtures caulked watertight.
- Water closets require a minimum 21" clear space in front and 15" measured from the centerline of toilets to the finished wall on either side.
- Shower door openings require a minimum 22" clear opening.

Dishwashers

- Dishwashers require an air gap. An air gap can be a deck mount or a Johnson tee type with required trim vent (with exceptions per manufacturer)
- Dishwashers are to be anchored to the countertop, typically with (2) screws and (manufacturers installation instructions.)

Insulation

- Insulate all hot and cold-water piping in unheated spaces to protect from freezing.
- Insulation in unheated areas to be minimum R-4. Water pipes in attics or exterior locations are required to have adequate provisions to protect from freezing, such as heat traps and insulated.
- Hot water circulating systems require R-4 minimum, or $\frac{3}{4}$ " wall pipe insulation on the entire loop.