



**Marion County Public Works
Building Inspection Division
Inspection Checklist**

**Residential Plumbing
Underfloor/Underground**

2012

This checklist is intended for our external customers to prepare for an inspection. It is also intended for internal use for our inspectors to improve consistency and overall service delivery.

Please verify the following before calling for the Inspection:

Permits and Plans

- Job address is posted in a visible location.
- Permit and approved plans are on site and accessible to the inspector
- Permit information is correct (address, permit number, description of work, etc.).

Underground Utilities

- Sanitary sewer is under test with either water or air.
- Tracer wire is installed on non-metallic pipe materials, sanitary sewer, water service, and storm sewer.
- Piping is properly supported.
- Water service is a minimum of 24 inches deep.
- Rain drains are of correct materials, properly sized and supported.
- Storm sewer is of correct size, materials, and outfalls to an approved location.
- Trenches parallel to footings are offset a minimum of 45 degrees.
- Water service is under test with either water or air and per manufacture's installation instructions.
- Crawl space drains require accessible backwater valves if connected to the rain drain system.
- Footing drains are properly installed and protected with an accessible backwater valve if required.

Underfloor

- Proper support of horizontal piping is required.
- Cleanouts are installed as per code requirements.
- Protect all piping when in contact with concrete.
- All pipe penetrations through foundation shall be properly sealed.
- Water service is protected from freezing below insulation.
- Nail plates are installed if required.
- Water lines are of the correct pipe materials and properly sized

Underground Plumbing

- No pipes directly embedded in concrete.
- All pipes passing through walls are protected from breakage.
- Voids around piping passing through concrete floors are appropriately sealed.
- No flat venting.
- Vent pipe inverts are taken off above the center line of the drain.
- Vents are downstream of the trap.
- Pipe trenches parallel to footings offset a minimum of 45 degrees from footing bearing line.
- Underslab water lines are a minimum of type L copper with brazed joints or other approved materials, CPVC, etc.
- Drains, waste and vents (DWV) water tested with a 10 foot head of water for 15 minutes or air tested at 5 psi for 15 minutes.
- Plastic pipe not allowed to be tested with air except as allowed by manufacturer.

Cleanouts

- Each horizontal drainage pipe provided with a cleanout at its upper terminal, and each run of piping which is more than 100 feet in total developed length, is provided with a cleanout for each 100 feet, or fraction thereof.
- Cleanouts are not required at horizontal runs not exceeding 5 feet, unless such line is serving sinks or urinals.
- Cleanouts may be omitted on any horizontal drainage pipe installed on a slope of 72 degrees or less from the vertical angle.
- Cleanouts are not required above the first floor.
- An approved 2-way cleanout fitting, installed inside the building wall near the connection between the building drain and building sewer, or installed outside of a building at the lower end of a building drain and extended to grade, may be substituted for an upper terminal cleanout. The riser on a two way cleanout is not to exceed three feet.
- Cleanouts are required at each aggregate horizontal change of direction exceeding 135 degrees.
- Each cleanout is installed so that it opens to allow cleaning in the direction of flow of the soil or waste line, or at right angles thereto, and except in the case of wye branch and end of line cleanouts, installed vertically above the flow line of the pipe.
- The underfloor cleanout is located not more than 20 feet from the access door with an unobstructed area of 30 inches horizontal and 18 inches vertically above the flow line of the pipe.
- Cleanouts are accessible. Extend above floor or exterior of structure if access is limited.

Sewage Ejectors

- All fixtures with flood rim below upstream manhole must drain through accessible backwater valve.
- Fixtures above the upstream manhole must be separate from the backwater valve.
- Only fixtures below crown level of the sewer may discharge through an ejector.
- Gate valves and check valves are installed on pump discharge.
- Lines are sized for two fixture units per gallon per minute of flow.
- Minimum two inch discharge when a water closet discharges to the sump, minimum 20 gpm.
- Engineered systems with a grinder pump may be smaller than two inch on the discharge.
- Sump is properly vented.

Note: These are general requirements only and do not reflect all conditions. For additional information please contact the Building Inspection Division.

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