



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

**Residential Plumbing  
Rough-in & Top Out**

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.).

**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, 20 gpm min.
- Minimum two inch discharge when a water closet discharges to the sump.
- Engineered systems with a grinder pump may be smaller than two inch on the discharge.
- Sump is properly vented.

**Drains**

- Drains, waste and vents (DWV) under test.
- Drains properly sized.
- Back to back fixtures require double fixture fitting.
- Changes in direction from vertical to horizontal, or horizontal to horizontal, are made through wye branches or 45 degree wye branches, or fittings of equal sweep.
- No threaded fittings or joints located in a non-accessible location.
- Install 18 gauge nail plates when plastic or copper plumbing is within 1 inch of face of framing.
- Hangers or straps do not compress, distort, cut or abrade the piping and allow free movement of pipe.
- Pipes exposed to damage by sharp surfaces are protected.
- Support all vertical and horizontal lines as per Table 3-2.

## **Traps**

- A vent protects each trap.
- The developed length of the trap arm cannot exceed the limits of Table 10-1.
- Trap arms less than 3 inches cannot change direction more than 90 degrees without the use of a cleanout,
- Trap arms 3 inch and larger cannot change direction more than 135 degrees without the use of a cleanout.
- The vertical distance between the fixture outlet and the trap is as short as possible and not over 24 inches in length.

## **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.

## **Island Sink Venting**

- Drain loop method requires fittings to be of drainage type only.
- The drain serving the island cannot serve any fixtures upstream of the vent.
- A cleanout is required in the vertical section of the foot vent.
- An approved and accessible air admittance valve may be used in lieu of a drain loop/foot vent system.

## **Vents**

- Vent and branch vent pipes are level or graded back to the drainage pipe it serves.
- The horizontal vent is 6 inches above the flood rim of the fixture, except for island sinks or where structurally impossible, with AHJ approval.
- Vent pipes located below flood level of rim must use drainage fittings.

- Flat venting is not allowed.
- Vent pipe inverts are taken off above the center line of the drain.
- Aggregate vent areas must equal the largest required building sewer.
- Vents must terminate a minimum of 6 inches above the roof line and not more than 12 Inches from a vertical surface.
- The required clearance to building openings is 3 feet above or 10 feet horizontal.

### **Wet Vents**

- No wet vent shall exceed 6 feet in developed length.
- Minimum of one pipe size larger than the required waste line.
- Limited to traps of one and two fixture units located on the same story.
- Not to serve as vent to more than four fixtures

### **Laundry**

- Standpipe receptor may be a minimum of 18 inches and not more than 30 inches above the trap.
- No traps for laundries shall be located below the floor.
- Traps may be a minimum of 6 inches, and a maximum of 18 inches above the floor.

### **Kitchen**

- Dishwasher waste ahead of garbage disposer.
- Loop dishwasher drain hose as high as possible and secure in place.
- Island vents are to be used only when structurally required.
- Air admittance valves, if used, are approved and accessible.

### **Bathrooms**

- Secure all tub and shower valves, shower valves, and showerheads as required by code.
- Minimum shower height is 70 inches, 1024 square inches, and capable of encompassing a 30 inch circle.
- Showers or tub shower combinations in all buildings shall be provided with individual control valves of the pressure balancing type, or the thermostatic mixing valve type.
- Over rim tub spouts set with a minimum 1 inch air gap to flood rim of tub.
- Maintain clearances as per figure R307.2/Chapt 3 International Residential Code.

### **Exterior**

- Vacuum breakers on all hose faucets.
- Backflow protection on all irrigation systems.
- No valves located downstream of atmospheric vacuum breakers.

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