



Plumbing Rough-in Inspection Guide

The drainage, waste, venting and water distribution systems are inspected to ensure that they operate properly and provide the occupants with a healthy living environment and safe drinking water.

When must an inspection be requested

The owner or authorized agent in co-ordination with the plumbing contractor must request a plumbing rough-in inspection once the work is completed and the systems are ready for testing. The heating and electrical work should also be completed. This inspection will be conducted with the framing inspection.

Can the inspection be combined with another inspection

Yes! Our preference would be to perform the framing and heating rough-in inspection at the same time as inspecting the plumbing and witnessing the tests.

What is involved during an inspection

A provincially qualified building inspector reviews the assembly of the plumbing system components for compliance with the Ontario Building Code. The following is a list of the major areas that are inspected.

- Materials and equipment
- Testing of drainage and venting systems
- Testing of potable water systems
- Protection of piping
- Support of piping
- Traps
- Arrangement of drainage piping
- Cleanouts
- Slope and length of drainage pipes
- Arrangement and size of venting pipes
- Protection from contamination of water piping

The construction progress, including Building Code deficiencies, are documented on a Field Inspection Report issued by the building inspector immediately after the site inspection.

How to prepare for the inspection

A review of the plumbing system rough-in prior to the inspector's arrival can help to ensure a smooth flow in the construction of your project. A checklist of the most common Building Code deficiencies found while performing plumbing rough-ins inspections follows.

How to request an inspection

Inspections are requested online through the Cloudpermit portal.

Looking ahead

The next inspection may be the heating rough-in, framing or insulation.

Plumbing Rough-in Inspection Checklist

This checklist identifies the most common Ontario Building Code deficiencies found while performing plumbing rough-in inspections. Use this checklist as a guide. Not all Building Code requirements are included in this checklist.

Materials and Equipment

- Improper pipe fittings in a drainage or venting system are not being used.
- One-quarter bends with 4 inch size or less drainage piping is not installed on building drains.
- A double Y, double TY, double T or double waste fitting is not installed in a nominally horizontal soil or waste pipe.
- Plastic pipe conforms to B181.1, B181.2, B182.1 or B182.2 when used underground outside a building, under a building for a drainage system or inside a building for a storm drainage system.
- Plastic pipe conforms to B181.1 or B181.2 when used under a building or inside a building for a venting system.
- PE/AL/PE pipe and fittings has not been used in a hot water potable water system.
- PEX/AL/PEX pipe and fittings for use with potable water systems complies with B137.10.
- Galvanized pipe has not been used in a water distribution system, except for repairs.
- Solder joint fittings for drainage systems, lead waste pipe and aluminum DWV pipe have not been used in a water system. Lead free solder being used.
- Shower valves conform to CAN/CSAB125

Piping

- Cast iron, galvanized steel pipe and aluminum DWV pipe is not welded.
- Slip joints have not been used in the venting or drainage system.
- Connection of pipes with an increaser or reducer will permit drainage of system.

- Allowance made for expansion of piping.
- Provision made to eliminate water hammer.
- Suitable air brake indirect connections.
- Vent pipe supported at roof termination.
- Piping protected against freezing temperatures.
- Support of ABS piping every 4 feet.

Testing of Drainage, Venting and Potable Water Systems

- Systems are ready for inspection prior to the inspector's arrival.
- No leaks in drainage, venting or water distribution systems.
- Traps
- Floor drains have trap seal primers.

Cleanouts

- Cleanout for the building drain is accessible
- Cleanout installed on fixture drain on the kitchen sink or removable trap installed.
- Cleanout installed before the trap and after trap serving an island sink and trap located on floor level below the floor of the sink location
- Cleanout located at base of stacks
- Slope and Length of Drainage Pipe
- Minimum slope of 1 in 50 for pipe 3 inch or less.
- Maximum developed length of fixture outlet pipe 1200 mm
- Stack Vents
- Upper end of a soil or waste stack ends in a stack vent or vent stack that connects to a header and leads to open air.

Vent Pipes

- Vent pipe of at least 1½" on each storey.
- Sewage ejector is vented at the top.
- Vent pipe installed without sag and no open or unused ends.
- Except for a wet vent, a vent pipe is connected above horizontal centre line of soil or waste pipe.
- Vent pipe installed above the flood level of the fixture it serves before connection to a vent pipe.
- Maximum length and minimum slope of the trap arm conforms with Table 7.5.6.3.
- Vent terminates 2'-11" above and 12' from windows, etc.