



Plumbing Underground Rough-in Inspection Guide

The building sanitary, storm drains and sewers are inspected to ensure that they will operate properly and to make sure that cross connections are not created between the storm, sanitary drains or sewers.

When must an inspection be requested

The owner or authorized agent in co-ordination with the plumbing contractor must request a plumbing system inspection once the work is completed and the systems are ready for testing.

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 systems (water or air)
- Testing of water service pipe (water or air)
- Protection of piping (frost and spatial separation)
- Support of piping
- Traps
- Arrangement of drainage piping
- Cleanouts
- Slope and length of drainage pipes
- Arrangement and size of venting pipes (floor drains)

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

How to prepare for the inspection

A review of the building drains and sewers 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, drains and sewer inspections follows.

How to request an inspection

Inspections are requested online through the Cloudpermit portal.

Looking ahead

The next inspection may be the foundation. The building permit provides the list of all inspections required for your project.

Plumbing Drains and Sewers Inspection Checklist

This checklist identified the most common Ontario Building Code deficiencies found while performing plumbing drain and sewer inspections. Use this checklist as a guide to reduce delays associated with Building Code deficiencies.

Not all building code requirements are included in this checklist, and some may not apply to your project.

Materials and Equipment

- Improper pipe fittings in drainage or venting systems 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 aluminium DWV pipe have not been used in a water system. Lead free solder being used.
- Type M soft copper tube not being used in the potable water system.

Piping

- Cast iron, galvanized steel pipe and aluminium 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.
- Piping protected against freezing temperatures.
- Continuous support of piping.

Testing of Drainage, Venting and Potable Water Systems

- Systems are ready for inspection prior to the inspector's arrival with water or air pressurized.
- No leaks in drainage, venting or water distribution systems.

Traps

- Floor drains have trap seal primers and are vented.

Cleanouts

- Cleanout for the building drain is accessible
- Cleanout located at base of stacks

Slope and length of drainage pipe

- Minimum slope of 1 in 50 for pipe 3 inch or less.

Vent pipes

- Vent pipe of at least 1^{1/2} inch on each storey.
- Sewage ejector is vented at the top.
- Vent pipe installed without sag and no open or unused ends.