

Backwater/Backflow valve

A backwater valve, also known as a “back-flow valve”, a “one-way valve” or a ‘clapet’ is a device that should either be installed on the pipes leading to the plumbing fixtures in the basement of a building such as toilets, sinks, showers, washing machines, floor drains, etc... or on the main waste water pipe.

A backwater valve permits flow in one direction – to the public sewer – and prevents a return of flow in the opposite direction. Don’t forget about the sump pump that is connected to the sanitary or storm systems of your city.

There are three kinds of backwater valves:

1. A branch line backwater valve (normally closed valve) should be installed on the drains of all plumbing fixtures located below street level. However, when several plumbing fixtures are connected to the same branch, the valve can be installed on that branch. Branch line backwater valves should not be installed on the main drain because they impede air circulation, which is needed for proper gravity flow of wastewater out of the building.
2. The squeeze-in valve is specifically designed for basement floor drains.
3. A mainline backwater valve (normally open valve) can be installed on the building drain of single-occupancy buildings. This valve is always open and if water comes from the city, a flap will lift up close the pipe.



Branch line



Main Line



Floor Drain

As a general rule, all NEW construction will have a/multiple backflow valves. If/when basements are finished in new construction, it is important to not cover the access traps to the branch line valves.

If there is a main line back flow valve, there is normally a large access box (approximately 10” x 16”) with a cover located as close as possible to where the sewer line comes into the building. Branch line valves are not installed on the main drain line but on each line leading to toilets, sinks and floor drains. With branch line valves, there will normally be more than one valve installed.

There are advantages and disadvantages to each installation and it is important to make sure the proper type of valve was used – the home inspector may not be able to tell if the proper type of valve is used since that would/could require opening the valve.