

First Flush Diverter

HOW IT WORKS:

When it rains, water slowly build up in the roof gutter system before it exits through the downpipe. The first flush of water from the roof can contain amounts of bacteria from decomposed insects, lizards, bird and animal droppings and concentrated tannic acid. It may also contain sediments, water borne heavy metals and chemical residues.

Instead of flowing to the water tank, these pollutants are diverted with the initial flow of water into the chamber of the water diverter. The water diverters utilize a dependable ball and seat system - a simple automatic system that does not rely on mechanical parts or manual intervention.

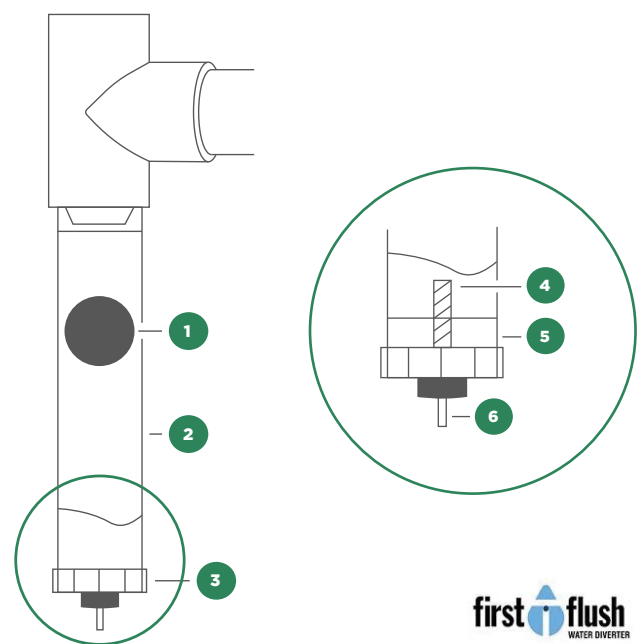
As the water level in the diverter chamber rises, the ball floats and once the chamber is full, the ball rests on a seat inside the diverter chamber preventing any further water entering the diverter. The subsequent flow of water is then automatically directed along the pipe system to the tank.

For a water diverter to work effectively, the contaminated water in the chamber must be sealed off. This prevents the contaminated water from passing to the storage tank and ensures the water does not “siphon” off the contaminated water in the chamber. The simplest and surest way to do this is with a floating ball and seat. A slow release valve ensures the chamber empties itself after rain and resets automatically. The diverted water need not be wasted water because the drain pipe from the diverter chamber can be fitted to a standard drip irrigation system.

Simple and effective first flush devices, these are installed at the downpipe and used when there are a small number of downpipes supplying water to the tank.

The first flush diverter requires minimal maintenance. Installed at the gutter downpipe or via a T-junction to a new or existing system. Add the appropriate length of pipe* based on the quantity of water you wish to divert. Consider as a guide that each 1m of 100 mm PVC pipe holds approximately 8.8L of water.

Downpipe diverters should be installed at each down-pipe that supplies water to the tank. The diverters are supplied in kit form and come with everything needed to complete installation. Just add the length of PVC pipe required to form the diverter chamber.



first flush
WATER DIVERTER

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|----------------------------|---|
| 01 Sealing ball | 04 Plastic Filter Screen |
| 02 Diverter Chamber | 05 Socket |
| 03 Screw Cap | 06 Nut & Tail and Flow Control Valve |

It is preferable to fit the longest length chamber possible to ensure better quality water. Install the chamber below the gutter filter (or rain head), to within 150mm above the ground to allow easy access to the end cap. (***Pipe not included in this kit**)



Rain Harvesting™