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First Flush Diverter

Installation and Operational Guide

Congratulations of purchasing your First Flush Diverter. The First Flush Diverter is designed to be connected into a roof water collection system on homes utilising tank water. The unit is effective at reducing the contamination which enters your storage tanks. The First Flush Diverter is manufactured from high quality, UV resistant materials which are designed to provide long and reliable service.

In order for the unit to operate effectively it is essential that it be installed, operated and maintained correctly. Please read these guidelines prior to installation.

The guidelines contain information on:
- Installation and Operation
- Important Notes
- Warranty Conditions

Before Installing

READ THIS DOCUMENT COMPLETELY and ensure that you are competent to install this unit. Should you have any doubts contact your local plumber for assistance.

Note for Plumbers

Please ensure that these instructions remain with the owner after installation.

Introduction

The First Flush Diverter is designed for external installation and connection into a roof collection system. It is manufactured from a blend of special polyethylene materials that withstand heat, weather and colour fading. The materials meet the requirements of AS 4020 and AS 2070 for those in contact with potable (drinking) water.

Firstly check your down-pipe sizes. Most down-pipes are round, either 65, 80, or 100mm in diameter. Some older pipes may be non-standard, square or rectangular, PVC, galvanised steel or copper. If you have such down-pipes check with your local plumber or hardware outlet as conversion kits are usually available to convert them to PVC sizes.

Installation Procedure

There are an unlimited number of methods for piping collected water from gutters to storage tanks. On existing installations the installer will have to decide on the best location for the First Flush Diverter to interrupt the flow from the gutters and perform its collection and diverting function. The ideal position is close to where the water enters the tank where multiple pipes combine. If the storage tank has several entry points, then the various supply lines might have to be re-routed and combined, or an additional First Flush Diverter installed. Refer to illustrations on the next page.

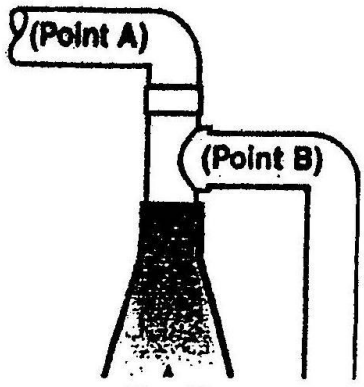
Installation Position

The position of where the First Flush Diverter stands must be firm, capable of withstanding in excess of 150kg for the large diverter and 50kg for the standard diverter, which is the total loads when the diverters are full. Wall brackets are only intended as lateral support. Solid decking, a concrete pad, or a compacted base is best. Consideration must be given to how the First Flush Diverter is drained. A hose fitting may be connected, or the water simply allowed to drain away slowly. Remember that the First Flush Diverter must be nearly empty to perform its function. Ensure that when the unit is positioned the port can be opened for cleaning.

Installation Procedure

Once you have decided on the location and made any necessary arrangements to position the First Flush Diverter at the desired height, the connection layout can be confirmed. If the First Flush Diverter is to be alongside the building then it is recommended that you connect the incoming pipe (the pipe from the gutters) into the top of the First Flush Diverter (Connection A) and the outgoing pipe (the pipe to the storage tank) to the branch of the tee (connection B). Refer Fig 1.

Should the First Flush Diverter be installed at the storage tank it is recommended that the incoming pipes (the pipes from the gutters) be fitted at connection point B and the outgoing pipe (the one to the storage tank) from the tee marked point A. The outgoing pipe can be connected directly to the storage tank with a saving on plumbing and the number of fittings required.



(fig, 1)

Pipe Connections

We recommend using good quality PVC down-pipe fittings, tee junctions RJ 80mm, bends RB2 95, 65, or 80mm sockets. RB112 bends may be used if desired. Depending on the type of fittings used you may require one or several short lengths of down-pipe to connect fittings. PREPARE the appropriate elbows, tees and connecting pieces. Mark and cut the down-pipes to be joined and fit the pipe-work together WITHOUT SOLVENT.

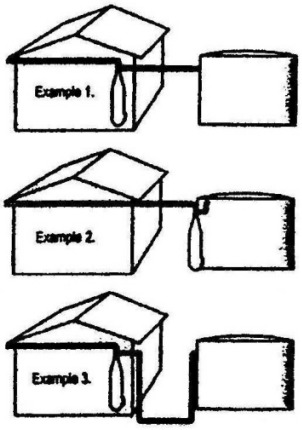
When satisfied that the parts are compatible and the installation looks tidy, then fit the tee junction to the First Flush Diverter.

Operation

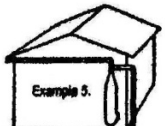
The First Flush Diverter works on the principal that after a dry period, say three or four days, the roof and gutters begin to collect contaminants. (The amount will depend on location.) After a dry spell the first flush of rain will wash most of the contaminants into the First Flush Diverter rather than entering the storage tank. The First Flush Diverter must be drained before the next heavy rain in order to perform its function.

There are two principal ways to drain the First Flush Diverter. After rain the unit can be manually drained by turning the valve on until the First Flush Diverter is empty. A second method is to leave the valve slightly open at all times allowing the water to drain away slowly via a length of hose or into a watering system for garden distribution. The performance of the unit is barely affected by this method.

ILLUSTRATION OF TYPICAL CONNECTION ARRANGEMENTS



Example 4 – water is collected from multiple down-pipes. The pipes may combine at the house, under the ground or at the tank. In this case the best solution is to position the First Flush at the tank.



Example 5 – water is collected from one or more down-pipes, and directed to a storage tank below the house or in the ground. In this case the First Flush should be positioned on each pipe interrupt supply before it enters the tank.

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1 Year Limited Warranty

Only high quality materials are used in the construction of this First Flush Diverter. It is warranted against faulty materials or workmanship for a period of one year (1) from the date of purchase. This warranty specifically excludes: mechanical damage or destruction by any means including excessive heat, damage through transport, abuse, over-pressurisation or contact with corrosive materials.

Important Note

The technical information contained herein is true and accurate to the best of our knowledge. All products offered and sold are subject to TT Plastics' published terms and conditions of sale and warranty. These conditions and all other published information in relation to First Flush Diverter products are subject to change without notice. These instructions are provided to assist in the installation process. While endeavouring to provide recommendations, advice or specifications which are accurate and correct, TT Plastics cannot accept or assume any liability either directly or indirectly for incidents resulting from the installation process, purchase of the First Flush Diverter or any other product. These exclusions and limitations do not limit your statutory rights under the Consumer Guarantees Act.

Exclusions and Warranties

TT Plastics make no warranties expressed or implied in connection with the operation or installation of the First Flush Diverter product. TT Plastics representatives, resellers or distributors that make oral or written statements in respect of First Flush Diverter products do so on their own account, and such statements will not form part of any sale agreement or contract for any products sold other than what is stated above.

Limitation of Remedies

As we have no control over how the First Flush Diverter is installed or operated, whether for breach of contract, warranty, negligence or otherwise, TT Plastics cannot be held liable for any incident, special or consequential damages. The sole remedy available from TT Plastics is a refund of the contract price, or replacement of the goods for which liability is claimed.