

RAIN HARVESTING

by Blue Mountain Co

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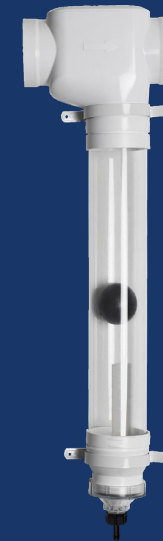
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First Flush Plus

100mm/4"



PRODUCT DETAILS

The First Flush Plus Tee's specially designed inlet solves the problem of fast-moving dirty water "skipping" over the first flush chamber, ensuring the dirtiest water does not enter your tank.

WDDP11 100mm

WDDP111 4"

WDDP211 80/100mm

FEATURES AND BENEFITS

- Diverts water containing particles of organic and inorganic matter into collection chambers installed on each downpipe.
- Patented First Flush Plus tee prevents dirty water "skipping" over the traditional T-junction gap during heavy rainfall.
- Customisable Diverter Chamber pipe length
- Automatic reset valve drains after rainfall events
- Comes in kit form
- Transparent, Rapid Release Exit Funnel

WHAT'S IN THE BOX?

- 100mm/4" First Flush Plus Tee
- Ball Seat
- 100mm/4" socket reducer
- 100mm/4" Pipe Wall Brackets x 2
- Sealing Ball
- Transparent, Rapid Release Exit Funnel
- Plastic Filter Screen
- Hose Connector
- Flow Control Washers x 8

TOOLS/MATERIALS YOU MAY REQUIRE

- 100mm pipe (for diversion chamber)
- Tape measure
- Marker pen
- Saw
- Solvent weld glue
- Screws
- Drill or screwdriver
- 2 100mm x 90mm in pipe reducers (for 90mm pipe installations)

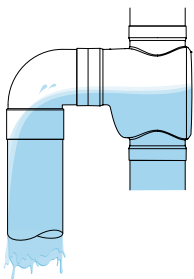
INSTALLATION

1. Determine the length of 100mm (4") pipe required for your first flush diversion chamber. As a rough guide, 1 metre of 100mm pipe holds approximately 8.8 litres (3 feet of 4" pipe holds approximately 2 gallons). Ensure all cut edges are clean and smooth.
2. The First Flush Plus tee can be installed in the horizontal or vertical orientation to suit your installation. The outlet must be accessible for maintenance and inspection. (Refer to Figures 1a, 1b and 1c for suggested installation orientations).

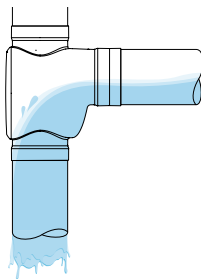
Figure 1

Suggested Installation Orientations

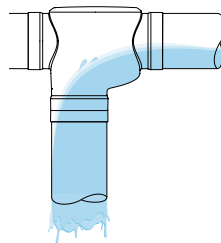
1a. Wet System or 'Charged'



1b. Vertical



1c. Horizontal



3. Select the orientation of the First Flush Plus tee appropriate for your chosen installation point. This will determine which socket on the First Flush Plus tee will attach to your diversion chamber. (Examples: if you're installing your First Flush Plus beneath a horizontal pipe, the arrow marking the direction of water flow should be oriented in the direction of flow, meaning the socket on the "branch" of the "T-junction" will attach to your diversion chamber. For installations where the "branch" is orientated horizontally, the arrow marking the direction of water flow should point UP so the water will initially flow into the diversion chamber.

4. Orient the ball seat so it will fit inside the First Flush Plus tee socket that will attach to your diversion chamber, then apply solvent weld glue and press it hard up inside the socket.
5. If you are attaching your First Flush Plus to existing 90mm downpipes, install 100x90mm in pipe reducers into the remaining First Flush Plus tee sockets. If you are attaching your First Flush Plus to existing 100mm downpipes, reducers are not required.
6. Measure your existing downpipe and cut to create space for the First Flush Plus tee. The outlet of your diverter must sit at least 150mm (5.9") from the ground when fully assembled, so select your installation point and measure and cut accordingly. Ensure all cut edges are clean and smooth. Position your First Flush Plus T-junction in place by applying solvent weld glue to the sockets and pipe. Insert the pipe into the sockets or socket adaptors at either end of the First Flush Plus tee.
7. Apply solvent weld glue to the end coupling socket and one end of your 100mm diversion chamber pipe and insert it firmly into the end coupling.
8. Apply solvent weld glue to the socket of the ball seat and the other end of your 100mm diversion chamber pipe then insert it firmly into the socket and against the ball seat.
9. Attach to the wall using the supplied brackets, supporting the unit until it is fully secured. The upper bracket should sit directly under the First Flush Plus tee where it will hold the weight of the unit.
10. Place the ball inside your first flush diversion chamber through the end coupling and firmly screw the transparent, rapid release exit funnel with O-ring onto the end coupling to ensure a good seal.
11. Select the appropriate flow control washer and fit it into the hose connector with the side marked "TOP" showing. Start by using the Control Washer with the smallest gauge hole (lowest number). Try a larger gauge Washer if experiencing blockages. Save the remaining washers for possible future use. Insert the plastic filter screen in through the base of the Transparent, Rapid Release Exit Funnel and secure by attaching the hose connector and flow control washer.

DIVERSION CHAMBER SIZE

Determine the length of 100mm (4") pipe required for your first flush diversion chamber.
As a rough guide, 1 metre of 100mm pipe holds approximately 8.8 litres (3 feet of 4" pipe holds approximately 2 gallons) of water.

POLLUTION FACTORS

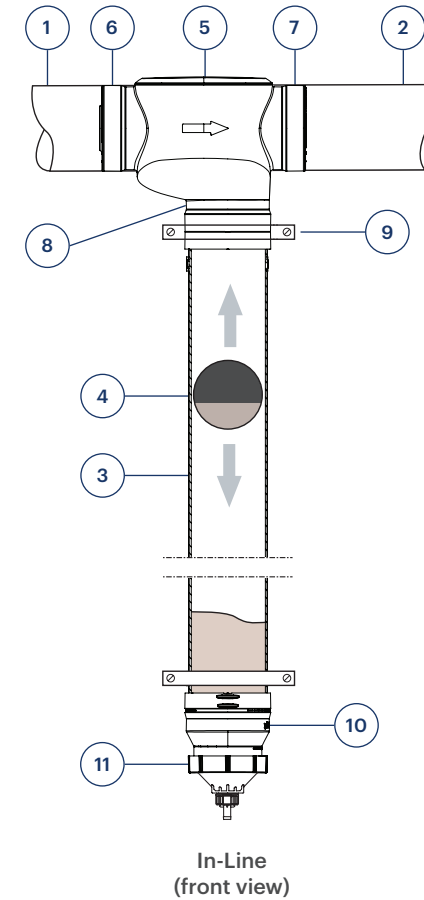
The following factors can be used as a guide to determining the volume of water to be diverted.

POLLUTION FACTOR FOR THE ROOF	
MINIMAL POLLUTION	SUBSTANTIAL POLLUTION
<p>DIVERT 0.5L PER M² (0.0125 GALLONS PER FT²)</p> <p>Open field, no trees, no bird droppings, clean environment</p>	<p>DIVERT 2L PER M² (0.05 GALLONS PER FT²)</p> <p>Leaves and debris, bird droppings, various animal matter, e.g. dead insects, skinks, etc.</p>

The above quantum are the results of preliminary testing. Individual site analysis and field testing is required to more accurately assess the quantum to be diverted in each individual case.

DIVERSION FACTOR FOR A FIRST FLUSH WATER DIVERTER	
MINIMAL POLLUTION	SUBSTANTIAL POLLUTION
<p>M² (or FT²) ROOF AREA X POLLUTION FACTOR</p> <p>=</p> <p>LITRES TO BE DIVERTED</p>	
<p>Example for a minimal polluted roof of 100m² 100m² x 0.5 = 50 litres to be diverted</p>	<p>Example for a heavily polluted roof of 100m² 100m² x 2 = 200 litres to be diverted</p>
<p>Example for a minimal polluted roof of 1000ft² 1000ft² x 0.0125 = 12.5 gallons to be diverted</p>	<p>Example for a heavily polluted roof of 1000ft² 1000ft² x 0.5 = 50 gallons to be diverted</p>

REFERENCE CHART



1	In-feed from the roof	8	Ball seat
2	To the tank	9	Pipe/Wall Brackets
3	Diverter Chamber	10	Socket Reducer
4	Sealing Ball	11	Transparent, Rapid Release Exit Funnel
5	First Flush Plus Tee		
6	Chamber Inlet		
7	Chamber Outlet		

MAINTENANCE

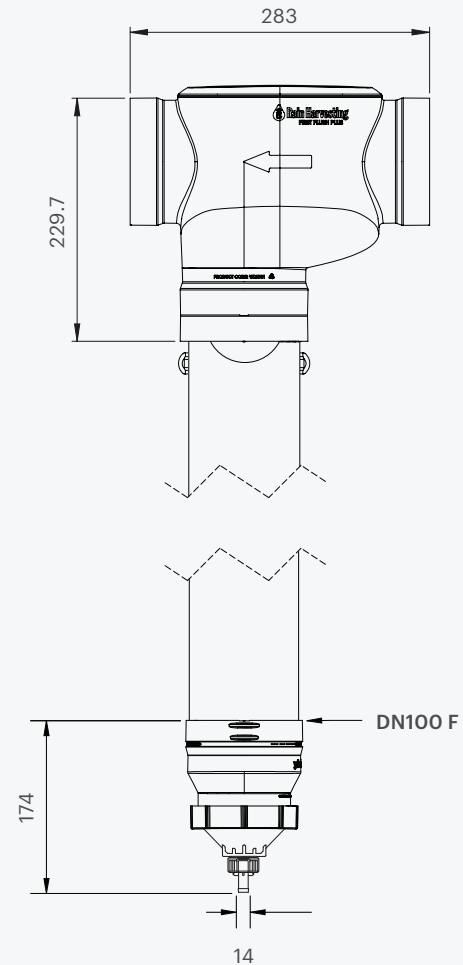
It is important to ensure that your first flush diverter outlet remains clear of any debris. If your outlet becomes blocked, the chamber will not empty and the first flush of water will not be diverted when it rains.

To ensure the flow of water through your diverter's outlet, periodically unscrew the outlet to allow debris to fall out. If the diversion chamber is full of water, take care as it empties.

Remove the hose connector, flow control washer, and filter screen and hose or wash the screen with clean water. Check the flow control washer for any blockages and remove and clean as necessary.

For best results and minimal maintenance, we recommend installing rain heads such as our Leaf Eater rain heads on all your downpipes to limit the volume and number of leaves and debris that reach your first flush diverter.

PRODUCT DIMENSIONS



ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED.

Pipe Fitment

WDDP11	DN100 F	Fits over 100mm pipe
WDDP211	80/100mm	Fits over 80mm pipe
WDDP111	4" SCH40	Fits over 4" SCH40 pipe

DISCLAIMER This product specification is not a complete guide to product usage. Further information is available from Rain Harvesting Pty Ltd and from the Installation and Operating Instructions. This specification sheet must be read in conjunction with the Installation and Operating Instructions and all applicable statutory requirement. Product specifications may change without notice. © Rain Harvesting Pty Ltd