

**Planet-friendly
water tanks.**

Made-to-measure, made to last.



Rainwater Harvesting User Manual

Above Ground



Tankworks

Made to measure. *Made to last.*

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Introduction

Your new home is fitted with a complete rainwater harvesting system. This system collects water from the roof of your home and stores it in your rainwater tank for later use in flushing your toilets, feeding your washing machine and one or more external taps for gardening use.

The system fitted to your home has been proven to save over 40 000 litres of water per year on the average sized home and family. This is a significant benefit to environment and a savings on your water bill.

The complete system is made up of a number of components and like many items around your home requires ongoing care and maintenance.

Please take the time to read and understand the contents of this manual to ensure you get the best performance from your system.

Should you require further assistance please visit www.tankworks.com.au or call 1300 736 562 nationally.



System Overview

Your complete rainwater harvesting system comprises of the following elements

1. Gutters on your house to capture the rain from your roof.



The gutters on house capture the rainwater running off your roof. These gutters direct the rainwater to the downpipes which in turn feed into the rainwater collection tank. It is important that these gutters are kept clean and in good order.

2. Pipe work to feed rainwater into your tank.

There are two main types of pipe work systems to feed the water to your collection tank.

a. Charged or wet system.

This system connects most of your down pipes around your home into an underground pipe work system which then feeds into your rainwater tank. You have this type of system if there is pipe work coming out of the ground next to your tank and feeding into the top or side of your tank.



b. Direct feed system.

This system has the downpipe from your gutter setup to feed directly into your rainwater tank.



3. Rainwater collection tank



The rainwater tank collects and stores the water. Tanks vary in size and shape depending on the requirements of your local council and building authorities. Your Tankworks Australia tank is manufactured from Bluescope Aquaplate material and carries a 10/20 warranty.

On some occasions your builder may have installed more than one tank on your home. These will normally be connected together and will act as one storage tank.

4. Pump and controller

There are number of configurations for the pump and controller but they all perform the same basic function.

Controller. If there is sufficient water in your tank the controller switches the pump on when water is required. If there is insufficient water in your tank the controller switches back to mains water automatically. This controller does not add water to your tank but simply allows the mains water to feed thru when your tank is empty.

Pump. The Pump will typically be a sump pump mounted within your tank or in some cases an external pump. When the pump is switched on by the controller the tank water is pumped from your tank

Tankworks Australia supplies two types of pump controller configurations.

- a. EVO MKII tank mounted system see p7
- b. Classic wall mount see pp8-9

5. Filters

All systems contain filters which require your regular cleaning and maintenance to ensure your system performs at its best. The filters are designed to clean the rainwater to a level which will ensure your appliances such as your toilet cistern and washing machine valves are kept clean.

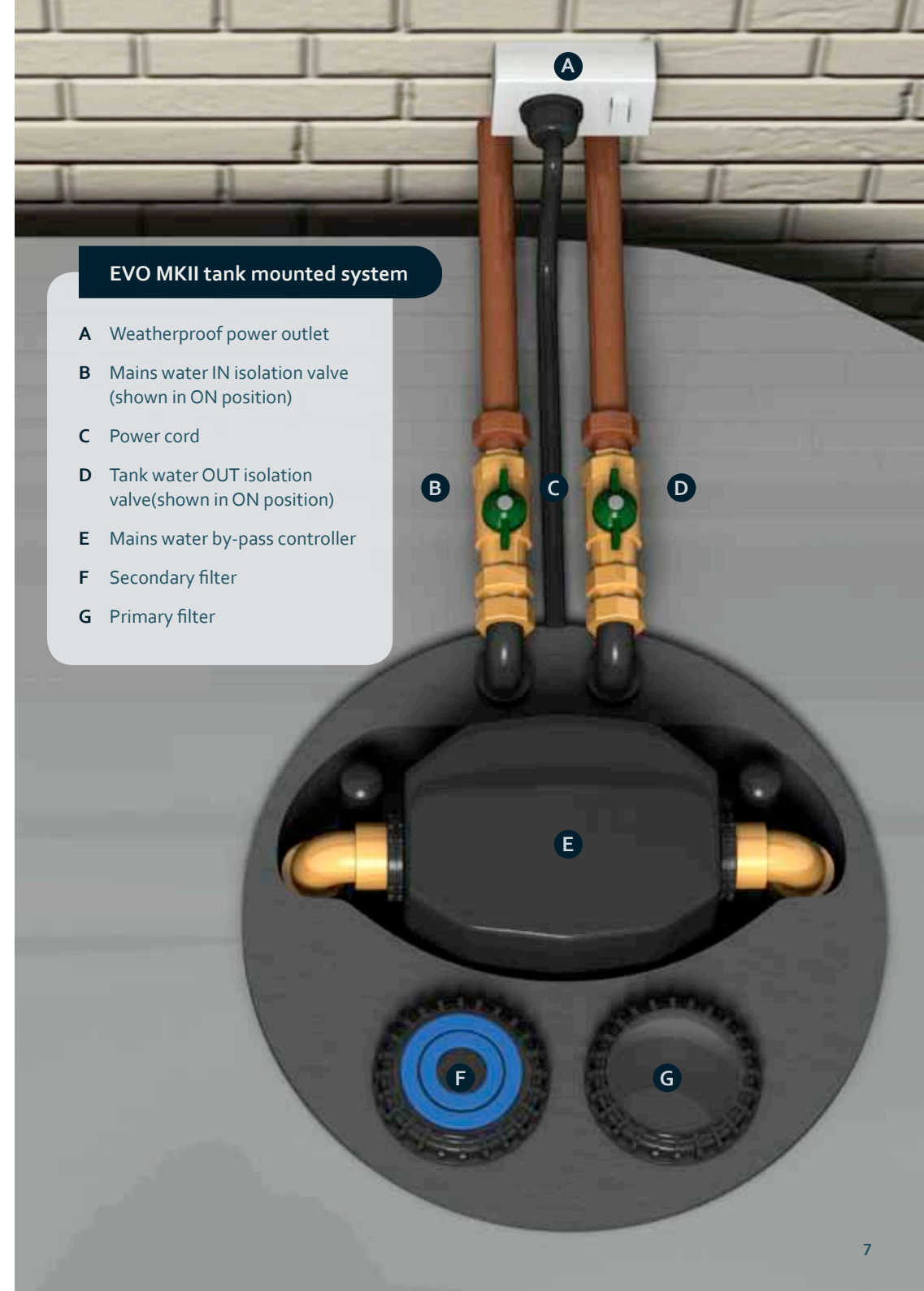
In some cases additional filtration may be required if you have leaves or other organic matter collecting on your roof and gutters.

Refer to care and maintenance section for further information on cleaning your filters.

6. Rainwater pipes

Rainwater pipes work to feed the water to your toilets, washing machine and at least one external tap.

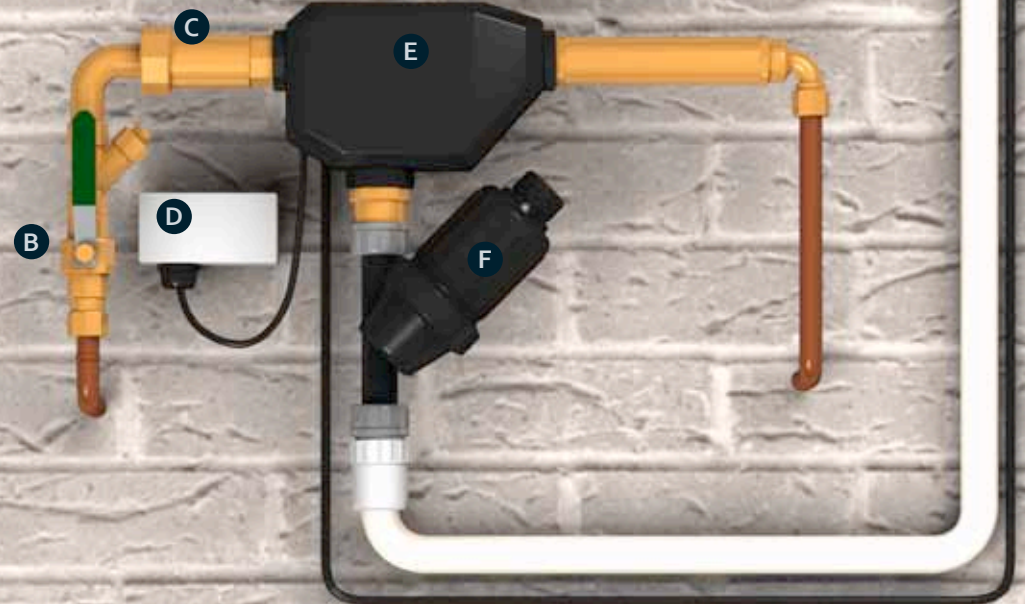
When your home was built separate water pipes have been installed feeding your toilets, washing machine (optional) and one or more external garden taps. The Garden tap which runs from your rainwater tank has a sign indicating rainwater or DO not drink symbol.





Classic wall mount

- A Enclosure box (optional)
- B Mains water isolation valve
- C Mains line strainer (optional)
- D Weatherproof power outlet
- E Mains backup controller
- F Pump line strainer
- G Cartridge filter (optional)



Investor wall mount



EVO MK II tank system

- A Leaf Eater (optional)
- B Charged stormwater pipe
- C Inspection outlet
- D First flush water diverter (optional)
- E Overflow air-gap (optional)
- F Overflow stormwater
- G Inlet screen and light guard
- H Tank drain valve
- I Tank base – concrete slab or similar
- J Weatherproof power outlet
- K Submersible pump
- L Evo Mark II – for detail see p7
- M Tank

Classic system

- A Leaf Eater (optional)
- B Mains water isolation valve
- C Mains line strainer
- D Weatherproof power outlet
- E Mains backup controller
- F Pump line strainer
- G Cartridge filter (optional)
- H Charged stormwater pipe
- I First flush water diverter
- J Overflow air-gap (optional)
- K Overflow stormwater
- L Tank drain valve
- M Inlet screen and light guard
- N Submersible pump
- O Tank base – concrete slab or similar
- P Tank



Care and maintenance of your system

Your rainwater harvesting system will provide many years of faultless operation with regular care and maintenance. It is important that the following few simple maintenance steps are regularly performed.

1. Cleaning and inspecting your gutters

It is important for the proper functioning of your rainwater system that your gutters are kept clean and clear. Regular inspection and cleaning is required to ensure that leaves and other organic material does not enter your down pipes and collect in the underground pipe work.

If you live in a leafy area it is recommended that you fit a suitable gutter guard to help keep the leaves out of your gutters. Dirty gutters are the main cause of your rainwater developing unpleasant odours or developing discolouration.

Note: Cleaning your gutters is a dangerous activity and should be completed with suitable fall protection. We recommend the use of licensed contractors to perform this function.



ACTION: *Inspect and clean your gutter of all leaves and dirt.*

2. Cleaning the tank inlet filter

The inlet filter to your tank must be kept clean allowing the water from your roof to pass easily into your tank. Cleaning frequency of the inlet filter varies depending on your location and the amount of debris coming from your roof. Initially check the filter weekly until you determine the frequency required.



ACTION: *Remove the filter and hose clean. The use of a scrubbing brush may be required to remove dry and stubborn debris.*

3. Cleaning first flush device

(Optional and not always fitted)

The first flush device is designed to divert the initial water flow away from your tank. This device is optional and may not be installed on your system.



ACTION: To check and clean the first flush water diverter, disassemble as shown in the diagram. It may be full of water, so take care when unscrewing the black hose tail. Flush the white strainer and the red washer well with clean water.

Reassemble, taking care to ensure that the ball is replaced and free to move in the pipe body.



4. Cleaning controller filters EVO MKII system



Primary filter contains a 200 micron filter basket that can be cleaned and reused.

Note: Remember to turn the power point back on so your system is ready to use.

ACTION: Turn off the power point, remove primary filter cap, remove and clean filter replace ensuring the cap is tightened.



Secondary filter. This is an optional filter and your system may not contain an actual filter cartridge inside this filter pot. This filter pot has been designed for an optional upgrade filter if your tank water is discoloured or has developed odours.

This filter pot is designed to have an industry standard 10 inch filter cartridge. Filter cartridges can be purchased from Tankworks Australia or many plumbing and hardware stores.

Two filter cartridges available from Tankworks Australia are as follows;

20 micron carbon activated – Used to remove colour and odour. This filter cannot be cleaned and has to be replaced when it becomes clogged. Depending on your circumstances this filter needs to be replaced every 6 – 12 months or when you notice a pressure drop.

50 micron pleated – Finer sediment removal down to 50 micron. Can be washed and reused.

Note: Remember to turn the power point back on so your system is ready to use.



ACTION: To check if you have a cartridge filter installed or to replace. Turn off the power point, remove secondary cap, remove and clean or replace with new filter, ensure the cap is tightened.

Wall mount classic system

Y – strainer



Action: turn off pump power, unscrew filter body, remove filter and clean & replace.

Fault finding

Please use the following guide before making a service call

Cartridge filter (optional)

The cartridge filter is designed to have an industry standard 10 inch filter cartridge. Filter cartridges can be purchased from Tankworks Australia or many plumbing and hardware stores.

Two filter cartridges available from Tankworks Australia are as follows;

20 micron carbon activated – Used to remove colour and odour. This filter cannot be cleaned and has to be replaced when it becomes clogged. Depending on your circumstances this filter need to be replaced every 6 – 12 months or when you notice a pressure drop.

50 micron pleated – Finer sediment removal down to 50 micron. Can be washed and reused.



ACTION: Turn off the power point, close mains water valve, unscrew body of cartridge filter, remove cartridge filter and replace it, ensure the cap is tightened.

Fault	Action
Pump not running	<ul style="list-style-type: none"> • Check water level in tank. Water level must be 300mm min. • Check power cord plugged in and turned on • Check LED lights are displayed on controller • Check power to power point. Can use a portable light or other device to check if power is available at power point. • Depress manual override button on top of controller to check for operation. • Ensure mains water is turned on. Unit must have mains water to function. • Pump or controller is faulty. Contact Tankworks on 1300 736 562.
Water overflow from top of tank when raining	<ul style="list-style-type: none"> • Check and clean inlet screen. • Check overflow line is clear. • Call Tankworks on 1300 736 562 if problem continues
Water leaking from first flush diverter.	<ul style="list-style-type: none"> • This is normal function and is expected. You will lose a small amount of water while it is raining and for a period after rainfall has stopped. The water can be directed to a drain or similar using 13mm garden hose.
Poor pressure when pump running.	<ul style="list-style-type: none"> • Inspect and clean controller filters. Test briefly without filters installed to see if pressure improves. • Inspect tank controller connections to house for leaks • Ensure all valve are fully open on inbound and house feed lines.
Pump running continuously	<ul style="list-style-type: none"> • Check power cord from pump is plugged into the controller and not the power point on wall (classic system only) • Check no leaking taps, toilet or washing machine connections. • Turn off system and contact Tankworks on 1300 736 562

Fault	Action
Noisy pump	<ul style="list-style-type: none"> • Pump is designed to be almost silent in operation. Contact Tankworks on 1300 736 562.
Water smells / bad odours	<ul style="list-style-type: none"> • Odours is caused from organic material (leaves and debris) in your gutters, pipe work and water tank. • Clean gutters and debris from roof • Add secondary carbon activated filter to EVOMKII controller. • Add Davey aqua safe water steriliser to tank. Can be purchased from Tankworks or other Davey approved resellers. • If problem persist your charged line system may require flushing to remove debris.

Spare parts

Part	Item code
Inlet screen	
10" Cartridge filter – 15 micron carbon activated	PPAC10
10" Cartridge filter – 50 micron pleated	PP50
Y strainer (classic system)	TF-25-155
Primary filter EVO MKII	EVOFILT 200

Service Record

Cartridge replacement date
Replace after 6 months

Warranty information and card

- a. All Tankworks Australia rainwater tanks are covered by a 10 year construction warranty.
- b. All tanks made from Bluescope Aquaplate steel are covered by the Bluescope 20 year corrosion warranty.
- c. All pumps and mains water backup controllers are covered by a two year warranty issued by the manufacturer.

- d. Warranties do not cover the following:
 - i. Service calls not related to faults with the products included in the rainwater harvesting system.
 - ii. Faults caused by accidental damage, misuse or acts of nature.
 - iii. Maintenance as detailed in this manual.

Tankworks Australia Pty Ltd

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**Thank you
for your
purchase!**



Tankworks

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