



# 20

## Rain Filters *Triple Action Filtration System*

20" Filter Cartridge – Maintenance and Replacement Instructions (Model: WFRW04)

**THIS CARTRIDGE IS FOR USE IN THE FILTRATION OF RAINWATER WHEN THE RAINWATER TANK IS CONNECTED FOR WHOLE OF HOUSE USE, OR INTERNAL USE, SUCH AS TO THE WASHING MACHINE, HOT WATER SYSTEMS AND/OR MULTIPLE TOILETS.**

Cartridge replacement notes:

1. Please ensure that the water supply and power to the pump and any diversion switch are turned off before changing the filter cartridge.
2. Release any pressure build up within the housing by using a screwdriver to activate the pressure relief valve on top of the filter housing.
3. Using the blue plastic tightening wrench place the wrench under the white bowl and raise until it is secure around the blue collar/nut.
4. Unscrew the collar with the wrench in a clockwise direction.
5. When dismantled remove the used filter cartridge and clean the white bowl. Be careful not to damage the black o-ring.
6. Unwrap the new cartridge and insert in the white bowl.
7. Ensure that the o-ring is sitting cleanly on the o-ring seat on top of the white bowl.
8. Place the bowl with cartridge under the filter head assembly.
9. Raise collar and fasten onto filter head assembly.
10. Tighten system using the wrench.
11. Turn water back on and check for any leaks in the system rectify/seal if required.

**NOTE:** The life of the filter cartridge is determined by three factors - water pressure\*, water quality and usage. Residual sediments and other matter will eventually build up in the filter cartridge causing water pressure drops. Accordingly, cartridge life may vary between 6 and 12 months subject to the conditions outlined.

\* Care must be taken to ensure the pump is specified to provide adequate water pressure/flow rates.

### Improving the Performance of your Rainwater Harvesting System

'Pre-treatment devices' are recommended by many authorities and be included as part of all rainwater harvesting systems. A fire proof **gutter mesh** system should be installed to keep leaves, debris and vermin out of gutters.

Pre-treatment devices such as **Leaf Eater®** or **Leaf Beater® screened rain heads** should be installed at each downpipe that supplies rainwater to the tank. These devices improve the hydraulic performance of downpipes by deflecting leaves and debris away from the flow of water. Gutter mesh and rain heads prevent gutters blocking and eaves flooding and in doing so, reduce fire risk by keeping flammable material out of the gutter.

It is also critical to install **First Flush Water Diverters** to prevent the first, most contaminated rainfall from polluting tank water. First Flush Diverters can be installed at each downpipe that supplies water to the tank, or larger units, that can handle multiple inlet pipes, can be installed nearby the tank.

Not only do pre-treatment devices improve water quality, protect pumps and household appliances, and reduce tank maintenance, they also extend the life of Rain Filters cartridges.

Please visit [www.rainharvesting.com.au](http://www.rainharvesting.com.au) for further information.

We can remind you when your filters need replacing. To take advantage of this service please complete the warranty card and send to us or visit our website **[www.rainharvesting.com.au](http://www.rainharvesting.com.au)**

to register your Rain Filter System online, or alternatively call our National **Replacement Filter Service Centre\*** on **1300 785 355**.

\* Replacement Filters Program is administered by Water Filters Australia Pty Ltd

**WARNING:**

*If used for a drinking water application you must ensure that the water is microbiologically safe and of a known quality with adequate disinfection before or after the filter system.*

cartridge maintenance and replacement



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## Rain Filters *Triple Action Filtration System* 20" Filter Cartridge – Specifications (Model: WFRW04)

### FOR USE IN THE FILTRATION OF RAINWATER WHEN THE RAINWATER TANK IS CONNECTED FOR WHOLE OF HOUSE USE, OR INTERNAL USE SUCH AS TO WASHING MACHINES, HOT WATER SYSTEMS AND / OR MULTIPLE TOILETS - COLOUR, ODOUR & SEDIMENT FILTRATION

Rain Filters pleated carbon cartridges are designed for treatment of sediment, colour and odour within rainwater water supplies.

The cartridges are constructed from a carbon impregnated non – cellulose media. Unlike cellulose cartridges Rain Filters cartridges are resistant to bacterial attack allowing them to be used for non chlorinated water applications.

They offer sediment filtration, as well as colour and odour reduction in the one cartridge. The unique pleated internal membrane provides additional surface area for higher dirt loading capacity, while maintaining minimal pressure drop. This combination of a pleated polyester membrane and carbon filtration produces an outstanding filter cartridge with extended service life.

#### FEATURES:

1. Contains a blend of premium activated carbons impregnated within the membrane to maximize the removal and reduction of colours and odours.
2. The larger surface area provides for greater sediment holding and longer filter life. Over seven (7) times more surface area than other carbon cartridges.
3. Will not release carbon fines.
4. Temperature rating at minimum 4.4° C to 51.7° C.

#### SPECIFICATIONS:

MODEL: WFRW04  
 FLOW RATE: Suitable for flow rates up to 50 litres per minute  
 DIMENSIONS: 67mm diameter x 508mm height (cartridge)

#### CONSTRUCTION DETAILS:

1. Low durometer, thermoplastic rubber gaskets to ensure effective sealing.

2. Injection moulded high impact plastic end caps for superior durability and appearance.
3. Inner polypropylene core for compressive strength.
4. Filter membrane constructed of pleated carbon impregnated polyester providing significantly more surface area than traditional cartridges.
5. Outer mesh netting for surface integrity.

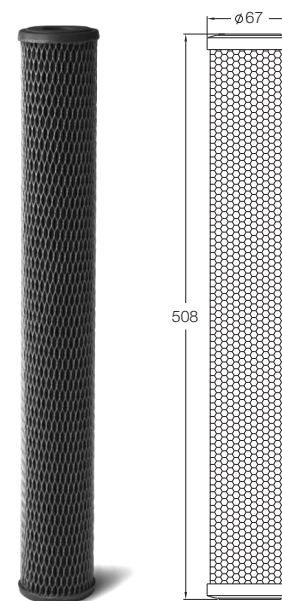
#### SERVICE:

The life of the filter cartridge is determined by three factors - water pressure, water quality and usage. Please ensure that your rainwater tank is properly maintained and 'pre-treatment devices' have been installed.

**Please read "Cartridge Maintenance and Replacement" instructions for tips on how to improve rainwater quality and extend filter life.**

#### WARNING:

If used for a drinking water application you must ensure that the water is microbiologically safe and of a known quality with adequate disinfection before or after the filter system.



filter cartridge specifications



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## Rain Filters *Triple Action Filtration System* 20" Filter Housing – Specifications (Model: WFRW02)

**FOR USE IN THE FILTRATION OF RAINWATER WHEN THE RAINWATER TANK IS CONNECTED FOR WHOLE OF HOUSE USE, OR INTERNAL USE SUCH AS TO WASHING MACHINES, HOT WATER SYSTEMS AND/OR MULTIPLE TOILETS**

**NEW UNIQUE DESIGN:** Three piece housing for greater protection

- Heavy duty opaque housing.
- Brass pressure relief valve on top for easy opening of the filter housing.
- Completely corrosion resistant.
- 3 piece housing prolongs the life span of the o-ring.
- Top seated o-ring gasket.
- 3/4" F BSP brass inserts for trouble free installation.
- Supplied with 3/4" M BSP hex nipples for inlet/outlet.
- Complete with mounting bracket & screws, tightening wench.
- UV Stabilised Housing

### SPECIFICATIONS

Head & Nut/Collar Construction:	Filled Polypropylene with brass relief valve
Bowl Construction:	Styrene Acrylonitrile (SAN) Plastic
O-ring:	Nitrile Rubber (NBR)
Max. Operating Temperature:	50°C
Max. Operating Pressure:	125 psi
Inlet/Outlet Connections:	3/4" F BSP brass.

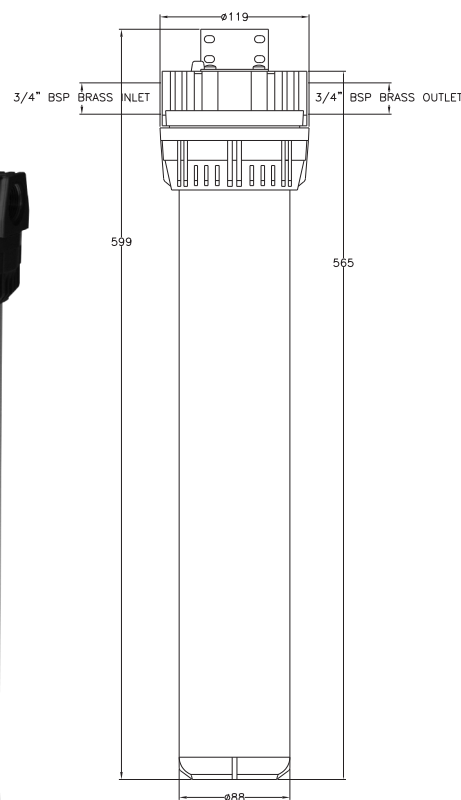
### IMPORTANT NOTE:

If the filter housing is installed outside a suitable sunlight protective cover must be installed to prolong the life of the housing and filter cartridge, or alternatively it should be installed in a sheltered position.

### WARRANTY:

This product supplied by Rain Harvesting Pty Ltd is under warranty for a period of one year from the date of purchase. The terms of warranty require that;

- The product be used in accordance with the instructions supplied.
- Installation and maintenance be carried out in accordance with instructions provided.
- Warranty be limited to replacement of the faulty part only, to the exclusion of any other claim by the customer for direct or indirect damages caused by the faulty part.
- Goods under warranty will only be replaced upon submission/receipt of the faulty part and verification by Rain Harvesting Pty Ltd of the defect.
- The customer will pay all labour and transport expenses necessary for replacement of the part covered by the warranty.



filter housing specifications



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## Rain Filters *Triple Action Filtration System*

### 20" Filter Housing – Installation Instructions

Model: Housing (WFRW02) and Cartridge (WFRW04)

**THIS SYSTEM IS FOR USE IN THE FILTRATION OF RAINWATER WHEN THE RAINWATER TANK IS CONNECTED FOR WHOLE OF HOUSE USE, OR INTERNAL USE SUCH AS TO WASHING MACHINES, HOT WATER SYSTEMS AND/OR MULTIPLE TOILETS**

#### THE FOLLOWING PARTS ARE SUPPLIED:

- 3 piece heavy duty opaque housing with brass pressure relief valve.
- 3/4" F BSP brass inserts for trouble free installation.
- 2 x 3/4" M BSP hex nipples for inlet/outlet.
- 20" filter cartridge (model: WFRW04)
- Mounting bracket and screws.
- Tightening wrench.

#### INSTALLATION NOTES:

1. If the filter housing is to be installed outside, a suitable sunlight protective cover must be installed to prolong the life of the housing and filter cartridge, or alternatively it should be installed in a sheltered position.
2. The filter housing must be installed after the rainwater tank pump and after any mains/rainwater diversion device.
3. When selecting the installation location ensure that you allow enough room below the system to enable the system to be dismantled and the filtercartridge replaced.
4. The filter system can be installed vertical or horizontal.
5. Use plumbing tape when securing the male 3/4" hex nipples into the inlet and outlet of the filter head assembly.
6. Ensure that the plastic wrapping is removed from the filter cartridge before inserting the cartridge into the filter housing.

7. The 3 piece filter housing has been specifically designed to protect the housing o-ring. Following insertion of the filter cartridge into the white bowl, place the head assembly on top of the o-ring. Take the round plastic collar and place the white bowl into the collar. By raising the collar it can be screwed onto the head assembly sealing the system.
8. A tightening wrench is supplied, but be careful not to over tighten, as this may damage the wrench and housing unit.
9. It is advisable to use union joints when connecting the filter housing to the rainwater supply as this will assist with any future servicing issue.



installation instructions