



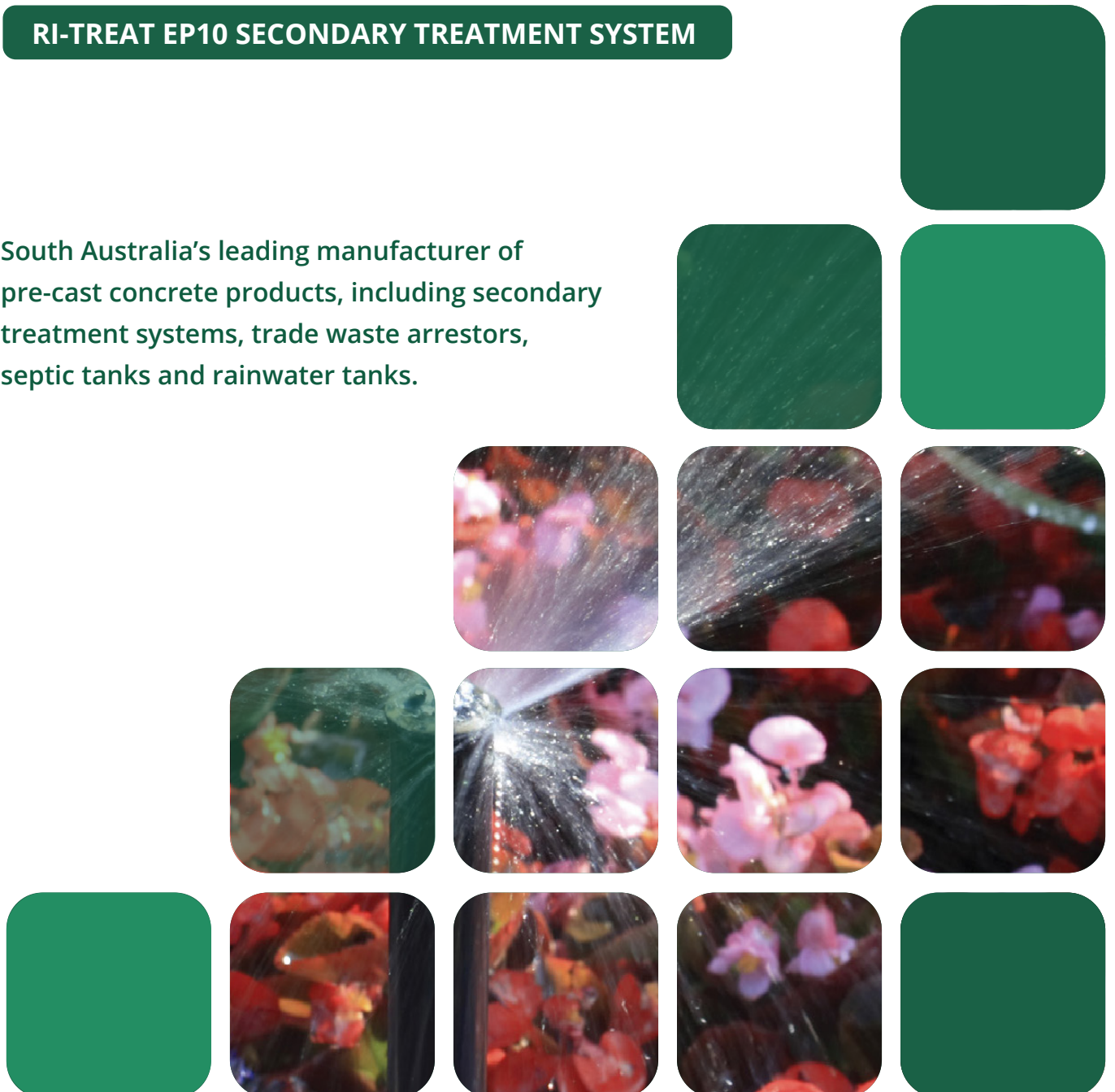
**Ri-Industries**

For servicing of your STS unit please  
telephone the service agent.

# Householders Operational Manual

**RI-TREAT EP10 SECONDARY TREATMENT SYSTEM**

South Australia's leading manufacturer of  
pre-cast concrete products, including secondary  
treatment systems, trade waste arrestors,  
septic tanks and rainwater tanks.





**Ri-Industries**

# Contents

IMPORTANT NOTES .....	3
GENERAL INFORMATION .....	4
SYSTEM OPERATION & TROUBLESHOOTING ..	5
GUIDELINES FOR IRRIGATION USE .....	6
SUITABLE CLEANING PRODUCTS .....	7
ELECTRICAL & CIRCUIT DIAGRAMS .....	8
SUITABLE PLANTS .....	9
RI-TREAT & RI-SCAPE BRISTLE FILTER .....	11

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# Important Notes

The maintenance and operation of the Ri-Treat EP10 secondary treatment system (STS) is subject to SA Health regulations under state law. The unit, including any warranty work, must be carried out by an accredited service agent.

## Maintenance & servicing

- Owners and operators of on-site STS must maintain a valid maintenance and service contract for their system.
- STS servicing must be performed by a trained professional who has completed a course specified by SA Health.
- Servicing must comply with the manufacturer's instructions and the conditions of the relevant authority's approval (e.g., Council/SA Health).
- Service providers must submit a copy of each service record to the relevant authority and notify them if they cease servicing the system.

## Warranty

The warranty will be void if the unit is not installed, maintained, or operated according to the manufacturer's requirements. Examples include:

- Failure to install the tank in strict accordance with the Ri-Industries Installation and Maintenance Manual for the Ri-Treat EP10.
- Any form of structural modification.
- Failure to service the aerobic unit in compliance with SA Health guidelines for onsite wastewater systems and the manufacturer's specified requirements.
- Failure to undertake servicing and repairs by an approved SA Health servicing contractor or failure to maintain records of all services and repairs.
- Overloading the system by not following the guidelines outlined in the General Information section of the Ri-Industries Householders Operational Manual for the Ri-Treat EP10.
- Use of unsuitable cleaning products, as specified in the Ri-Industries Householders Operational Manual.
- Damage to the unit caused by (but not limited to) planting too close to the tank or external forces such as storms, fires, and floods.
- Failure to provide full system details during the transfer of ownership or land development.

Copies of the Householders Operational Manual and the Installation & Maintenance Manual can be found online at [www.ri-industries.com.au](http://www.ri-industries.com.au).

# General Information

The Ri-Treat EP10 will operate effectively for over 30 years if used correctly and properly maintained. Under SA Health regulations, households are required to have the unit serviced every three months by a certified service agent to ensure consistent system performance. Due to its design, and depending on usage, the Ri-Treat EP10 may require a pump-out every three to five years.

The recommended operating temperature range when fully buried is for an ambient air temperature of between  $-1^{\circ}\text{C}$  and  $41^{\circ}\text{C}$ .

The Ri-Treat EP10 will operate continuously without issues if used correctly. However, the most common problems that may arise over time include:

- Overloading with solid waste
- Overloading with wastewater
- Contamination of the system

## Prohibited materials

A system overload can be caused due to several factors. The following materials should never enter the system:

- Concentrated or excessive amounts of bleach, detergents, or disinfectants
- Rags and sponges
- Baby wipes or 'flushable' wipes
- Printing paper or newspaper
- Condoms, tampons, or sanitary pads
- Food scraps, gravel, dirt, or stones
- Oils, grease (a grease trap is required), paints, or solvents

## Water usage

Excessive water use can also negatively affect system performance, particularly if there is continuous high-water flow over several weeks. If this occurs, check for:

- Leaking taps
- Stormwater pipes connected to the system (test by filling gutters with water)

For further advice on the suitability of the Ri-Treat EP10, consult your local service agent or Ri-Industries.

# System Operation and Troubleshooting

The system is self-maintaining unless problems arise due to overloading or contamination. Normally, the alarm system will activate only if there is a failure of either the aeration pump or the irrigation pump. An alarm reset switch is typically located indoors.

After resetting the alarm, do not ignore the issue, as the alarm indicates a problem that requires immediate attention. If problems occur, the following troubleshooting guide may help:

Troubleshooting Guide	
Problem	Remedy
Air blower does not operate – alarm activates	Reset the alarm. If the alarm deactivates, use as normal. If not, check the power supply to the system. If power is connected, reset the circuit breaker and reset the alarm. If the alarm reactivates, contact your local service agent immediately.
Irrigation pump – alarm activates	Check the power supply. If power is connected, reset the circuit breaker and reset the alarm. If the alarm reactivates, contact your local service agent immediately.
Irrigation system failure	Check to see if you have an inline filter installed and clean if necessary. Check and clean/replace any faulty sprays or drippers. If further problems occur contact your local service agent.

Normally, the Ri-Treat EP10 will not need to be shut down except during a major service. If the system is not used for up to one month, it may take some time to re-establish itself but will return to normal operation within seven days.

If the system is to be inoperative for six months or more, it is recommended that it be shut down to conserve power and prolong the lifespan of its components. The unit should be thoroughly washed out and refilled with water to prevent it from floating. This process should be supervised by a service agent.

To restart the unit, follow the original startup procedure. Enzymes (such as Dynamic Lifter) may be used to accelerate reactivation by adding one to two cups down the toilet.

# Guidelines For Irrigation Use

Below are general guidelines for the use of irrigation with the Ri-Treat EP10 system:

- Prevent any form of bleach, antibacterial solutions, or toilet cleaners from entering the system.
- Do not irrigate grassed or lawned areas, as children may play on them and the treated water is not suitable for this purpose. Sub-surface irrigation is recommended for these areas.
- Do not use irrigation on areas where fruit and vegetables are grown, as the treated water is not suitable for edible plants.
- A list of recommended plants that can be irrigated with treated water is included in this document.
- The surface irrigation disposal area must be dedicated solely to effluent disposal. It should be landscaped with salt-tolerant shrubs and trees and designed to discourage pedestrian and vehicle access.
- The irrigation disposal area must not be located on land subject to waterlogging or flooding. The reclaimed effluent must be evenly distributed without spray-drift, pooling, or runoff. Where necessary, modifications such as bounding, mounding, or terracing should be implemented to prevent runoff.
- No effluent should be discharged until the surface irrigation disposal area is fully completed, including landscaping and planting areas, to prevent pooling or runoff. Plants in this area must be salt- and nutrient-tolerant to support transpiration of reclaimed effluent.
- In accordance with legislation, the surface irrigation disposal area must display at least four (4) warning signs, one on each side, to inform occupants that reclaimed water is used for irrigation. These signs must:
  - Have a white background with red lettering.
  - Use text at least 20mm in height
  - Include the following wording:

**WARNING - RECLAIMED WATER  
NOT SUITABLE FOR HUMAN CONTACT/CONSUMPTION**



# Suitable Cleaning Products

Avoid using any form of bleach, antibacterial solutions, or toilet cleaners that could enter the system. If bleach does enter, it will disrupt the system's efficiency by killing beneficial bacteria, potentially causing odours.

Additionally, washing multiple loads of laundry in a short period (e.g., more than two loads within 24 hours) can overload the system, leading to ineffective operation and odour issues. To maintain efficiency, spread out laundry loads over time.

## **Recommended cleaning products for use with the Ri-Treat EP10 and septic tanks include:**

- Vinegar
- Bicarbonate of soda
- Soap (including washing powder, dishwashing liquid, and ordinary body soap)
- Biodegradable cleaning liquids

## **Cleaning items to use sparingly:**

- Disinfectants

Always read product labels carefully, as some products labelled "septic safe" may still harm the system.

If in doubt, contact your service agent or Ri-Industries on 8444 8100.

For further details, please refer to the warranty information.



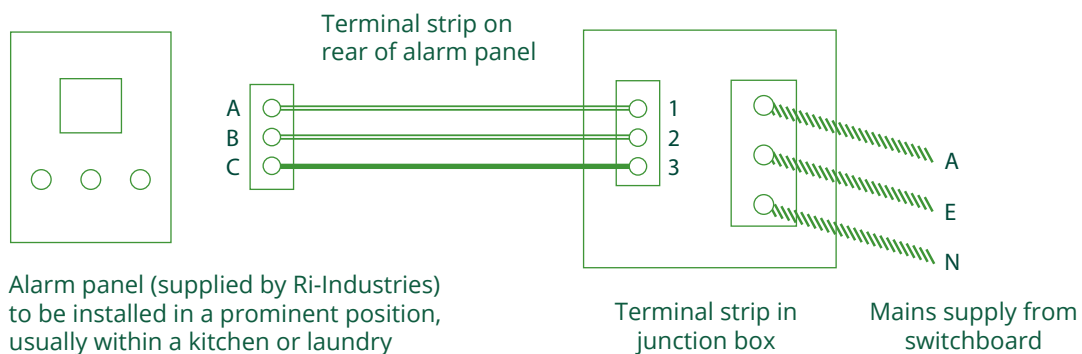
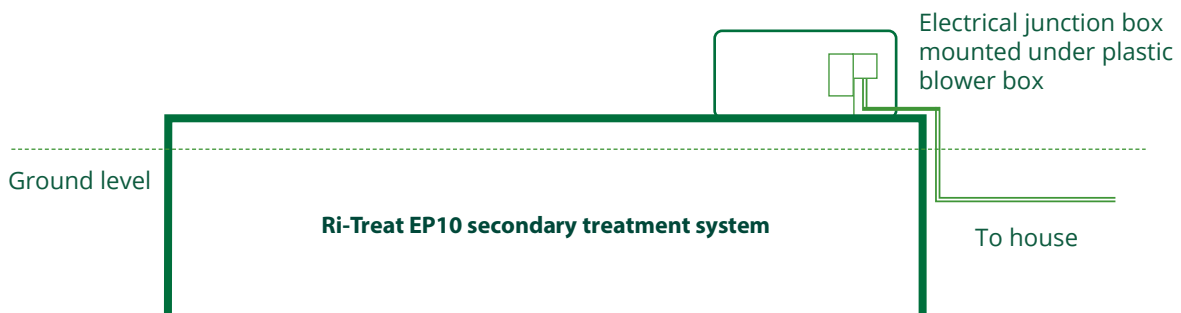
# Electrical and Circuit Diagrams

All electrical connections must be carried out by licensed and experienced tradespersons.

Within the premises' switchboard, it is recommended to use an independent and dedicated 16 Amp circuit (minimum), serviced with its own ELCB (residual current device) to supply power to the Ri-Treat EP10.

**Note:** Ri-Industries' alarm panels reset automatically and operate on 12-volt AC power, supplied by a transformer located in the control box mounted on top of the tank.

- The green light indicates that the system is receiving power.
- Low voltage operation ensures user safety.
- Auto-reset functionality minimises inconvenience and provides peace of mind.



# Suitable Plants

The list below is a guide to suitable plants for the surface irrigation disposal area.

Please note, due to wide climatic and soil variations, you should check with your local plant nursery before finalising your plant choice.

Trees		
Botanical Name	Common Name	Approx Height
Agonis Flexuosa	Willow Myrtle	5-6 metres
Acacia Baileyana	Cootamundra Wattle	3-5 metres
Banksia Spp.	-	3-10 metres
Casuarina Glauca	Swamp Oak	6-12 metres
Casuarina Stricta	Drooping She Oak	3-5 metres
Casuarina Cunninghamiana	River She Oak	6-10 metres
Callistemon Viminalis	Red Bottlebrush	3-6 metres
Callistemon Salignus	White Bottlebrush	3-6 metres
Eucalyptus Robusta	Swamp Mahogany	6-9 metres
Eucalyptus Saligna	Sydney Blue Gum	15-20 metres
Eucalyptus Grandis	Flooded Gum	10-20 metres
Eucalyptus Camaldulensis	River Red Gum	15-20 metres
Eucalyptus Cosmophylla	Cup Gum	5-6 metres
Hymenosporum Flavum	Native Frangipani	3-6 metres
Leptospermum Laevigatum	Coast Tea Tree	5-6 metres
Melaleuca Armillaris	Bracelet Honey Myrtle	3-4 metres
Melaleuca Quinquenervia	Broad Paperbark	5-7 metres
Melaleuca Nesophila	Western Tea Myrtle	2-4 metres
Pittosporum Spp.	-	2-4 metres
Syzygium Paniculatum	Bush Cherry	8-10 metres
Tristania Laurina	Kanuka	3-5 metres
Shrubs		
Abelia X Grandiflora	Abelia	2-3 metres
Acacia Floribund	Gossamer Wattle	2-4 metres
Acacia Longifolia	Sallow Wattle	2-4 metres
Acacia Iteaphylla	Flinders Range Wattle	2-3 metres
Cotoneaster Spp.	-	2-4 metres
Cortaderia Selloana	Pampas Grass	2-3 metres
Cyperus Alternifolius	Umbrella Grass	0.5-1 metre
Cyperus Papyrus	Papyrus	1-2 metres

# Suitable Plants

<b>Shrubs</b>		
<b>Botanical Name</b>	<b>Common Name</b>	<b>Approx Height</b>
Cassia Spp.	Swamp Mahogany	1-3 metres
Chamelaucium Uncinatum	Geralton Wax	2-4 metres
Dryandra Formosa	-	1-3 metres
Eremopjhila Spp.	-	1-2 metres
Grevillea Spp.	-	1-3 metres
Hebe Spp.	Veronica	0.5-1 metre
Iris Pseudacorus	Yellow Flag Iris	0.5-1 metre
Nerium Oleander	Oleander	2-3 metres
Melaleuca Decussata	Cross Leaved Honey Myrtle	1-2metres
Phormium Tenax	New Zealand Flax	2-2.5metres
<b>Perennials / ground cover</b>		
Aster Novi-gelgii	Perennial Aster	0.5-1 metre
Canna	-	1-2 metres
Chrysanthemum Frutescens	Marguerite Daisy	1 metre
Chrysanthemum Maximum	Shasta Daisy	1 metre
Gazania Ringens	Black Eyed Susan	0.4 metres
Impatiens Spp.	-	0.4 metres
Salvia Uliginosa	Bog Salvia	0.4 metres
Viola Spp.	-	0.4 metres
<b>Climbers</b>		
Bougainvillaea Spp.	-	Variable
Clematis Spp.	-	Variable
Hardenbergia Violacea	Purple Coral Pea	Variable
Hibbertia Scandens	Snake Vine	Variable
Jasminum Grandiflorum	-	Variable
Jasminum Polyanthum	-	Variable
Jasminum Officinale	Common Jasmin	Variable
Kennedia Rubicunda	Dusky Coral Pea	Variable
Lonicera Japonica	Japanese Honeysuckle	Variable
Passiflora Spp.	Passion Flower	Variable
Vitis Coignetiae	Glory Vine	Variable

# Ri-Treat and Ri-Scape Bristle Filter

The Ri Bristle Filter comes standard in our Ri-Treat and Ri-Scape tanks and can be incorporated into septic and holding tanks to enhance effluent quality.

We recommend cleaning the filter quarterly and replacing it annually or as needed.

Poor maintenance or factors such as garbage disposals or excessive laundry may require more frequent inspections, servicing, or replacement of the filter.

## Features

- Effectively filters out hair, lint, tissue, seeds, and other debris that can clog pumps and soakage trenches
- Provides excellent filtration performance
- Offers over 300 cubic inches of open area to minimise clogging
- Flexible design allows installation in hard-to-reach tees, baffles, and similar components
- Constructed from twin 2.5 mm stainless wire with black UV-stable polypropylene bristles for superior filtration and durability

## Installation and removal

### To install:

1. Push the Ri Bristle Filter into the top of the PVC tee inside the tank until the 90-degree wire handle rests on the top of the tee.
2. The filter is now installed, as shown in the picture.

### To remove for cleaning or replacement:

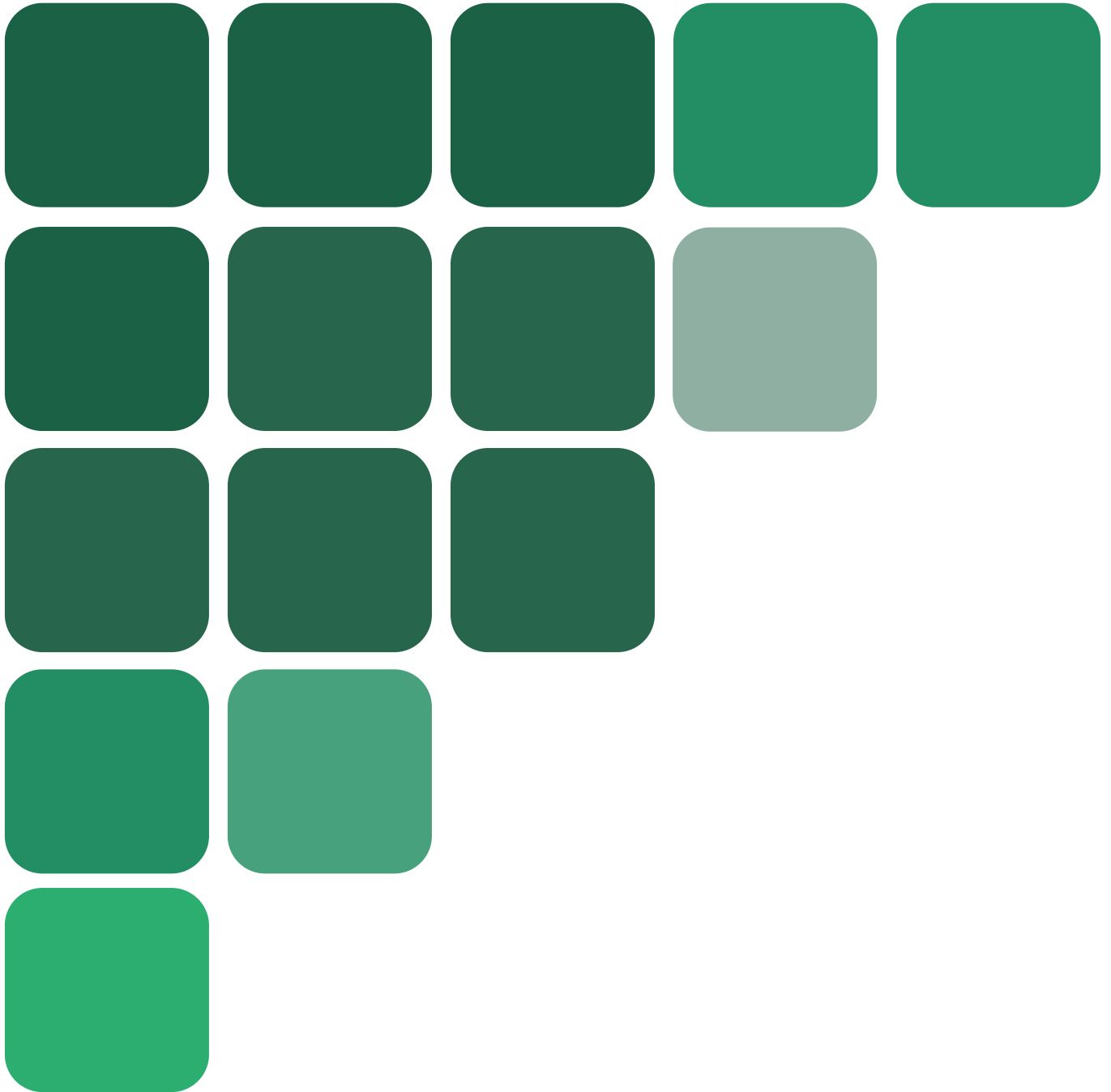
1. Pull up on the wire handle to remove the filter.
2. Hose down the filter over the inlet chamber to clean it.
3. If replacing, place the used filter in a plastic bag for proper disposal.

## To order

Please contact Ri-Industries

- [sales@ri-industries.com.au](mailto:sales@ri-industries.com.au)
- 8444 8100





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