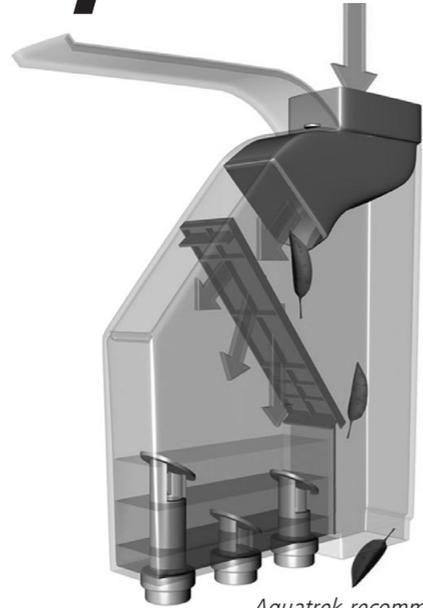


Congratulations on the purchase of your **Supadiverta™**



Aquatrek recommends fitting by a qualified plumber

SUPADIVERTA can be used to redistribute rainwater to dry garden areas, top up the pool or fill rainwater tanks from several downpipes and the size adjustable priority use outlets allow for an amazing versatility of use.

SUPADIVERTA is designed with a super efficient syphonic drainage system and a unique filter. Once the reservoir level reaches a height above an outlet's anti vortex baffle, the vortex drawing air down the outlet during normal gravity drainage is blocked, creating a solid water head. The outlet's hose is then purged (of air), head pressure is generated and the hose will flow full of water at accelerated velocity. Each metre of head generates 9.8Kpa (1.47psi) but flow through the pipe and fittings cause friction loss. **The greater the friction loss, the slower the flow.** Refer www.supadiverta.com.au

Remember, a steady 10mm rainfall per hour on 50 sq metres of roof servicing one downpipe will harvest an average of 8.3 lt/min - 500 lt/hr.



Quick Prime Optional

The 2nd priority outlet is quickly primed when a 13mm bleed tube is fitted at an upper level between the 2nd and 3rd priority hoses. Fitting reducing tees into both hoses and connecting the tees with 13mm tubing allows the 3rd outlet to act as a snorkel to quickly purge trapped air from the 2nd outlet. This method is recommended to speed priming of 25mm poly pipe **fitted directly to** the 2nd priority outlet. 25mm poly pipe is generally used over longer distances and in high intensity rain areas.



Fitting 25mm poly pipe **directly** to the 3rd priority outlet is not recommended. AQUATREK recommends using a **flexible** UV stabilised 13mm tube in preference to 13mm poly pipe as the quick prime bleed tube.

It is essential that the vertical poly pipe remains vertical to enable priming. 19mm poly pipe is recommended for the vertical feed to *horizontal* 25mm poly pipe. Use a 90° elbow to join vertical and horizontal sections. If connecting 25mm poly pipe to 19mm poly pipe, use barbed reducing joiners and **DO NOT** connect directly to the vertical drop.

Fitting Instructions

Downpipe fits into SUPADIVERTA top inlet and to outside of bottom outlet

100mm x 50mm RECTANGLE DOWNPIPES

Step 1. Measure, mark then cut out 342mm section of downpipe.

Step 2. Position SUPADIVERTA to rejoin the upper and lower downpipe sections.

A 3mm gap is needed between the downpipe and wall to fit the SUPADIVERTA and enable easy removal of the inspection lid. Fit spacers between the downpipe and wall if needed.

Step 3. Secure downpipe with downpipe clips. Spacers may be needed.

90mm ROUND DOWNPIPES

Step 1. Purchase two adaptors (prior to hiring plumber).

100mm x 50mm x 90mm adaptors require an internal fitting of a section of 100mm x 50mm PVC to couple the adaptor to the inlet. This provides a neat and firm fitting.

95mm x 45mm x 90mm adaptors do not require a coupling, fit into the SUPADIVERTA inlet and are recommended for snug fitting to the outlet.

Step 2. Carefully measure, mark then cut downpipe to size. As adaptors vary between manufacturers, Aquatrek is unable to indicate the precise length of downpipe to be removed.

IMPORTANT: it is the adaptors **internal** fitment that needs measuring, not the height of the adaptor!

Step 3. Fit SUPADIVERTA and adaptors to rejoin the upper and lower downpipes. There is no need to glue or screw the adaptors to SUPADIVERTA. A 3mm gap is needed between the downpipe and wall to fit the SUPADIVERTA and enable easy removal of the inspection lid. Fit spacers between the downpipe and wall if needed.

Step 4. Secure downpipe with downpipe clips. Spacers may be needed.

OTHER SIZE DOWNPIPES

Adaptors are available to fit many other downpipe sizes. Contact AQUATREK if you have difficulty in locating suitable adaptors.

IMPORTANT: Purchase adaptors prior to hiring a plumber.

- For quality rainwater harvesting, householders should address any gutter debris issues prior to fitting SUPADIVERTA. Handy hints and tips can be found at www.supadiverta.com.au
- SUPADIVERTA normally does not require additional bracing.
- Carefully consider intended usage prior to selecting the height position.
- Use Teflon tape on threads of supplied fittings. Do not over-tighten.
- Some outlet fittings, for example 90° elbows, are best fitted prior to securing downpipe.
- Check that the filter is properly positioned.
- If painting adaptors and SUPADIVERTA, it is best to use a suitable priming agent prior to painting.
- Inline taps fitted to the outlet hoses are a handy accessory.

The central outlet will scavenge much of the heavier debris (sand) that passes through the 750 micron mesh filter and fitting a short polypipe and inline tap will allow capture of this debris. To divert the polluted first flush, a first flush kit designed for SUPADIVERTA is available from AQUATREK. Details of this kit plus a lot more information and cost cutting tips can be found at:

www.supadiverta.com.au

Automatic flow path transfer

- If you have a tank installed next to **downpipe A;** Install SUPADIVERTA on downpipe B with the intersect of the SUPADIVERTA filter support wall and filter a minimum 6cm to 8cm below the bottom of the tanks overflow.
- Fit a 19mm or 25mm hose from 2nd priority outlet to tanks bottom inlet/outlet.
- While the tank is at a low level, water will flow freely to the tank. As the tank becomes full, the flow will slow and the water level in the SUPADIVERTA will eventually rise above the 3rd priority outlet vent.

- In this situation, if the 3rd priority outlet is connected to a second tank sited away from the house, that tank will begin filling before the first tank fills.
- When the first tank fills to a height above the SUPADIVERTA internal level, **water transfer between SUPADIVERTA and the first tank will reverse.** In this situation, water from the first tank will flow back to the SUPADIVERTA, then to the second tank! This transference is automatic, requires no power or human interaction and continues after it stops raining! Fitting an inline tap to the pipework feeding the first tank will allow stoppage of the reverse flow and is a handy option.

Fast Facts

- Regular flushing of the downpipe and storm-water is recommended.
- Syphonic drainage is vastly superior to gravity drainage and the inlet inflow often exceeds the maximum capacity for gravity but is insufficient for syphonic. In this situation, flow will alternate between the two mediums.
- Use 25mm polypipe when diverting to a tanks top meshed inlet and fit end with a 90° elbow to prevent splash.
- Working head pressure decreases as a tank fills.
- Use 19mm poly pipe if diverting to drip hoses.
- Use a 25mm horizontal mainline when diverting from more than one additional downpipe to a tank.
- Tanks can be optioned or retro fitted with additional outlets.
- Rises (highpoints) along the poly pipe should be avoided as these can create air locks.
- If an outside T.V. antenna (bird roost) is close to a downpipe, consider harvesting other downpipes if the water is to be diverted to a tank or pool.
- **POOL OWNERS SHOULD NOT** divert rainwater to a pool unless the diversion system is fitted with an effective leaf/debris diverter and a first flush diverter. First flush is contaminated with many pollutants including phosphate laden bird droppings which can turn your pool green! **NOT GOOD!**
- When cleaning gutters, wrapping 2 or 3 layers of cling wrap (overlay from bottom to top) around the filter will prevent any passage of debris to the internal reservoir.
- If a film builds up on the filter mesh, cleaning is best done with a **soft brush** and a mild detergent. Do not use abrasive and coarse household cleaning products.

AQUATREK recommends installation by a qualified plumber

www.supadiverta.com.au