This document is brought to you by



01371 850537 / info@ohel.co.uk / www.ohel.co.uk

# Brief Guide to installing a Rainwater System

### Contents:

- 1. Introduction
- 2. Planning
- 3. Responsibilities
- 4. Your tank
- 5. Your pump
- 6. Your mains back up
- 7. Frequently asked questions.
- 8. Summary

### 1. Introduction

This guide is intended to be read in conjunction with all relevant installation manuals for the various components within your rainwater system. Rewatec supply only high quality components for your rainwater system, which, installed correctly with care, will last many years.

Each component has its own installation manual, this is because we use many different components for different situations therefore one manual cannot cover everything.

We hope this guide is useful when planning and installing your rainwater system.

### 2. Planning

When planning a rainwater system think about the following things:

- Where to site the tank
- Which downpipes can you realistically get to the tank without being too deep?
- If you are not putting the tank in first, where will your service duct be?
- Do you have a good soak away from the tank?

It is important to think about all these things. Talk to your builder and plumber about what you are planning and get them involved from the start. Your builder, plumber and electrician will have to work together to make the installation easy and the system efficient.

### 3. Responsibility

Ensure people know their responsibility on site.

<u>Groundworker:</u> It will be the groundworkers responsibility to put the tank in, and install the inlet, outlet and service duct, however make sure they talk to the plumber/builder to ensure the service duct is in the correct place for the services.

<u>Plumber:</u> The plumber should install the pump in the tank, and make the connections from the pump to his plumbing for the WCs, washing machine and outside taps.

<u>Electrician</u>: Ensure the electrician knows to provide power for the pump and mains top up if you have one.

## 4. Your Tank:

. Please refer to the full tank installation manual for full installation details.

Your tank comes with a 4" inlet, outlet and service duct. As an owner or installer you must install the tank in a way that will be usable for the customer/user. Please think about the following:

- Tank depth: if the tank has a built in filter, putting it too deep will make it impossible to clean the filter. If you think you will have a deep tank, please consider an external filter that could be installed closer to the property and therefore higher in the ground. Downpipe filters could also be an option.
- Accessibility: Make sure you install the tank in a position that it can be accessed. Plan this prior to digging the hole.
- Cleanliness It is important that you do not get dirt into the tank. If you do you should consider cleaning it prior to handover. Dirt can cause toilets to get stained and/or suffer from blocked valves.

We normally supply a 60cm collar for the tank, we would suggest that you do not go deeper than this as the tank will be inaccessible. In fact, higher is better.

Please read the tank installation manual for dimensions, and full installation guidance. The VS60 shaft has to be added to all dimensions but can be cut to size if needed.

### 5. Your Pump

Rewatec supply high quality, automatic pumps which are all individually tested before they are sent. It is important you take care of this pump. Do not carry the pump by its power cable.

The pump should be installed by your plumber, the filter should be attached and care must be taken whilst doing this. Dirt inside the filter will cause the pump to break. The pump has an auto start/stop and can be connected directly to the plumbing circuit in the property. Connections must be clean and watertight.

• A leak in the pipe will cause the pump to turn on and off! Eventually causing the pump to fail.

If REWATEC have not supplied pipe, then 32" MDPE pipe should be used, coloured black, green tape supplied should be wrapped around the pipe to identify it as rainwater.

Should leaks develop in your toilets, the drop in pressure will turn on the pump, from time to time, when there is no demand for water. Should this happen you can install a pressure vessel to the pump or plumbing circuit to 'soak up' this pressure drop.

A pressure vessel can be installed as a preventative measure to stop this happening. Your plumber can do this.

### 6. Mains Top Up

A 'mains top up', if supplied, will keep your tank from totally running dry in the event that there is no rain for some time. A sensor in the tank tells a magnetic valve to open and feed water into the tank. There are a few things you/your plumber/your builder need to consider when installing this:

- Ensure the sensor is set just above where the pump is taking the water from, your plumber can do this. If you cannot secure the cable for any reason, it can be cable tied to the supply pipe on the pump, this will ensure is always set correctly. Simply hanging it at the correct height is however, perfectly fine.
- DO NOT let the sensor sit on the bottom of the tank, it will cause the tank to run dry.
- The mains top up water MUST freely run to the tank, we provide a bracket that holds the tap/magnetic valve above the pipe to the tank. The pipe to the tank should be 50mm, held firmly in the gap provided and end up flush with this gap. This provides the necessary, legal air gap. The 50mm pipe then needs to go to the tank. This can be through the service duct, directly to the tank, or installed in such a way that it meets a downpipe.

Please read the mains top up manual in full for more assistance.

#### 7. FAQ

Q. My toilets won't flush, what is happening?

**A.** The main cause for this is your tank has run dry. Make sure your mains top up sensor is installed at the correct height, remove the sensor from the water to make sure the top up works and the water is getting into the tank. If the pump has run dry, it will turn off and reset itself a short time afterwards. See pump manual.

#### Q. My pump won't stop, what is happening?

**A.** There is a leak in the pipes, or dirt in the top if the pump.

#### Q. How high do I set my mains top up sensor?

**A.** Above where the pump is taking the water. 30cm from the tank bottom should be fine.

**Q.** My tank has to be installed deeply because of all the pipework from my downpipes, is this ok?

**A.** It is not ok, it will make any access to the tank very difficult. A pump should last a long time but the leaf filter needs maintenance, you should think again about certain downpipes or a different way of filtering.

Q. Should I install a header tank?

**A**. This is up to you, we can advise you and even supply a header tank system. However it does add to the initial cost. If installed correctly the pump should give you many years of use. A small pressure vessel will stop the pump constantly switching on and off if you have a leak. A direct fed system is simple, and effective in most domestic systems.

Q. Can I install my tank in a driveway?

A. Yes, but you must use our drivable cover. Please contact us about this.

#### 8. Summary.

We hope you find this short guide useful. As advised, each component has its own manual which must be read in conjunction with this short guide.

Should you require more information, or need specific installation guides, please contact us or visit our website where everything can be downloaded:

www.rewatec.co.uk