

Urbika Development

Grey Water Installation Boksburg.

Installation and Maintenance Manual.





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Urbika Development - Grey Water Installation Boksburg. (Doc June 2019)

The Grey water installed at Urbika Development Rondebult Road in Boksburg.

On Site Installation consist out of two, group installations, each group consist out of three individual complete Grey Water Systems.

Grey Water Components:

Each System Consist out of a three parallel installations of One Inlet 1000 Lit Collection Tank, Equipped with a inline screen (For hear and other possible obstacles coming from showers and bathwaters) followed by a UV Chamber with a X - Clear 75 Watt UV (Ultra violet Sterilising Lamp), followed by one 6000 Lit Storage tank equipped with a 40Lit/m Hi Blow Blower for aeration to keep the water fresh.



Installation: take note of the Piping and Inspection Manhole Lids.

Electric Control Panel: Each Unit are controlled from the Control Panel switch facilities



The Control panel are Equipped with switch gear for operating and protection of the 3 X 40 Lit/min Hi Blow Blowers, as well as 3 x 75 Watt UV's Build into the 3 x UV Chambers, each equipped with one 75 Watt UV Lamp for water sterilisation.



Operational Process:

Waste water from the bathroom, Basin, Bath and shower are directly connected to the sewer line feeding to the Grey Water system at the bottom part of the site of the development. The total developments Grey water are split into two areas where the one site drains to the Northern system and the other development to the southern side of the development.

Take Note: Sewage from the Toilettes from all living Units are on its own system and do not discharge to the Grey water system.

The Grey water from each home flow into a dedicated pipeline to one of the three compartment Grey water systems for treatment. (Basic Treatment take place and the system consist our of a pre Tank equipped with a Inline Filter, a UV Chamber with a UV and a Storage tank with Aeration)

Each System work as follows, Grey water (Bath and Shower Water) from each Living unit as the source are discharged into a dedicated sewer line, splitting into the three unit Grey water systems, the water is screened with inline Filters, then it flow through the UV Treatment, into the 6000 Litre Storage and air conditioning Tank, where Fine Bubble air are blown into the water and from there it overflow into the Storm water storage Dam at the bottom of the site, from where the water can be recycled for garden purposes or discharged to the Cinderella Dam into the natural stream.

Servicing of the Systems.

All systems work and operate the same, therefore we will describe one system which will apply for all six Installations.

There are three manholes on each Grey water system. (See Picture below.)



The first Manhole is inflow from the splitter box to the 1000 Litre Pre Tank equipped with a Inline Filter on the outlet of that tank, this Filter needs to be cleaned once a month for the start to determine frequency of cleaning.

Open the manhole cover, then find the green cover with square hole screws, open with a square tool screw driver, take the Cartridge of the inline filter out and wash it down with a hose pipe and re install.



The Second Manhole is for the UV and needs to be checked ones every six months and if faulty needs replacement (UV Tech 75 Watt UV Lamp).

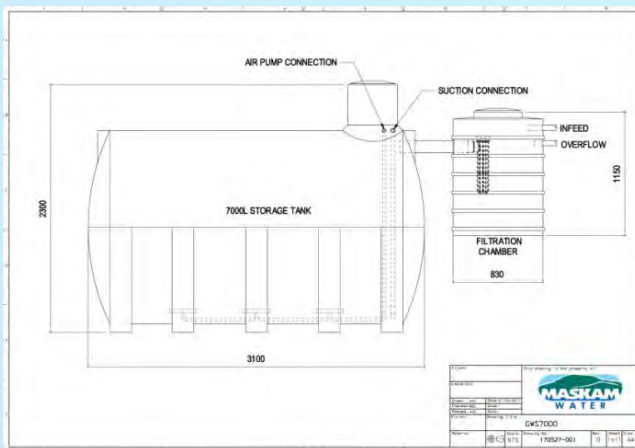
Open the manhole cover as well as the Green UV Chamber Cover as in one above. With the power on, unscrew the UV holder top, check the lamp for the blue shine.

To replace the Lamp, switch of the power at the Control panel, unscrew the lamp holder, pull the lamp out for about 20 cm, unplug but hold the lamp with a cloth, unplug the lamp and pull the lamp out of its glass tube.(The lamp plug wire is a short wire therefore the 20mm, before you unplug the Lamp.)

Replace with a new lamp by pushing the new lamp into the glass tube but hold it with a cloth, couple the plug part to the lamp, once it is firm, plug back the UV and its plug holder, tighten the UV lamp screw ring fairly tight, the lamp is replaced, check that the blue light shine after you switch the power on.



The Third Manhole is the 6 000 Litre Storage tank and needs to be checked every month to make sure that the 40 Litre /m Fine Bubble Blower blows air into the system, it can also be checked at the Control panel if the Air pump is operational.



Your Grey Water System is a easy manageable system and holds a total capacity of 7000 Litres of water which can be used in emergencies for fire fighting as well as gardens and water features.

Total Capacity of one 3 x 7000 Lit Installation.

One Total System with three full units will hold a Total Capacity of 21 000 Lit of High Quality Grey water, for beneficial use as planned.



Completion of the Boksburg Project.



If there are any Questions about the System, contact Waterbear Technologies cc.

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**Maskam Water
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