
INSTALLATION MANUAL

OZZI KLEEN SEWAGE TREATMENT SYSTEM

*MODELS: RP10, RP10A, RP10A+, RP10S & RP10S+



* Check your state for Approval.

NEATPORT PTY. LTD. TRADING AS SUNCOAST WASTE WATER MANAGEMENT

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SAFETY INSTRUCTIONS

	<p>Please follow all safety precautions and accident prevention guidelines during installation, use, maintenance and repair of the Ozzi Kleen Sewage Treatment Plant. All local safety precautions and accident prevention guidelines established in the area should also be followed.</p>
	<p>DO NOT ENTER SEWAGE TREATMENT PLANT. Risk of drowning or asphyxiation due to low oxygen environment is present. Ensure all access lids are closed securely after accessing the treatment plant to prevent unauthorized or accidental access.</p>
	<p>WARNING! To reduce the risk of electrical shock, all works requiring access to the motor box must be carried out by a licensed electrical contractor or authorised service professional.</p>
	<p>SLIPPERY WHEN WET! During cleaning, maintenance and repair work the surrounding area may become extremely slippery in some circumstances due to spilled water. Caution is to be taken when walking / standing near the Ozzi Kleen Sewage Treatment Plant when these activities are being conducted.</p>
	<p>The waste water contained in the Ozzi Kleen Sewage Treatment Plant may contain harmful bacteria. Persons coming in contact with waste water must immediately wash and disinfect all exposed areas. Contact your personal physician for all health concerns.</p>
	<p>Use safe lifting techniques when installing/relocating the Ozzi Kleen Sewage Treatment Plant. Ensure that all lifting equipment is in a safe working order and the area is clear of obstructions.</p>

SECTION A: PLUMBER'S INSTALLATION INSTRUCTIONS

INTRODUCTION

The Ozzi Kleen is suitable for installation in the ground, partially in-ground or above ground on a compacted hard stand base.

GENERAL WARNING

The sewage treatment system is not to be used in any way, or waste fed into the system, until the sewage treatment system has been commissioned. This includes contractors during the construction of the house or owners wishing to take up residence. If the system is used prior to commissioning, the owner will need to pay for the system to be cleaned up.

Household drains such as laundry, bathrooms and toilets etc. are to be connected to a common drain prior to connection to the sewage treatment system. If the fats, oils, and grease (FOG) value is expected to exceed the raw sewage limits specified in the RP10 Owner's Manual, kitchen drains should be routed through a grease trap before entering the sewage treatment system to remove FOG.

These systems are not designed to be installed in enclosed spaces (e.g. Sheds, Pump Rooms or similar structures). Installation in enclosed spaces may create hazardous conditions during operation or servicing.

RP10/RP10A/RP10A+ IN-GROUND INSTALLATION DIAGRAM

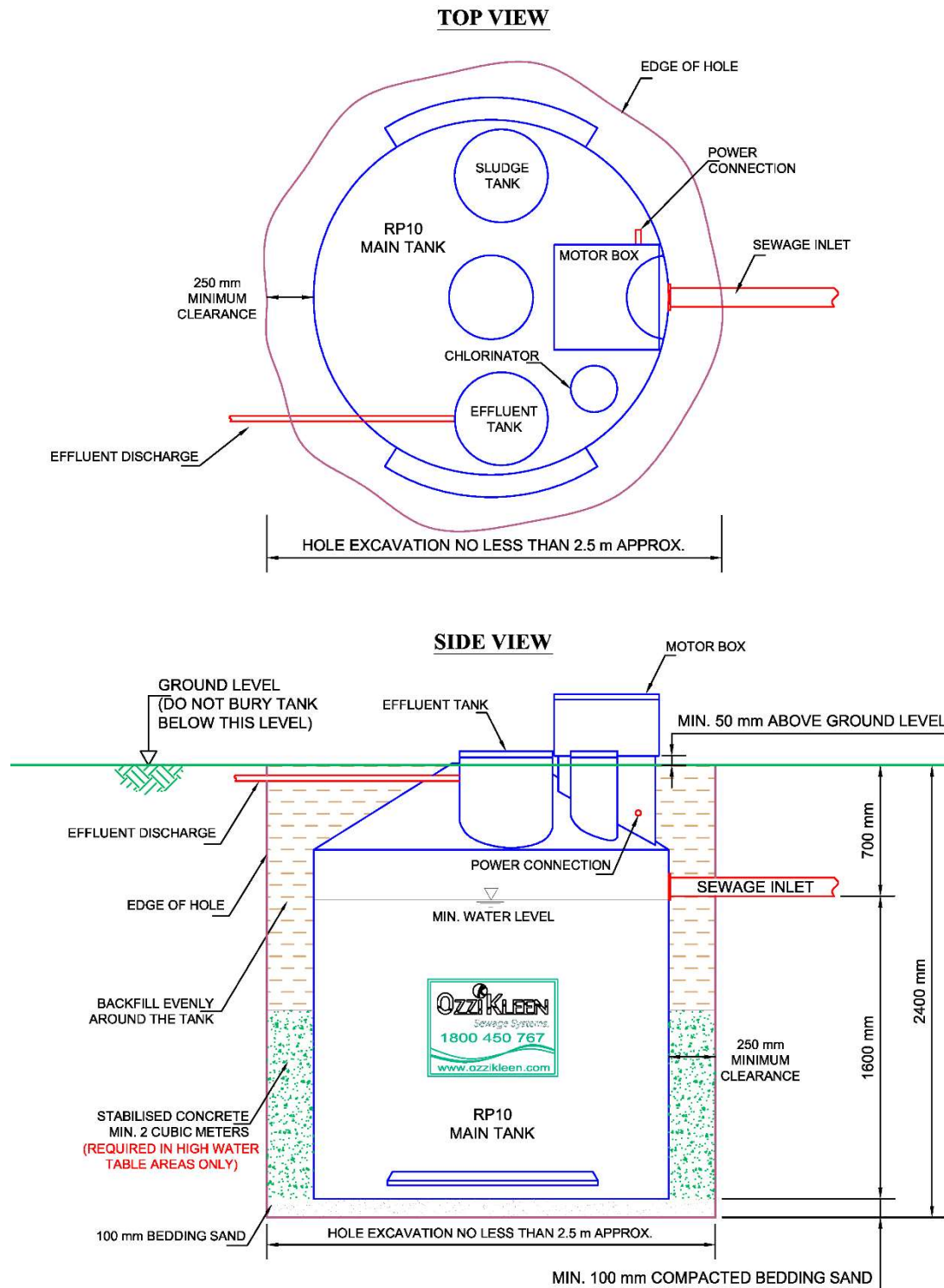


Figure 1 – RP10/RP10A/RP10A+ Standard In-Ground Installation Diagram

The sewer inlet fitting is 100 mm diameter PVC sewer pipe fixed to the side of the inlet compartment with the invert 300 mm below the top of tank wall and 1600 mm from the tank floor and 700mm from ground level.

RP10S/RP10S+ IN-GROUND INSTALLATION DIAGRAM

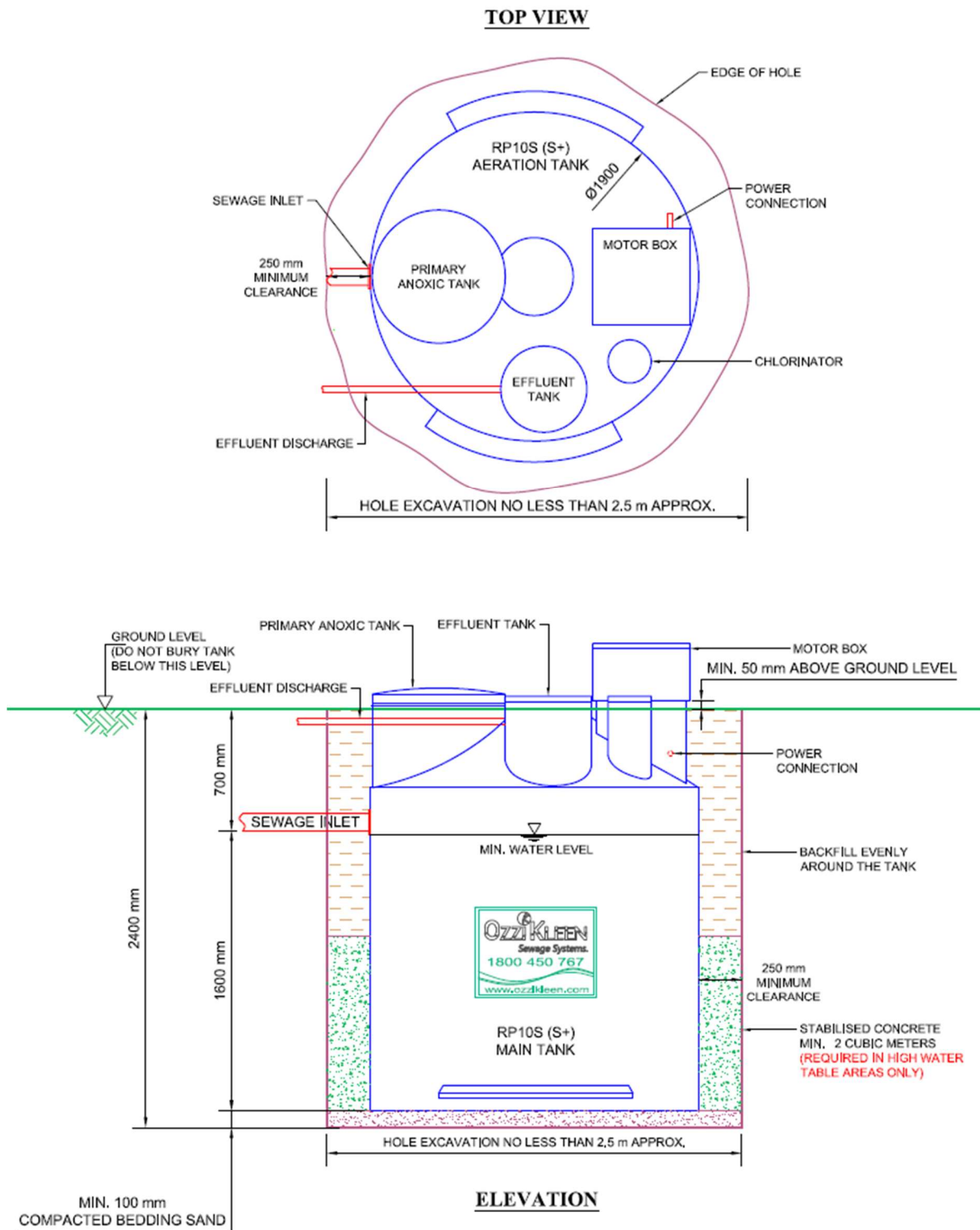
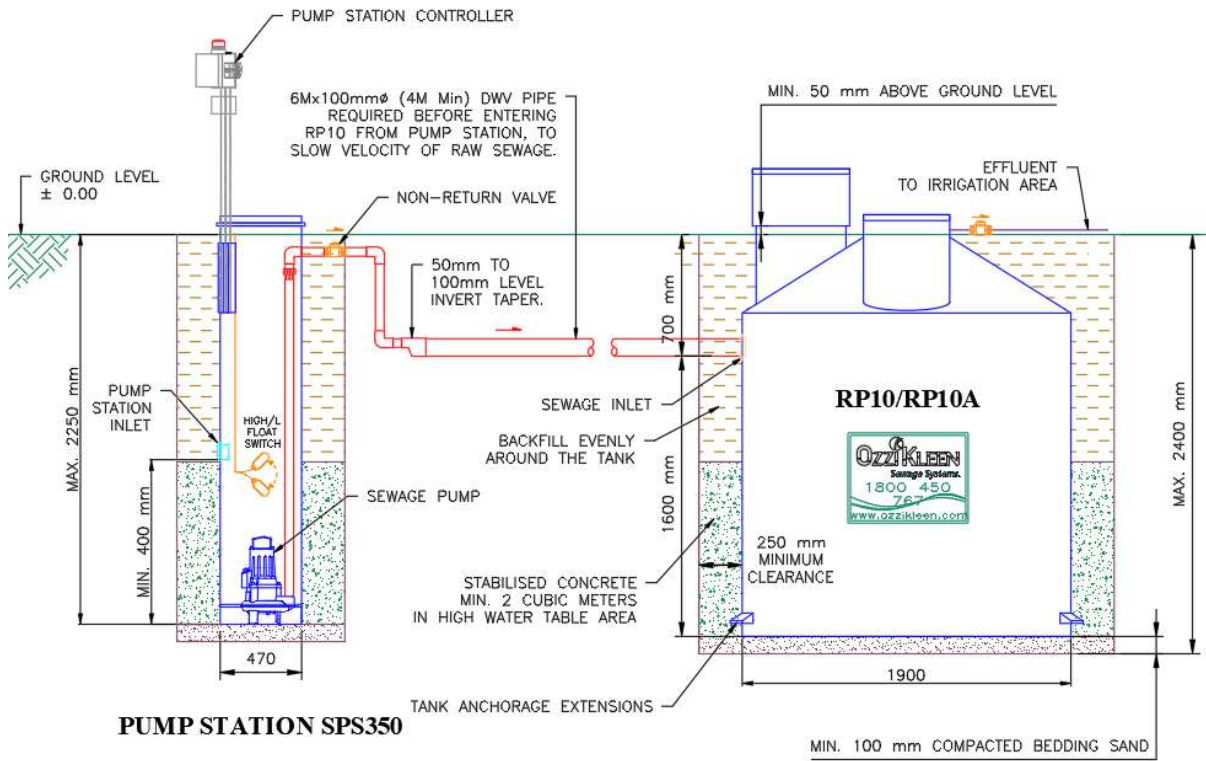


Figure 2 – RP10S/RP10S+ Standard In-Ground Installation Diagram

The sewer inlet fitting is 100 mm diameter PVC sewer pipe fixed to the side of the inlet compartment with the invert 300 mm below the top of tank wall and 1600 mm from the tank floor and 700mm from ground level.

DEEP INVERT PACKAGE INSTALLATION DIAGRAM



IN-GROUND INSTALLATION INSTRUCTIONS

STEP ONE – IDENTIFY WHERE TO INSTALL THE SYSTEM

The system is to be installed in a position where local storm water flooding and ponding around the tank will not occur. If the system is installed in a water course or a flood prone area the system will have to be relocated by the installer.

When installing the system underneath a building ensure that there is sufficient head room for servicing. A minimum of 1200mm headroom is needed to undertake servicing which can involve removal of some parts and retrieving of water samples.

These systems are not designed to be installed in enclosed spaces (e.g. Sheds, Pump Rooms or similar structures). Installation in enclosed spaces may create hazardous conditions during operation or servicing.

STEP TWO – EXCAVATE HOLE

For installation in-ground – a hole for installation will have to be excavated approximately 2500 mm diameter and 2400 mm deep with a sound base.



STEP THREE – BEDDING SAND

A minimum 100mm layer of bedding sand is required. If the hole is over excavated, extra bedding sand will be required. Under no circumstances is the material excavated from the hole to be used as bedding for the tank. Only bedding sand should be used.



A normal installation of the sewage treatment system will locate the level of the sewer invert at 700mm below natural ground level and 1600mm above the sand base. Refer to standard installation diagram on page 6.

STEP FOUR - MEASURE

Check that the depth from the sand bed to natural ground level is no greater than 2300mm. If the measurement is more than 2300mm add more bedding sand to raise the base.

Check the base is level.



STEP FIVE - INSTALL

Install the treatment plant so that the tank is located centrally in the excavated hole with no less than 250 mm to the nearest side. Ensure that the backfill is placed evenly around the tank.

If the system is placed unevenly in the hole so that the tank is near to touching a side of the hole this will not allow even backfill and cause tank instability. If this occurs, it will have to be rectified by the installer.

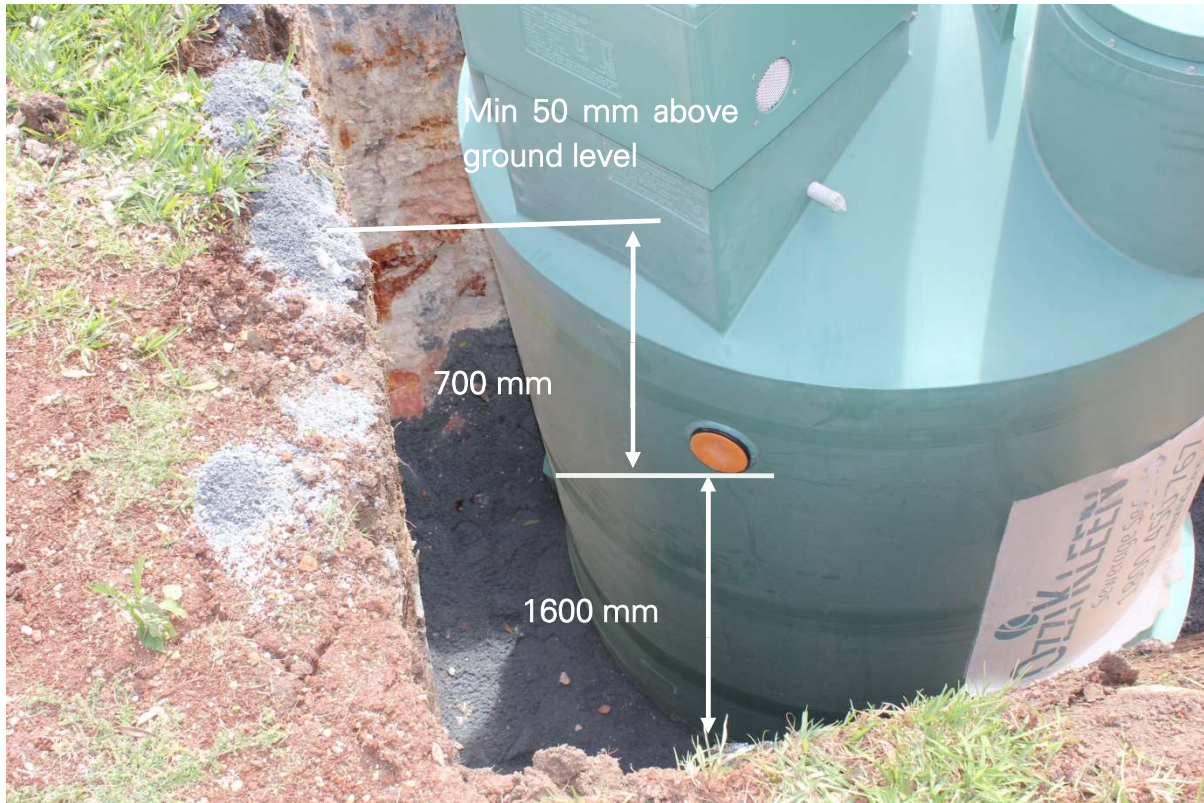
Install the sewage treatment system so that the base of the green motor box is no less than 50 mm above the natural ground level to avoid surface water entry. If the system is installed too low, it will have to be rectified by the installer.

The treatment plant comes with two lifting lugs on top of the tank suitable for lifting with a chain and D shackle. The tank has a dry weight of approximately 400 kg.



STEP SIX – CHECK MEASUREMENTS

Check depth from sewer invert to bedding sand is no greater than 1600 mm. Check depth of sewer invert to natural ground level is no greater than 700 mm. Make sure that the motor box hinges are at least 50 mm above the natural ground level.



STEP SEVEN – FILL THE SYSTEM WITH WATER

Completely fill the Ozzi Kleen treatment plant with water (approximately 4,500 litres) or up to the sewer invert, refer to Figure 1 on page 6, before any backfill is placed around the tank. All compartments including sludge waste and effluent compartments must be filled. Failure to do so will cause tank instability and any deflection to the tank will have to be rectified by the installer.



STEP EIGHT – CONNECT PIPE

Connect sewer piping to the sewer inlet. The inlet is an 'Akatherm' fitting and will require a standard 100 DWV pipe for the connection. This plug-in socket has a SBR seal and cannot be glued to.

IF A SPS300/SPS350 PUMP STATION IS INSTALLED

If a small pump station (SPS300 or SPS350) is installed to feed an Ozzi Kleen System, Minimum 4 metre Ø100mm pipe required before entering RP10. Please refer to Deep Invert Package Installation Diagram for details.

STEP NINE – BACKFILL AROUND TANK

In high water table areas, a minimum amount of 2 cubic metres of stabilised concrete, as per Figure 1 & 2 on page 6 & 7, is required to be placed around the base of the system.

If the system is not installed in a high-water table area backfilled earth is all that is required.

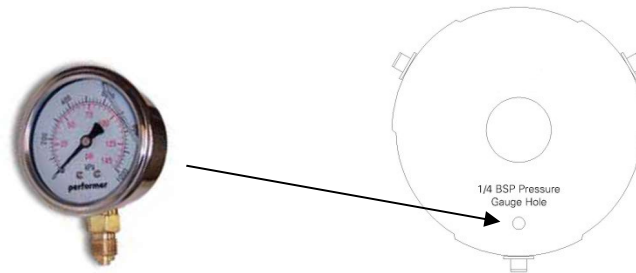
Backfill around the tank with clean earth only, which is free from large lumps of clay, stones, bricks, rubbish, and other foreign objects.



STEP TEN - CONNECT SOCK FILTER VALVE AND GAUGE (SOCK FILTER SYSTEMS ONLY)

Systems ordered with an Ozzi Kleen sock filter come supplied with a pressure gauge and non-return valve assembly inside the motor box to be fitted on installation:

1. Screw pressure gauge into the 1/4" hole in the sock filter lid.



2. Screw non-return valve assembly into the sock filter outlet (25mm elbow on top of the treatment plant).



STEP ELEVEN - IRRIGATION

The irrigation system could be of several different formats such as surface and sub-surface. Irrigation should be installed according to your Local Authorities requirements.

Connect and lay out sprinkler distribution line to connection on pump outlet (or sock filter outlet if installed) and fit the tee junctions on the 3 sprinklers approx. 8 meters apart along this line starting from the far end. Lay out pipe according to local Council requirements.

Irrigation tubing as supplied or similar should be used, not potable grade blue line water piping. If a Council sample valve is requested, it should be fitted to the low-density piping using low pressure irrigation components.

CAUTION: The standard pump installed has a 9.5 meter head at 25 litres/ minute. A larger pump will be required for irrigation systems with a higher head.

LANDSCAPING

If landscaping or the importation of topsoil around the sewage treatment system occurs after it is installed, the owner must ensure that the additional soil or materials do not cause the tank to be too low in the ground. No rocks are to be placed on top of the system or within 1 meter of the system.

Imported topsoil that may be placed on the system after the installation will be the responsibility of the owner.

If the system is installed under the home, deck or other enclosed environment please ensure air flow around the system. Please also be mindful that the system needs to be serviced therefore, planting shrubs too close to the system should also be avoided.

These systems are not designed to be installed in enclosed spaces (e.g. Sheds, Pump Rooms or similar structures). Installation in enclosed spaces may create hazardous conditions during operation or servicing.

PLUMBER'S INSTALLATION CHECK LIST – IN-GROUND INSTALLATION

The Ozzi Kleen sewage treatment system must be installed as per the following instructions. This form is to be filled out and returned to the manufacturer or their Distributor as part of the owner's warranty registration.

PLEASE TICK ALL THE BOXES DURING THE INSTALLATION

1.	<input type="checkbox"/>	Identify where the system is to be installed
2.	<input type="checkbox"/>	Excavate hole – 2500 mm diameter and approximately 2400 mm deep
3.	<input type="checkbox"/>	Place a layer of bedding sand in the hole
4.	<input type="checkbox"/>	Check depth from sand bed to natural ground level no greater than 2300 mm
5.	<input type="checkbox"/>	Install the tank
6.		Measure:
	<input type="checkbox"/>	Check depth from sewer invert to bedding sand no greater than 1600 mm.
	<input type="checkbox"/>	Check depth of sewer invert to natural ground level no greater than 700 mm
	<input type="checkbox"/>	Check that motor box hinges are at least 50 mm above the natural ground level
7.	<input type="checkbox"/>	Fill all tanks followed by main tank to sewer inlet with approximately 4,500 litres of water
8.	<input type="checkbox"/>	Connect sewer piping to the sewer inlet. <i>If a SPS300/SPS350 pump station is installed to feed an Ozzi Kleen system, minimum 4 m x Ø100mm pipe required before entering RP10 (Refer to Deep Invert Package Installation Diagram)</i>
9.	<input type="checkbox"/>	Backfill around tank with clean earth only, which is free from large lumps of clay, stones, bricks, foreign objects, or dumped rubbish etc.
10.	<input type="checkbox"/>	Sock filter non-return valve and pressure gauge fitted (<i>Sock filter systems only</i>)
11.	<input type="checkbox"/>	The irrigation system could be of several different formats, check Council requirements
12.	<input type="checkbox"/>	Complete installation certificate located on back page

ABOVE GROUND INSTALLATION DIAGRAM

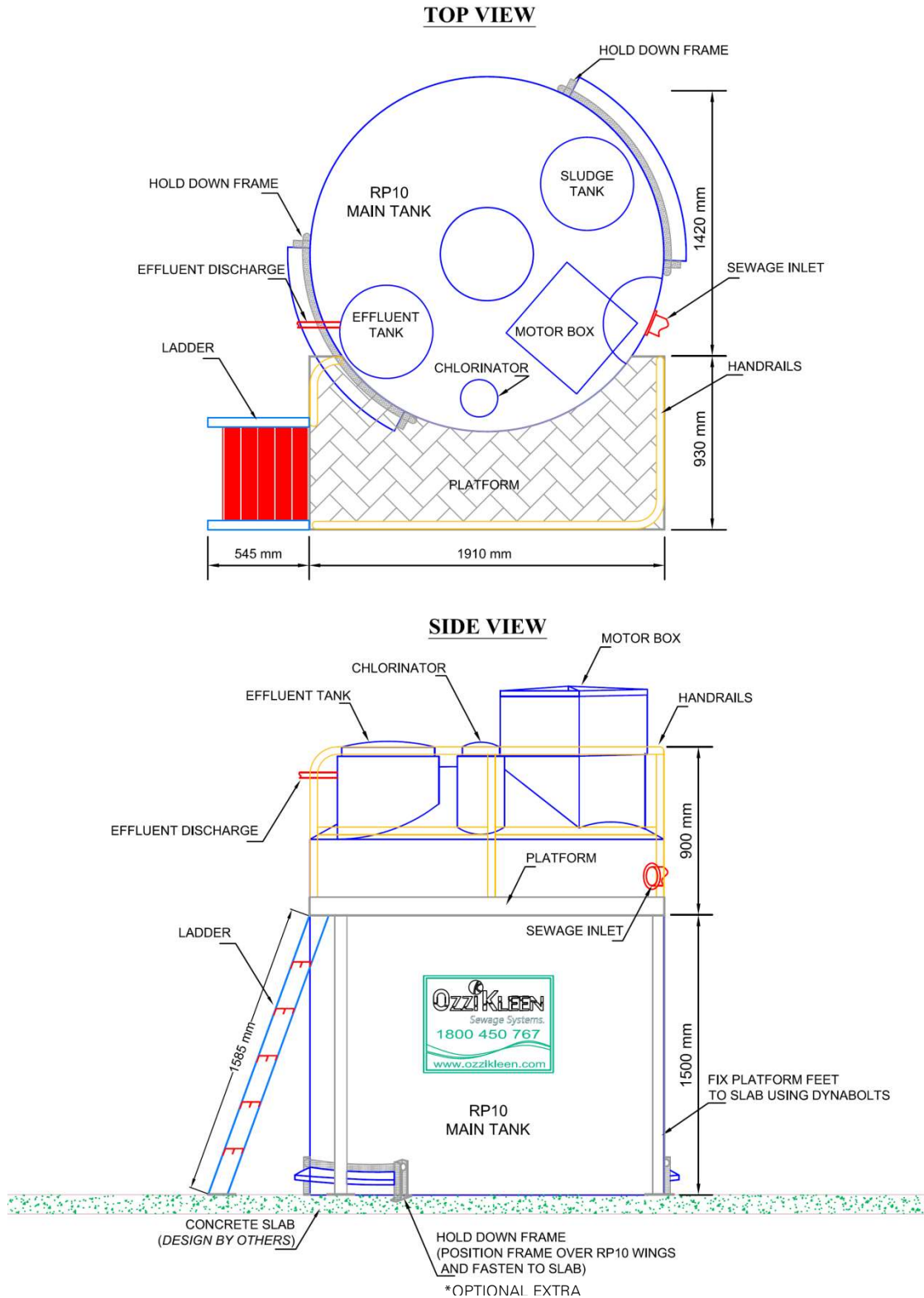


Figure 3 – Standard Above-Ground Installation Diagram

ABOVE GROUND INSTALLATION INSTRUCTIONS

STEP ONE – IDENTIFY WHERE TO INSTALL THE SYSTEM

The system is to be installed in a position where local storm water flooding will not wash away the base and ponding around the tank will not occur. If the system is installed in a water course or a flood prone area the system will have to be relocated by the installer.

These systems are not designed to be installed in enclosed spaces (e.g. Sheds, Pump Rooms or similar structures). Installation in enclosed spaces may create hazardous conditions during operation or servicing.

STEP TWO – PREPARE BASE

It is recommended that the system be installed on a suitably designed concrete base (design by others). Care must be taken to ensure enough room for the system and platform is available.

STEP THREE – POSITION TANK AND PLATFORM

It is a legal requirement that a platform and ladder must be installed so the system can easily be serviced in a safe manner.

Place the tank and platform on to the base and orientate the tank so that the chlorinator is aligned as per the installation drawing (see Figure 3).

Ensure the tank is sitting flush against the platform.

STEP FOUR – SECURE TANK AND PLATFORM TO BASE

Double check the system is in the correct orientation prior to securing the tank and platform.

Secure the platform to the base.

Place hold down frames over system wings and secure to base (*optional extra).

Note: If the system is installed in the incorrect orientation the system will have to be reinstalled by the installer.

STEP FIVE – FILL THE SYSTEM WITH WATER

Completely fill the Ozzi Klean treatment plant with water (approximately 4,500 litres) or up to the sewer invert.

All compartments including sludge waste and effluent compartments must be filled.

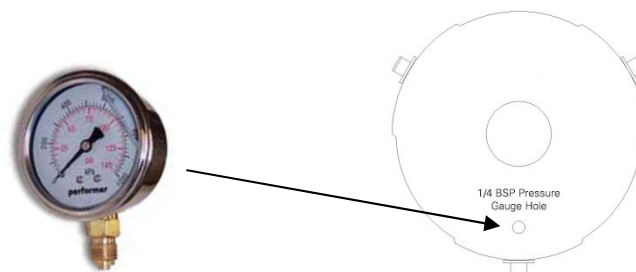
STEP SIX – CONNECT PIPE

Connect sewer piping to the sewer inlet, ensuring an adequate pump station has been installed upstream. The inlet is an Akatherm fitting and will require a standard 100 DWV pipe for the connection. This plug-in socket has a SBR seal and cannot be glued to.

STEP SEVEN – CONNECT SOCK FILTER VALVE AND GAUGE (*SOCK FILTER SYSTEMS ONLY*)

Systems ordered with an Ozzi Klean sock filter come supplied with a pressure gauge and non-return valve assembly inside the motor box to be fitted on installation:

1. Screw pressure gauge into the 1/4" hole in the sock filter lid.



2. Screw non-return valve assembly into the sock filter outlet (25mm elbow on top of the treatment plant).



STEP EIGHT - IRRIGATION

The irrigation system could be of several different formats such as surface and sub-surface. Irrigation should be installed according to your Local Authorities requirements.

Connect and lay out sprinkler distribution line to connection on pump outlet (or sock filter outlet if installed) and fit the tee junctions on the 3 sprinklers approx. 8 meters apart along this line starting from the far end.

Lay out pipe according to local Council requirements.

Irrigation tubing as supplied or similar should be used, not potable grade blue line water piping. If a Council sample valve is requested, it should be fitted to the low-density piping using low pressure irrigation components.

CAUTION: The standard pump installed has a 9.5 meter head at 25 litres/minute. A larger pump will be required for irrigation systems with a higher head.

PLUMBER'S INSTALLATION CHECK LIST – ABOVE GROUND INSTALLATION

The Ozzi Kleen sewage treatment system must be installed as per the following instructions. This form is to be filled out and returned to the manufacturer or their Distributor as part of the owner's warranty registration.

PLEASE TICK ALL THE BOXES DURING THE INSTALLATION

1.	<input type="checkbox"/>	Identify where the system is to be installed
2.	<input type="checkbox"/>	Prepare the base
3.	<input type="checkbox"/>	Position tank and platform on the base
4.	<input type="checkbox"/>	Secure tank and platform to the base
5.	<input type="checkbox"/>	Fill tanks 1 and 2 followed by main tank to sewer inlet with approximately 4,500 litres of water
6.	<input type="checkbox"/>	Connect sewer piping to the sewer inlet
7.	<input type="checkbox"/>	Sock filter non-return valve and pressure gauge fitted (<i>Sock filter systems only</i>)
8.	<input type="checkbox"/>	The irrigation system could be of several different formats, check Council requirements
9.	<input type="checkbox"/>	Complete installation certificate located on back page

SECTION B: ELECTRICIAN'S INSTRUCTIONS

A LICENSED ELECTRICIAN MUST BE USED

Installation of power to this unit must be performed by a licensed electrical contractor in accordance with current electricity act.

INSTALLATION INSTRUCTIONS

The power supply to the Treatment Plant is a single-phase service and should be wired in 2.5 mm² cable.

The alarm circuit is supplied from the control board and is 24 V DC. As the alarm cables are run with the supply cables to the plant, they must be rated for 240V but may be 1 mm² cable.

The maximum power consumption of the Treatment Plant with standard settings is approximately 1000 Watts. The air blower is rated at 120 Watts. The effluent pump is rated at up to 400 Watts, unless upgraded.

The power supply to the system should come direct from the meter board and be protected by a 10 Amp RCBO (Residual Current Circuit Breaker with Overcurrent protection). **The main power point needs to be RCBO protected.** It is recommended that the system be connected to an individual dedicated electrical circuit.

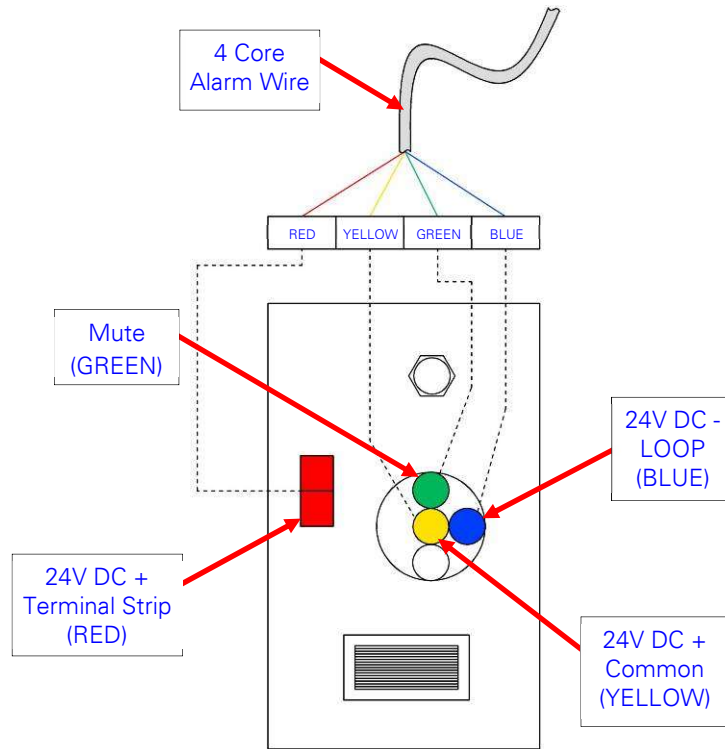
The alarm mute switch and alarm lights are on a common switch plate, which is to be mounted in the Owner's house at an appropriate point. The switch plate is found in the motor box.

There are 3 alarms available, all of which are activated via the Ozzi Kleen colour coded 4 core alarm cable (supplied separately). The alarm connections are polarity sensitive and must be connected correctly. Cabling between the dwelling and Treatment Plant should be installed using adequate protection/conduit. 2 cables will be required - 3 core for power supply and 4 core for alarm circuit. Important: if installing alarm cable in same conduit as the power supply, the 4 core alarm cable must be suitably rated.

The power supply cable is brought into the sewage treatment system through the side of the tank turret at the top of the tank, referred to as the access manhole, and up through the floor of the motor box housed in the flexible conduit provided. The 240 V supply is to be connected to the main power outlet inside the motor box. The low voltage alarm wires are to be connected to the terminals inside the small round junction box below the main power outlet. The external electrical conduit to the system is to be 25mm.

The power supply cable is to be connected to weatherproof outlet provided and alarm cable to be connected to terminal strip inside of PVC junction box provided. No other connections are required.

POWER TO TREATMENT PLANT MUST BE DISABLED BEFORE WIRING ALARM PANEL



Alarm Panel Wiring Diagram

- Red - Terminal strip on alarm panel
- Yellow - Common on the mute switch
- Blue - Loop on the mute switch
- Green - 1 on the mute switch

A strobe light is connected to the yellow and blue alarm wires but please note that these wires are polarity sensitive.

- Yellow + (positive)
- Blue - (negative)

Note: The motor compartment on the top of the sewage treatment system is on a hinged lid and the wiring to this compartment passes through a flexible conduit provided. No external conduit or rigid conduit is to be fastened to the outside of the motor box. If extra flexible conduit is used for wire connection to the system, ensure that there is sufficient length to allow for the tilting of the motor box when it is opened.

INSTALLATION CERTIFICATION

The Ozzi Kleen system has been installed according to the above procedures by an approved installer.

OZZI KLEEN SERIAL NO: _____

NAME OF INSTALLER: _____

INSTALLER'S LICENCE NO: _____

INSTALLER'S SIGNATURE: _____

DATE OF INSTALLATION: _____

ADDRESS OF INSTALLATION: _____

Suncoast Waste Water Management or their Distributor must be notified so that commissioning can be performed. Commissioning of the system is the process of assuring that all systems and components are tested and operational. This process turns the system on for the first time and makes sure that it is working.

Please leave this information in the motor box for submission with the Commissioning Certificate or return to:

Suncoast Waste Water Management

59 Industrial Ave

Kunda Park, QLD 4556

Fax: +61 7 5456 4677

Email: info@ozzikleen.com