

Greywater Diverta™

Installation & Operation Instructions

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Keep these instructions for future reference

Introduction

Congratulations on your purchase of the Nylex Greywater Diverta™. Your Greywater Diverta™ can provide you with a long-term solution for conserving grey water for garden irrigation.

The Greywater Diverta™ is constructed of robust materials so it will provide you with grey water conservation for many years. So that you get the most out of your Greywater Diverta™ and ensure that it will operate effectively in the long term, it is important to ensure that it is correctly installed.

By law, only a licensed plumber (the “authorised person”) is permitted to install the Greywater Diverta™ unit, whereas users can in most states install their own irrigation system. Laws in some states require that only a licensed plumber must also install the irrigation system (see more detail on this, Table 2, pg 14). However, to ensure the greywater irrigation system is always correctly installed, Nylex recommend use of a licensed plumber, drainer or other skilled person familiar with installation/drainage pipework, even when this is not mandatory under law.

Ensure that your plumber receives a copy of these instructions and a copy of your local government approval (where applicable) before he or she commences any work.

What is grey water?

Grey water is the wastewater generated from the bathroom, laundry and kitchen that has not originated from the toilet (black water). Whilst grey water does not contain toilet waste, it nevertheless contains the same types of pathogenic microorganisms found in toilet waste, though in much lower numbers.

Health authorities throughout the world agree that caution must be exercised for safe garden irrigation with grey water. The best method of using grey water, without using expensive treatment and disinfection methods, is through sub-surface irrigation. This prevents human contact whilst providing optimum plant access to the water and minimising water loss through evaporation.

Grey water also contains oils, fats, detergents, soaps, nutrients, salts, particles of food, hair and lint that impacts on the long-term performance of a grey water irrigation system. Whilst grey water from the kitchen contributes little to the total grey water volume, it accounts for the bulk of fats, oils and food particles contained within the water. Greywater from the kitchen is therefore not usually permitted for reuse. The Greywater Diverta™ is not suitable for kitchen water reuse.

In contrast, grey water from the bathroom and laundry accounts for the majority of grey water but contributes very little to the organic waste load and generally requires only minimal treatment to remove particles such as hair and lint that might clog an irrigation system.

Grey water contains contaminants, which includes nitrogen, phosphorous and potassium, which in most cases are beneficial to plants - except for a number of native plants that have a low phosphorous tolerance.

Grey water also has a slightly alkaline pH making it preferable not to use to irrigate acid loving plants, unless the pH is managed by conditioning the soil around your irrigation trenches.

Some laundry detergents and bleach can result in grey water with high levels of sodium salts, which can be detrimental to healthy plant growth. It is recommended that you use products with low sodium levels. Further advice about the sodium content in your laundry detergent can be obtained by contacting the products' manufacturer.

Some strong household products, such as caustic soda (drain cleaner), and other strong surface and floor cleaning agents can be detrimental to plant growth. When using such products, your Greywater Diverta™ should be diverted to the primary wastewater system (sewer or septic) to avoid plant damage.

Pre-installation approval required

Generally, approval to install any wastewater or grey water reuse system in Australia must (by law) be obtained from the approving authority / local government, prior to commencing any installation work (see state/territory exceptions page 14). Once those works have been completed, the local government may choose to inspect the installation, to confirm it is as approved, or alternatively, choose to accept certification from the licensed plumber responsible for the installation.

Further information is available from your local government / approving authority. Prior to receiving approval for the installation of your Greywater Diverta™, your local government / approving authority may wish to be satisfied that:

1. The grey water reuse system is one that has authorisation in all Australian states and territories, detailed on page 14.
2. The proposed grey water irrigation system meets minimum sizing requirements and will be located to satisfy the required minimum setbacks from features such as buildings and boundaries. These points are detailed further in these instruction notes. (See Table 1 and 2).
3. The appropriate local government application fee (if any) has been paid. This fee varies between states and territories and between local governments and some may not charge for the approval. See more on page 14 and ask your local government.

Important note to plumbers installing the Greywater Diverta™

Whilst all plumbing works must generally comply with the requirements of AS/NZ3500, the Greywater Diverta™ also requires it be installed by the following guidelines:

1. In some States the Greywater Diverta's™ failsafe overflow point must be installed higher than the plumbing system's overflow relief gully to protect against sewer surcharge from entering the unit (eg: up to 150mm). However, this is not required in all states and plumbers should seek the plumbing regulators advice. The failsafe overflow point is located half way up the unit (see Figure 1, below).

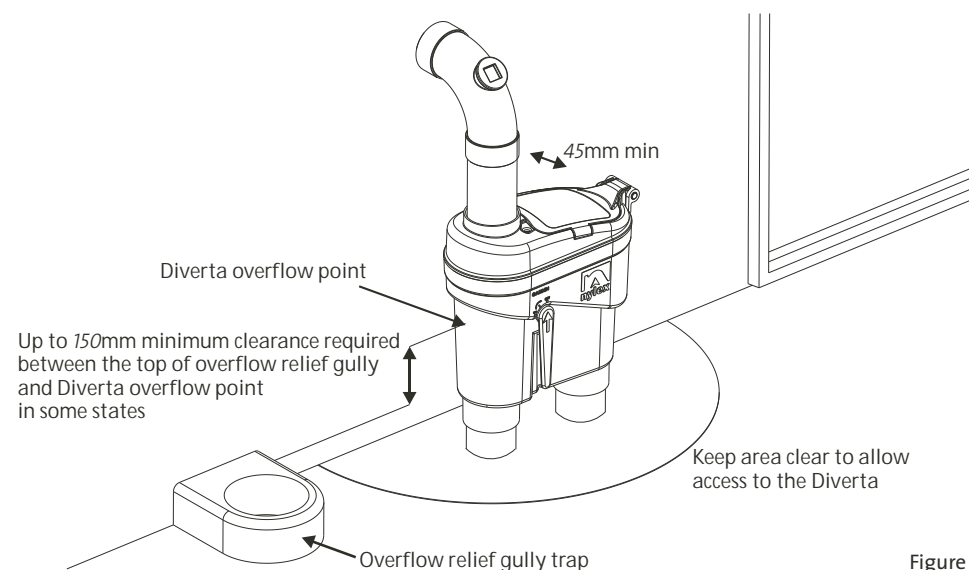


Figure 1

2. The Greywater Diverta™ is not suitable to receive kitchen or dishwasher grey water.
3. The Greywater Diverta™ must be installed (see Figure 1) clear of any structure that will inhibit free access by users:
 - a. To allow them to open the hinged access cover.
 - b. To view the inside of the unit for accessing the filter basket for cleaning.
4. The Greywater Diverta™ must be supported by a solid structure using a suitable support bracket so the weight of the product is on the bracket and not the wastewater pipe (see Figure 2). In situations where there is no suitable solid structure to secure the unit to, as might be the case for developments with limestone or timber stump footings, use a rigid steel channel or similar set into a concrete base for mounting the bracket (see Figure 3).



Figure 2

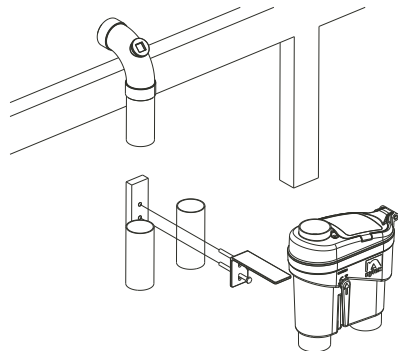


Figure 3

5. The Greywater Diverta™ has 65mm DWV connections and a maximum fixture rating of 15, so it can be installed to receive grey water from multiple fixtures brought together into a single vertical waste pipe, where possible, or from a single grey water fixture using smaller connections.
6. If the unit is being fitted to reuse grey water from a fixture that currently discharges to a floor waste gully, it is essential to ensure that the floor waste gully water trap will be continually replenished with water to prevent the entry of sewer gas into the building (i.e. ensure that it will continue to receive water to maintain the water seal within the floor waste gully).

Please Note: The Greywater Diverta™ is designed to allow a small portion of water to continue charging the sewer line even when diverted to irrigation as to maintain any downstream sewer water trap (e.g. a floor waste gully trap).

7. Where you are the person responsible for installing and / or certifying the irrigation system, ensure you have sighted and are familiar with the conditions of approval for the systems installation in your state or territory (e.g. the local government or other approving authority approval), see details on page 14.
8. To allow for total disassembly of the handle, install the diverter at least 45mm from the nearest wall / obstacle (see Figure 1 and Page 18).
9. If the Greywater Diverta™ is being installed inside the building (e.g. in the laundry cupboard), to avoid possible sewer gas or odours entering the building during filter cleaning, both the sewer and irrigation outlets must discharge via a water trap.

For example:

- a. Back to sewer or the onsite wastewater management system via a waste trap below the unit, an internal floor waste gully trap or an external overflow relief gully trap; and
- b. For the irrigation outlet line a waste trap between the unit and the irrigation system (see Figure 4).

NOTE: Plumbing standards recommend against a laundry floor waste gully trap due to rising suds.

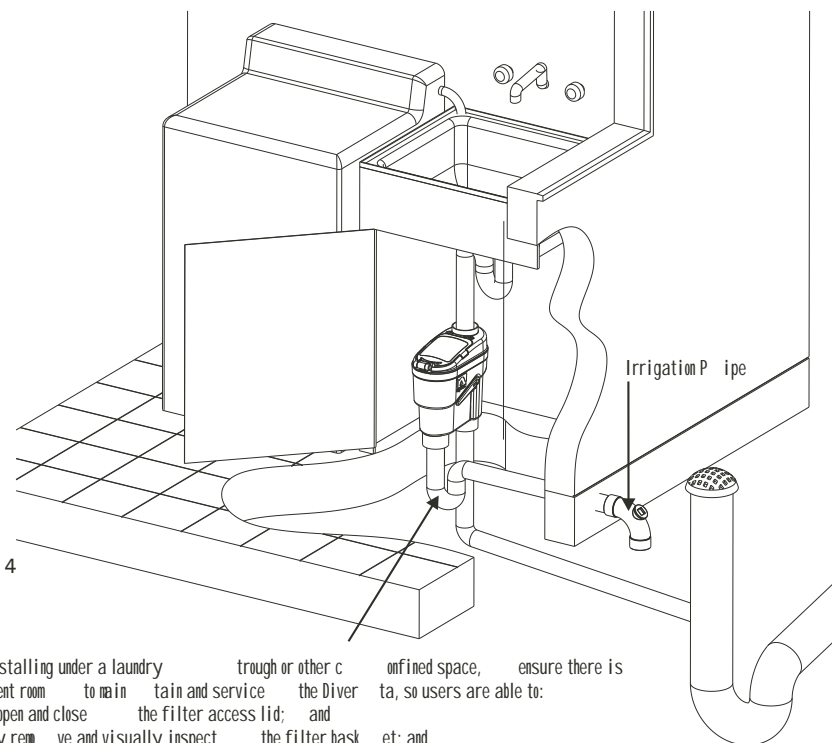
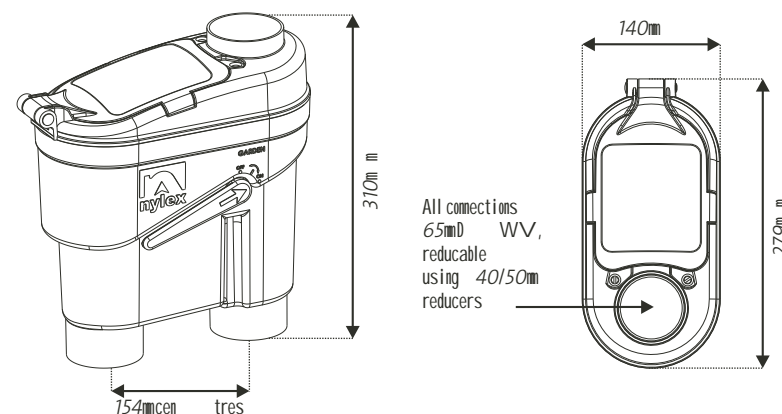


Figure 4

When installing under a laundry trough or other confined space, ensure there is sufficient room to maintain and service the Diverta, so users are able to:

- fully open and close the filter access lid; and
- easily remove and visually inspect the filter basket; and
- get easy access to all serviceable parts.

If uncertain see item 8 on page 6 and also pages 17 & 18. Also, water traps must be installed on both outlets (waste and irrigation) to prevent odours escaping.



The piped trench irrigation system

The size of a piped trench irrigation system is based on providing effective long-term operation without failure and subsequent risk to public health. It is also sited on the basis that minimum setbacks from buildings, boundaries and other features are achieved to protect the integrity of adjacent structures and properties.

These sizing and setback requirements can vary between Australian states and territories and advice on the required setbacks should be obtained from your Environmental Health Officer. (Refer to Table 1 and 2).

These Greywater Diverta™ instructions provide recommended minimum irrigation trench lengths (see Table 1, Page 11) and design but users may use larger or other approved trench irrigation designs or sizings if these are acceptable in your state or territory. The authorities will either base their irrigation sizing requirements on the number of bedrooms or the number of persons in the home (see page 14 for your state or territory's method).

Longer trench lengths are preferable when climatic conditions permit year-round irrigation or when installed in poorly drained clay soils. Ask your Environmental Health Officer for advice on this.

The recommended grey water trench irrigation system incorporates:

- > 50mm DWV PVC distribution pipes with suitable bend fittings to carry filtered grey water (under gravity) from the Greywater Diverta™ to the piped irrigation trenches. The distribution pipe system must be laid with a continuous grade not less than 1:40 so filtered grey water will not be trapped or allow any fine sediments to accumulate in any undulating sections.
- > When a single Greywater Diverta™ is used for multiple fixtures and this necessitates a 65mm waste pipe connection must be used, then the first metre of distribution pipe should (as a minimum) also be 65mm DWV pipe so the irrigation line can cope with surges exiting the unit. Then a 65mm to 50mm DWV reducer fitting can be used to reduce the distribution pipe back to 50mm DWV (figure 5).

- > A number of 50mm Y junction Greywater Diverta™ flow splitter fittings suitably located along the 50mm distribution pipes to evenly split and distribute the filtered grey water to each of the intended irrigation trenches (see figure 5).
- > A chosen number of 200mm x 200mm piped irrigation trenches consisting of 90mm PVC rigid pipe with 20mm holes at 500mm centres and end caps laid level in an aggregate (size 20-40mm rock) filled trench 200mm deep and 200mm wide. The aggregate trench is covered by geotextile material to stop the ingress of soil and then covered with a minimum 100mm and maximum 200mm of soil (see Figures 6 & 7). The irrigation trenches are sized based on soil type, winter irrigation not occurring, the number of bedrooms or persons, and the fixtures connected to the reuse system (see Table 1). Further advice about other options can be obtained from your local government, Environmental Health Officer or the onsite wastewater regulator in your state (see Table 2).

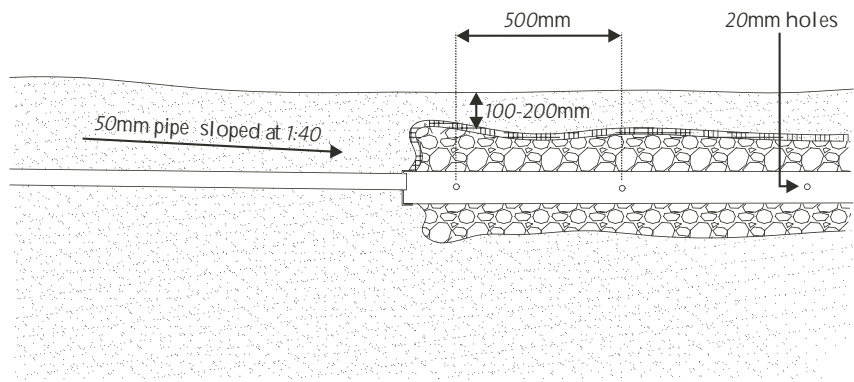


Figure 6

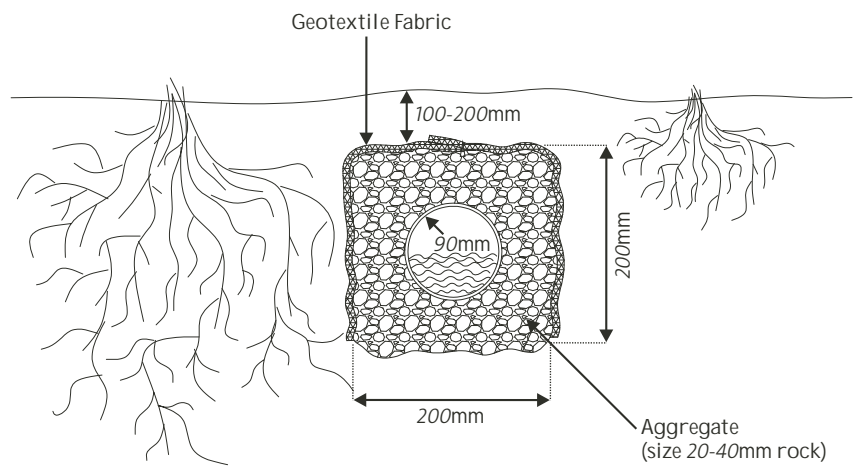


Figure 7

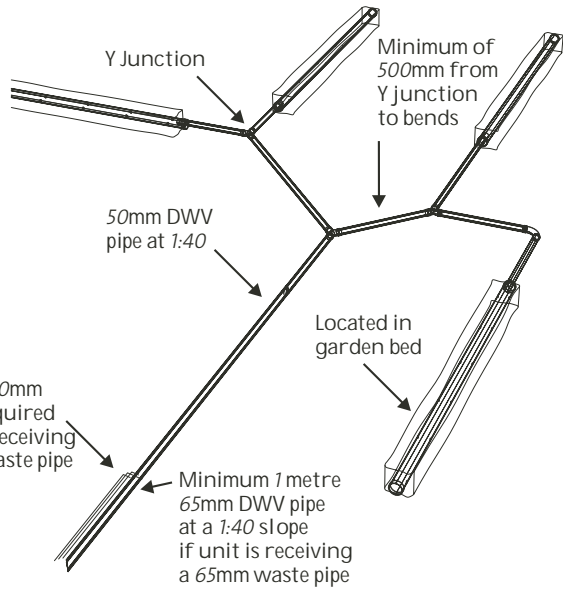


Figure 5

- Installers are required to prepare the irrigation trench 90mm PVC pipe work before installation by drilling 20mm holes on opposite sides of the 90mm pipes along the length at 500mm centres (see figures 6 & 8). The 20mm holes are drilled at the same level along the length of the pipe sides so irrigation water can fill the pipe and flow out of all holes. Removal of burs around the edges of drill holes is required to avoid suspended matter being caught over time and effecting the flow.

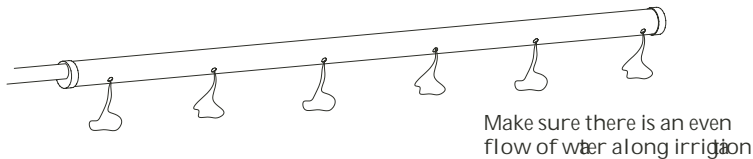


Figure 8

One of the 90mm pipe end caps has a suitable hole be drilled through it for connecting the 50mm DWV distribution pipe (see figure 9).

- Joins between the 50mm DWV pipe, Greywater Diverta™, Y junctions and other couplings are permanently glued together using PVC cement. Connection of the 50mm DWV pipe to the 90mm irrigation trench pipe end cap is inserted loosely and not glued (see Figure 9).

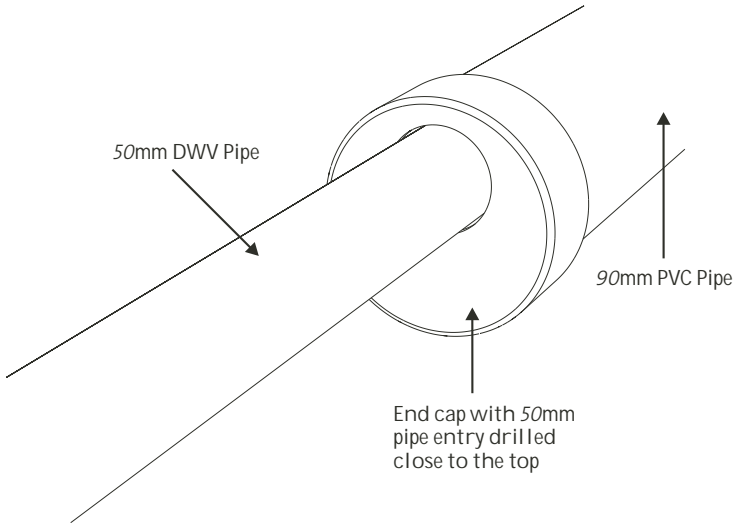


Figure 9

Table 1 minimum recommended 200mm x 200mm irrigation trench lengths

No. of bedrooms or No. of People	Bath only SAND	Laundry only SAND	Bath & Laundry SAND	Bath only LOAM GRAVEL	Laundry only LOAM GRAVEL	Bath & Laundry LOAM GRAVEL	Bath only SILTY CLAY	Laundry only SILTY CLAY	Bath & Laundry SILTY CLAY
1 to 3 b/room or up to 6 people	6.7m	4.2m	10.9m	10.5m	6.3m	16.8m	15.8m	9.8m	25.2m
4 b/room or up to 8 people	8.6m	5.3m	13.9m	12.9m	7.9 m	20.8m	19.4m	11.9m	29.1m
5 b/room or up to 10 people	10.3m	6.3m	16.6m	15.5m	9.4m	24.9m	23.3m	14.9m	37.4m

The above trench sizes are acceptable in WA, SA, VIC, NT and ACT:

- ACT has no minimum size requirements, however, the above sizes are recommended.
- In Tasmania, these recommended minimum sizes may not be acceptable and must be sized having regard for site conditions using AS1547 and the requirements of the local government. (Ask your local government).
- In QLD and NSW, these recommended minimum sizes may not be acceptable and may need to be sized having regard for site conditions using state wastewater guidelines and the requirements of local government. (Ask your local government).
- The above trench sizes are based on grey water being diverted in the wet season/winter.
- Locations where climatic conditions allow year round irrigation or in households with above average populations it is recommended that irrigation trench lengths be increased in length.
- In heavy clay soils, irrigation trench lengths may need to be increased in length in consultation with the approving authority and in SA for heavy clay soils subsurface trench irrigation may be unacceptable. (Ask your local government)
- In Northern Territory, soils are classified as either sand/loam, loam or loamy/clay and these soil types shall have minimum irrigation trench sizes as given above for sand, loam/gravel and silt/clay, respectively.
- Where a lesser population for the corresponding number of bedrooms as detailed above is present, the required irrigation trench lengths must be the minimum for the corresponding number of bedrooms (e.g. for 6 persons in a 5 bedroom house the trench length shall be sized on 5 bedrooms).

Design and installation steps for 200mm x 200mm piped trench irrigation system

1. Determine the minimum trench lengths required for your development from Table 1 on page 11. For non-residential developments, it is necessary to determine the likely maximum daily grey water volume to size the irrigation system. Likewise, use of larger irrigation trench dimensions with greater surface area will reduce the minimum trench lengths required.

Further advice on these matters of sizing can be discussed with your local government Environmental Health Officer.

2. Identify suitable existing garden beds or locations for new garden beds that can be reached by gravity from where the Greywater Diverta™ is to be located.

For example; using a downward grade of 1:40 for the distribution pipe on a flat site, and a maximum piped irrigation trench base depth 400mm below surface (with the 90mm pipe 300mm below surface and the 50mm distribution pipe below surface for the entire distance), a piped trench irrigation will need to be located within ten metres of the Greywater Diverta™.

Sloped sites will not have this distance limitation when irrigation trenches are being located down slope.

3. Plan a 50mm distribution pipe, Y junction and irrigation trench layout.

For example: The bathroom water from a five-bedroom home is intended for reuse and the soil is sand. From the table 1 on page 5 a minimum 10.3 metres of irrigation trench is required and four garden beds for piped trench irrigation have been identified.

Therefore you will need to split the single filtered grey water stream leaving the Greywater Diverta™ into four streams. This is achieved by using three of the Y junction fittings (as shown in Figure 8) so each garden bed has one 2.6 metre irrigation trench.

Alternatively, by reconfiguring the position or number of Y junction fittings you may need to split the flow to have:

- > 1x5.2m and 2x2.6m trenches; or
- > 1x5.2m, 1x2.6m and 2x1.3m trenches.

Trenches may be installed with bends using suitable elbow fittings and may be sized to be longer than the recommended minimum.

4. Layout the distribution pipe, Y junctions and trench pipe on the ground surface ensuring the distribution pipe can connect into the end of the irrigation trench pipe (see figure 9.) The Y junctions must be located on the distribution so that the 50mm inflow distribution pipe has no bends or elbows located within 500mm of it connecting into the Y junction, as bends can cause turbulence in the flow and effect the Y junction's ability to achieve an equal split of the water (see figure 5).

Dig the trenches where pipes and irrigation trenches will be installed making sure not to dig deeper than required and ensuring a downward grade will be achieved on the 50mm distribution pipe and Y junctions between the beginning and ends, so the water will flow by gravity through the pipe.

When digging the piped irrigation trenches use a spirit level ensure the base of the irrigation trench is relatively level so irrigation will occur over the entire trench length rather than just flow to a low section and irrigate only a portion of the trench.

5. Working away from the Greywater Diverta™ outlet, lay the distribution pipes in a trench, connect and glue the Greywater Diverta™ and 50mm distribution pipe joins together - only up to and not including the first Y junction fitting.
6. Once the glue on the distribution pipes has set, the first Y junction can then be temporarily set into position (but not glued) to establish the best position to split the single incoming grey water stream into two equal volume streams.

The Y junction should initially be set into place using a spirit level across the two outlet points so these are level, but for precise calibration release a small volume of grey water through the system and collection of the two stream in separate containers to check the split, followed by minor rotation to the fitting until an even split is achieved (see Figure 10).

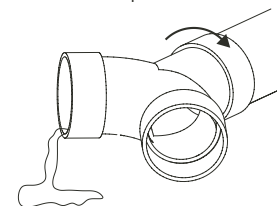


Figure 10

7. Once the equal water split position is established mark both the Y junction and distribution pipe join at corresponding points before removing the Y junction so it may be glued permanently into the marked position.

Once the glue has set continue to connect and glue further distribution pipe and Y junction fittings using the same water measuring and calibration technique with each subsequent Y junction.

8. In the 300mm-400mm deep irrigation trench excavations (depth set to suit connection with the 50 mm distribution pipe) lay two separate 500mm wide strips of geotextile or similar material down trench sides so the strips reach the bottom of the trench, but do not cover the base, and extend over the side top edges of the trench, and hold in place using suitable weights such as timber or rocks.

Backfill the trench to a depth of approximately 60mm with the 20-40mm aggregate. Lay the 90mm pipe, which have 20mm side holes already drilled along their length and end caps already fitted on top of the partially aggregate filled trench ensuring the opposite side holes are set level to each other and using a spirit level and straight length of timber or similar, the entire pipe length is set approximately level without undulation or low points.

9. Connect each of the 50mm distribution pipe ends into their intended 90mm irrigation trench pipe end cap ensuring the 50mm pipe is inserted into the drilled end cap so grey water will enter the upper level of the 90mm pipe (see Figure 9).

The 50 mm pipe is not glued to the 90mm end cap but simple inserted so it extends approximately 100mm through the end cap hole. Once connected, release some water through the Greywater Diverta™ into the irrigation system so you may make further minor level adjustments to the 90mm pipe and release more water until the water fills up to and spills out of the drilled side holes fairly evenly along its length (see Figure 8).

10. Back fill the trench with 20-40mm aggregate to 200mm overall depth. Fold the geotextile material top edges over the aggregate surface and backfill the remainder of the irrigation trench with soil (see Figure 7).

- The Y junction should initially be set into place using a spirit level across the two outlet points so these are level, but for precise calibration release a small volume of grey water through the system and collection of the two stream in separate containers to check the split, followed by minor rotation to the fitting until an even split is achieved (see Figure 10).

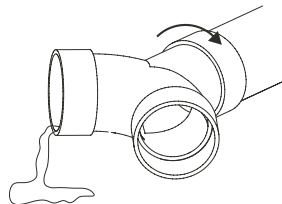


Figure 10

- Once the glue has set continue to connect and glue further distribution pipe and Y junction fittings using the same water measuring and calibration technique with each subsequent Y junction.

8. In the 300mm-400mm deep irrigation trench excavations (depth set to suit connection with the 50 mm distribution pipe) lay two separate 500mm wide strips of geotextile or similar material down trench sides so the strips reach the bottom of the trench, but do not cover the base, and extend over the side top edges of the trench, and hold in place using suitable weights such as timber or rocks.

Backfill the trench to a depth of approximately 60mm with the 20-40mm aggregate. Lay the 90mm pipe, which have 20mm side holes already drilled along their length and end caps already fitted on top of the partially aggregate filled trench ensuring the opposite side holes are set level to each other and using a spirit level and straight length of timber or similar, the entire pipe length is set approximately level without undulation or low points.

9. Connect each of the 50mm distribution pipe ends into their intended gomm irrigation trench pipe end cap ensuring the 50mm pipe is inserted into the drilled end cap so grey water will enter the upper level of the 90mm pipe (see Figure 9).

The 50 mm pipe is not glued to the 90mm end cap but simple inserted so it extends approximately 100mm through the end cap hole. Once connected, release some water through the Greywater Diverta™ into the irrigation system so you may make further minor level adjustments to the 90mm pipe and release more water until the water fills up to and spills out of the drilled side holes fairly evenly along its length (see Figure 8).

10. Back fill the trench with 20-40mm aggregate to 200mm overall depth. Fold the geotextile material top edges over the aggregate surface and backfill the remainder of the irrigation trench with soil (see Figure 7).

INSTALLATION

14

INSTALLATION

TABLE 2	WA	NT	VIC	SA	ACT	NSW	QLD	TAS
Your Regulatory Authorities for Further Advice	Department of Health	Department of Health & Community Services (Outside building areas)	Environmental Protection Authority	Department of Health	ACTPLA	Department of Health	Department of Local Govt. & Planning	Department of Infrastructure Energy & Resources
	Local government	Dept. of Planning (Inside building areas)	Local government	Local government	ACTEW	Sewerage Service Provider	Local government.	(Building Standards & Regulation)
	Local government							
National Plumbing Product Authorisation	National Certification of Plumbing and Drainage Products Scheme – Plumbing Safety Licence No. 20057							
State/Territory System/Product Authorisation	Approval No. GW0202	Type Approval No. 01/03	Approval No. CA80/04	Approval No. WCS01892	No separate state approvals required in these states			Product Authorisation No. BSR0444/2005
Permitted Areas of Use	Sewered and Unsewered areas							
Local Approvals Required Before Installation/Use	Local government approval	> Not required, except in remote communities from Dept. of Health	Local government approval	Local government approval and permission from the sewerage service provider or (STEDS) septic tank effluent disposal scheme operator	Plumbing permit to be obtained from ACTPLA	Local Govt. approval and satisfy the works approval requirements of your sewerage service provider	Unsewered Areas only	
Application Fees May Apply	Yes	No	Yes	No	No	Yes	Local government approval	
Who can Fit the Unit?	Only a licensed Plumber can connect the product on to the waste pipes							
Who can Install Irrigation after Divert?	Anyone	Plumber must certify	Anyone	Plumber	Anyone	Anyone	Anyone	Plumber
Irrigation System Minimum Setback Requirements	> 0.5m from closed fence boundaries > 1.2m from open boundaries > 1.2m from buildings > 0.5m from paths, driveways & carports > 6.0m from subsoil drains > up to 50m from bores intended for human consumption > 100m from public drinking water supplies > up to 100m from wetlands and other water dependant ecosystems (WA only)	> 0.5m from closed fence boundaries > 1.2m from open boundaries & open fence boundaries > 0.5m from paths, driveways & carports > 6.0m from subsoil drains > up to 50m from bores intended for human consumption > 100m from public drinking water supplies > up to 100m from wetlands and other water dependant ecosystems (WA only)	Anyone	> 2.5m from buildings & boundaries & other setbacks as given in SA Septic tank Code > 50m from any bore, dam or watercourse > 100m from Murray River pool level and above the 1956 level > 0.5m groundwater clearance	No minimum requirements but those used for WA, NT & VIC are suggested	No specific setbacks are established for greywater and state regulators still rely on minimum setbacks for onsite sewage systems (eg Septic tanks). Consequently, it is necessary to seek advice from your local government officer about the minimum setbacks required.	No specific setbacks are established for greywater and state regulators still rely on minimum setbacks for onsite sewage systems (eg Septic tanks). Consequently, it is necessary to seek advice from your local government officer about the minimum setbacks required.	No specific setbacks are established for greywater and state regulators still rely on minimum setbacks for onsite sewage systems (eg Septic tanks). Consequently, it is necessary to seek advice from your local government officer about the minimum setbacks required.
Irrigation Minimum Sizing Requirements	As detailed in the instruction manual							
Irrigation Type Permitted	Subsurface irrigation only, as detailed in the instructions							
*Important Note	*The details in this table reflect the regulatory situation current at 22 March 2005 and may change from time to time. Users are therefore recommended to check the details in this table against the latest regulatory situation in their state or territory.							

Operation and maintenance

The Greywater Diverta™ recycles grey water to irrigation trenches beneath the garden. The Greywater Diverta™ has a handle connected to a valve for selecting whether your grey water is diverted to the garden for irrigation or to the sewer. Garden irrigation is normally not required during winter or the wet seasons and over watering during these periods can be detrimental to plants.

The Greywater Diverta™ is fitted with a mesh basket filter to stop larger particles such as lint and hair from entering the irrigation system. Regular cleaning of the filter is required to ensure grey water can flow through the system and irrigate your garden.

Failure to clean the filter will result in grey water being diverted to the sewer via the failsafe overflow. The required cleaning frequency will vary from weekly to monthly depending on the number of people in the home, whether the laundry and / or bathroom are connected to the diverter, and the type and amount of laundering being done.

New users are recommended to initially inspect the diverter's filter twice a week, whilst grey water is discharging, to establish the typical period taken for the filter to become clogged before grey water overflows to sewer. This may establish a suitable cleaning frequency to achieve maximum grey water reuse.

Pre-wash rinsing of waste materials from nappies or cleaning / scaling fish, for example, in the laundry trough can cause the Greywater Diverta™ filter to quickly block, and should be diverted back to the main wastewater system for the premises (sewer, septic tank effluent disposal scheme [STEDS] or onsite wastewater management system).

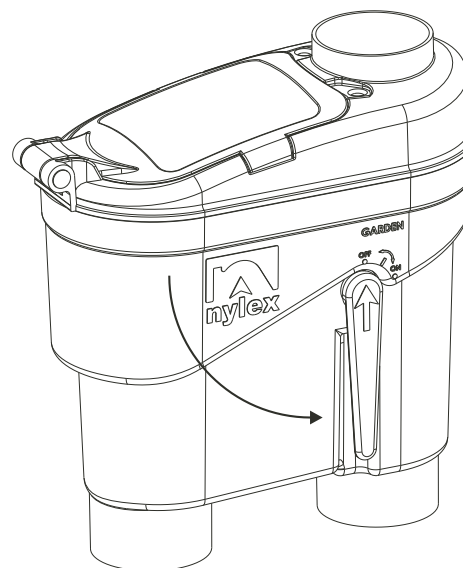
Gloves must be worn when cleaning the filter. The material collected in the filter must be disposed to an external rubbish bin or as directed by the authority having jurisdiction. Any spills of grey water from the Greywater Diverta™ when removing the filter must be cleaned with a suitable disinfectant. Hands and arms must be thoroughly washed with soap after this procedure has been carried out.

OPERATION AND MAINTENANCE INSTRUCTIONS

OPERATION AND MAINTENANCE INSTRUCTIONS

Points to remember

- Clean your filter regularly.
- Grey water irrigation during the winter or wet season is not required in most locations and grey water should be diverted back to sewer or onsite waste water management system to avoid overwatering and damage to your plants.
- Think about what you are sending through the greywater system and ultimately into the garden.
- Don't allow strong household products to be irrigated to your plants and use household cleaning products sparingly.
- Pre-wash rinsing of waste materials from nappies, fish cleaning etc. can block the filter and should be diverted back to the main wastewater system for the premises (sewer, septic tank effluent disposal scheme [STEDS], or onsite waste water management system).
- **If the lid is difficult to close, check that the camlocks are not obstructing the closure and that the seal is correctly located in the lid. Kitchen detergent liquid can also be applied over the seal immediately before the flap lid is closed.**

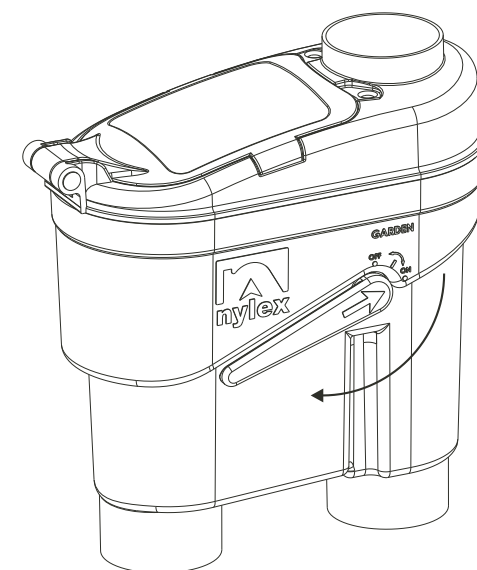


Divert to waste (OFF)

Turn the handle until vertical to divert the grey water to the sewer or other type of wastewater system that is servicing the premises.

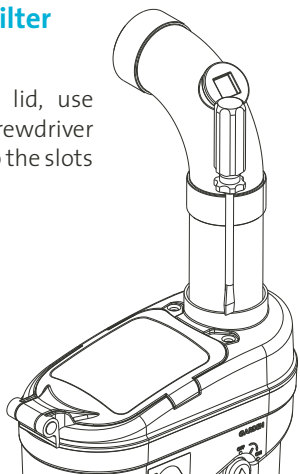
Divert to irrigation (ON)

Turn the handle until it points to divert to irrigate the garden.

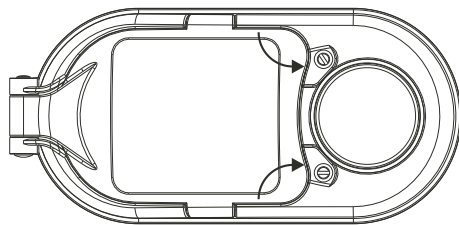


Cleaning the filter

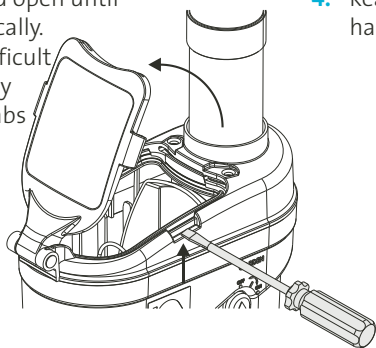
1. To open the lid, use a flat head screwdriver and place into the slots on the lid.



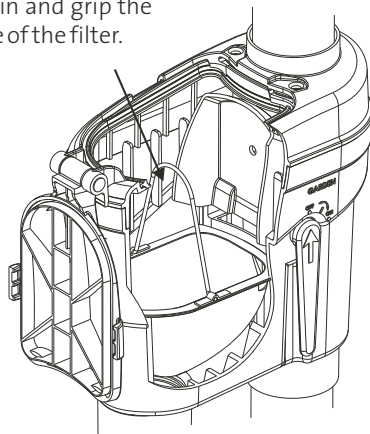
2. Without using excessive force, turn the screwdriver 1/4 turn in the direction of the arrows below.



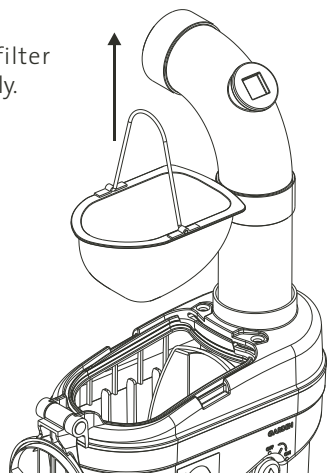
3. Lift the lid and open until it hangs vertically. If the lid is difficult to open, gently lift the side tabs with a flat bladed screwdriver.



4. Reach in and grip the handle of the filter.



5. Lift the filter out carefully.



6. When finished cleaning, replace the filter, close and lock the lid in reverse.

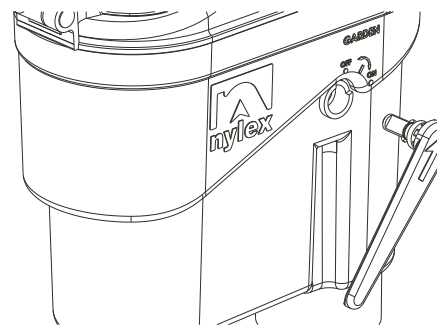
To clean the filter, simply take a flathead screwdriver, undo the locking mechanism and remove the filter basket. Clear trapped material out of the filter and dispose to an external bin or as directed by the authority having jurisdiction. After cleaning, care must be taken to ensure that the basket has been correctly re-inserted before locking the lid into place, after which, hands and arms should be thoroughly washed using soap.

OPERATION AND MAINTENANCE INSTRUCTIONS

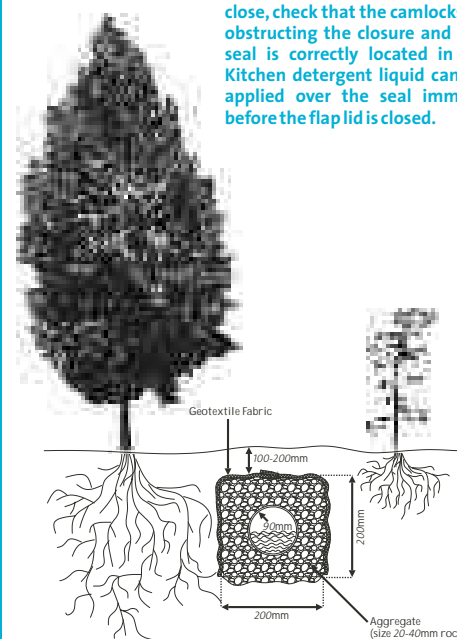
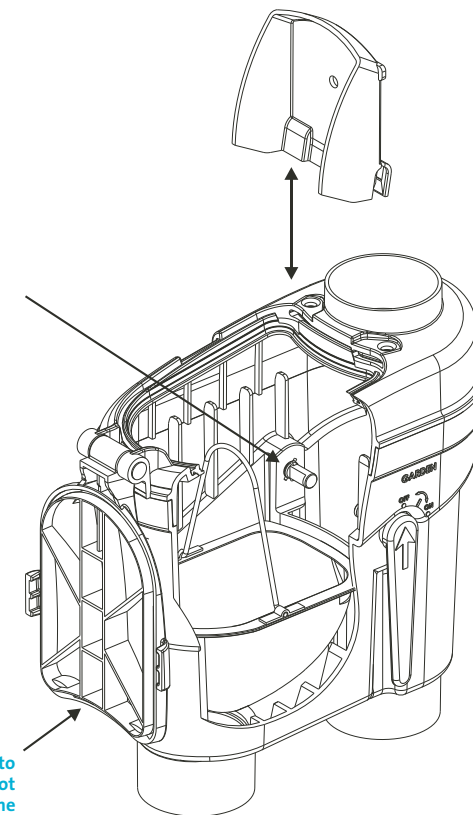
OPERATION AND MAINTENANCE INSTRUCTIONS

Serviceability

If the valve needs disassembly, make sure the handle is in the 'off' position (vertical), open the lid and simply remove the valve by pulling gently. To remove the handles and o-rings, ensure the arrow on the handle is pointing towards the line in between on and off and gently pull out. After cleaning, reassemble the handles and paddle in reverse, making sure the valve clicks into place onto the handle locators.



Please Note: If the lid is difficult to close, check that the camlocks are not obstructing the closure and that the seal is correctly located in the lid. Kitchen detergent liquid can also be applied over the seal immediately before the flap lid is closed.



Irrigation

The subsurface irrigation trench is a drainage pipe surrounded by an aggregate of gravel, Blue Metal or similar. Geotextile material is laid down the sides and across the top of the aggregate to stop the sand entering the irrigation trench. Be careful not to damage this material when digging in the garden by ensuring you know where the irrigation trenches are located.

Note: For further information about the irrigation system refer to the installation instructions.

How is the system installed?

The Greywater Diverta™ is simple to install for new or existing developments. By law, only a licensed plumber is permitted to install the Greywater Diverta™ unit, whereas users can, in most states, install their own irrigation system. Laws in some states require that only a licensed plumber must also install the irrigation system. However, to ensure the greywater irrigation system is always correctly installed, Nylex recommends use of a licensed plumber, drainer or other skilled person familiar with installation of irrigation/drainage pipework, even when this is not mandatory under law.

Detailed installation instructions for plumbers and users are contained within this booklet. Approval to install any grey water reuse system requires that the responsible local government issue an approval for systems to be constructed and used. Further Information about this approval should be sought by contacting your local Government Environmental Health Officer.

Warranty

The Nylex Greywater Diverta™ is guaranteed against faulty workmanship and materials for a period of 3 years. Should it fail to perform, it should be returned to the place of purchase for replacement with proof of purchase.