

IRRIGREY GUIDE

GREYWATER REUSE

Greywater Diversion Devices

A Greywater Diversion Device is connected to mains sewage. In the event that greywater needs to be directed away from the garden, this device can divert it straight into your sewer mains.

Filtration requirements

The Netafim irriGREY system can be connected downstream from a Greywater Diversion Device. However, this is only recommended when sufficient filtration (minimum 40 mesh) is used at the end of the GWDD.

Pressure requirements

The irriGREY system requires a minimum pressure of 1m at the end of the lateral line. This means the GWDD will need extra pressure to allow for friction loss in the pipes, and if the site is undulating. Extra pressure is especially important when there is multiple irriGREY units installed on the one greywater system. Please refer to the manufacturer of your GWDD to ensure it has enough pressure to meet these requirements.

Area Required

The area required for your IrriGREY system depends on the soil type. The chart below shows the spacing required between dripperlines for different soil types, in relation to the total area.

Soil Texture & Structure	Dripperline row spacing	Area required per person* in household (m ²)					
		1	2	3	4	5	6
Gravel and Sands	0.6m	30	60	90	120	150	180
Sandy Loams	0.6m	30	60	90	120	150	180
Loams	0.8m	40	80	120	160	200	240
Clay Loams	0.9m	45	90	135	180	225	270
Light Clays	1.0m	50	100	150	200	250	300
Medium to Heavy Clays	1.5m	75	150	225	300	375	450

Please also refer to your local authority for regulations as these requirements can vary from one area to the next.

Recommended Setback distances

Use the distances below as a guide for how far away your dripperline will need to be installed from various surrounding objects.

Feature	Setback distance (m)
Property boundaries, pedestrian paths, driveways	1m
Footings of buildings	1.5m
Retaining wall footing	1m
Inground swimming pool surrounds	1m
Inground potable water tank	6m
Bores intended for human consumption	30m

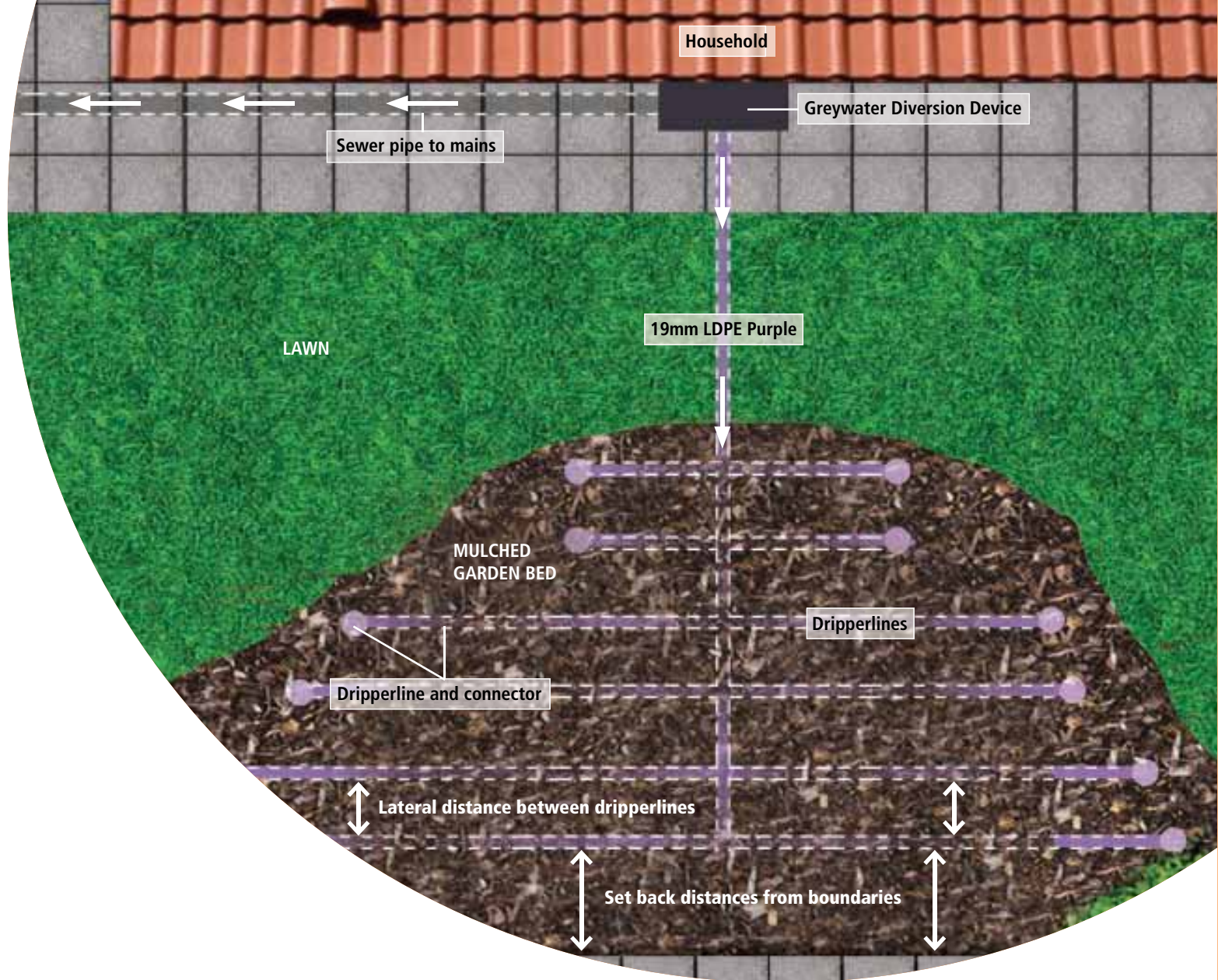
Please also refer to your local authority for regulations as these requirements can vary from one area to the next.

Pump Requirements

The chart below shows pressure and flow requirements for installing multiple kits. If in any case the flow and pressure exceeds the pump duty, we recommend you install an indexing valve. Please contact your local Netafim distributor for more information about this.

Pressure	Total kit flow rate (litres/min) at indicated pressures					
	1 kit	2 kits	3 kits	4 kits	5 kits	6 kits
1m	15	30	45	60	75	90
2m	20	40	60	80	100	120
3m	31	62	93	124	155	186
5m	42	85	128	171	214	256





Installation

For all garden bed installations, it is recommended the dripperline sits just below the mulch layer and on top of the soil line. It is important to note that for flat ground applications, the dripperline has a maximum of 15m run length from the 19mm LDPE.

Assembly

- 1 Determine the area in your garden, allowing for setback distances and access to the GWDD.
- 2 Roll out the 19mm LDPE purple pipe across the area.
- 3 Using a 19mm ratchet clamp, connect the pipe to the GWDD outlet with a $\frac{3}{4}$ x 25mm Nut. Note in some cases an extra fitting may be required.
- 4 Using the punch tool, punch holes along the 19mm LDPE where a dripperline lateral is required.
- 5 Insert a Dripperline Take-Off into each of the holes and into the end of the dripperline. Secure with a clamp, ensuring each fitting is at 90 degrees to the poly.
- 6 Using the 19mm end connector, cut the 19mm poly to the desired length and push the connector inwards, securing it with a 19mm clamp.
- 7 Cut the dripperline to the desired length and connect it with a 13mm end connector and clamp. Ensure that the maximum run length is not exceeded.

You are now ready to turn the system on.

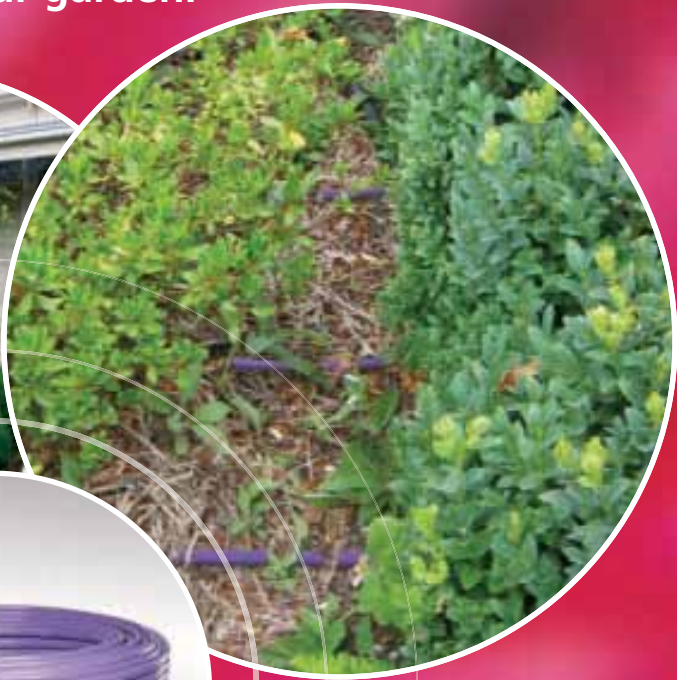
Maintenance and servicing

Maintenance and servicing of the irriGREY system should be carried out every time the GWDD is serviced.

- 1 During system operation disconnect the end connectors from the dripperline.
- 2 Ensure the system is flushed for a minimum of 30 seconds to clean out any trapped debris on the inside of the dripperline.
- 3 After putting the end connectors back in place, check the dripperline during operation to ensure no leaks or ponding occurs over the site. If a leak is found, check there is no debris or soil blocking the inside of the dripperline. If there is a blockage, locate the area and simply cut out the section of dripperline. Then use a ratchet clamp to reconnect the two ends of dripperline with a joiner.

irriGREY is the only complete dripperline irrigation package specifically designed to be used in conjunction with Greywater Diversion Devices.

Created by Netafim - the world's leading drip irrigation company – it allows you to reuse household greywater to irrigate your garden.



How irriGREY works

The irriGREY dripperline system delivers a slow and precise application of greywater throughout the soil.

Made from flexible polyethylene tubing, the dripperline has evenly spaced pre-inserted emitters. When water is pumped through the system, these emitters discharge an even, slow distribution of greywater into the soil.

Advantages of choosing irriGREY

- Allows for reuse of greywater for supplementary garden irrigation
- The most uniform distribution compared to all systems on the market
- Specifically designed drippers that operate without clogging
- An automated system that requires minimal maintenance & servicing

Easy to install

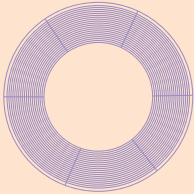
The irriGREY kit is simple to install, and is flexible enough to be used across all types of garden shapes, sizes and undulations.

The kit comprises of all you need to get your domestic greywater system up and running in no time.

The irriGREY kit includes:

- 100m Landline Purple Dripperline
- 25m Purple LDPE
- All associated fittings
- Easy to follow installation instructions

The Kit

	100m x Landline Purple 8l/hr @ 0.3m		25m x 19mm Purple LDPE
	25 x straight take-off		2 x 19mm elbow
	1 x budget punch tool to suit LDPE take-off		2 x 19mm end plug
	10 x 13mm end plug		1 x 19mm tee
	2 x 13mm joiner		1 x 3/4' x 25mm nut and tail
	24 x 13mm ratchet clamp		10 x 19mm ratchet clamp

Kits Required and Restrictions

The irriGREY kit comes with 100m of dripperline that will service a home of 1-2 people. For every extra 2 people, an additional kit will be required. Refer to the chart below as a guide.

No. of People	Kits
1 - 2	1
3 - 4	2
5 - 6	3

Additional fittings

Additional fittings are included in your kit and can be used to help make your irriGREY system fit your garden shape better.

Tee -
to split your system over two areas.

Elbows -
to assist with tight bends.

Joiners -
for connecting multiple pipelines.

In all instances, ensure clamps are used on all connections.

Regulations and Legislation

Each state and council has regulations and by-laws concerning the dispersal of greywater which must be strictly complied with. This manual is only intended to be an aid to installers and end users of the irriGREY System. Local, state or federal law and regulation shall take precedence over this manual. You are accordingly advised and requested to check with your own council and state government as to their specific requirements for the installation of the irriGREY System. Furthermore, the user of the irriGREY System is subject to all local conditions that prevail at the site; and further subject to any appropriate expert tests including, but not limited to, soil tests and water tests, which may be required prior to the installation to determine the fitness for use.

In addition, other factors must be considered to determine fitness for use including, but not limited to, slope and landscape contours and acceptable hydraulic loading rates.

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