

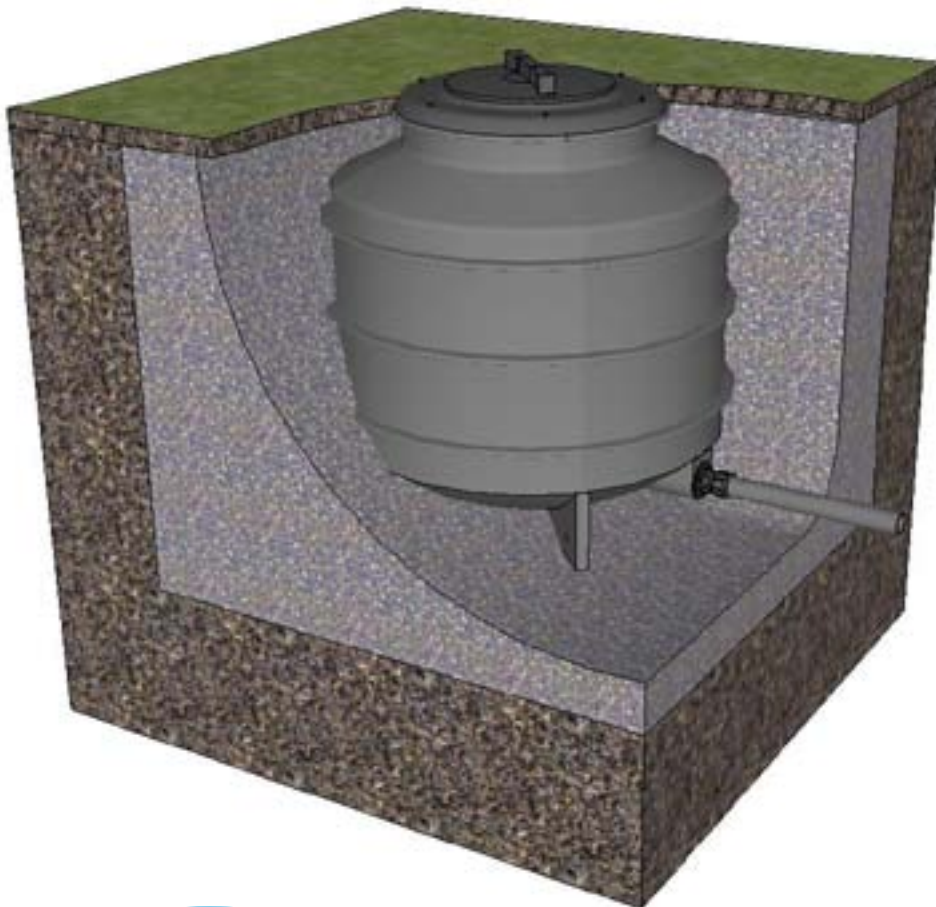


# naturalflow

eco-wastewater & sewage systems

*by Waterflow NZ Ltd*

## NaturalFlow Series NF1000 Grey Water System Specifications



# NATURALFLOW SERIES NF1000 GREY WATER SYSTEM SPECIFICATIONS

*New Zealand's Leaders in Eco-Sustainable, Odourless Wastewater and Sewage Systems*

## Compliance Requirements

All NaturalFlow Treatment Systems meet the requirements of the NZ Building Code G13-VM4.

Section 9 of AS/NZS 1546.1:2008 state that tanks constructed to these Standards will meet the requirements of the Code for Clauses B1 and B2, structure and durability.

Compliance with Section 9 of AS/NZS 1546.1:2008 and also Clauses G13.3.4 relating to on-site treatment and disposal systems and G14.3.1 and 14.3.2 relating to the control of foul water as an industrial waste are covered in the 'NaturalFlow Compliance Requirements' document.

Please feel free to ask for a copy of this complete document, if required.

## The Treatment Process

The NaturalFlow Series NF1000 Grey Water System comprises of a 1.2m diameter by 1.1m high treatment module.

The grey water (which includes water from showers, baths, laundry sink, dishwasher, washing machine and hand basins), is separated at its source from the black water (from toilets and kitchen sink), and flows first into the initial treatment chamber that retains the bulk of the scum and solids before being trickled through an aerating matrix filter into the dose chamber.

This water, which is treated to Secondary level criteria of 20/30 BOD/TSS, is then reintroduced into the receiving environment in accordance with AS/NZS 1547:2012.

This NaturalFlow Series NF1000 Grey Water module has a buffering capacity of 1000ltrs to contain any surge flows that may be initiated.

The size and extent of the disposal systems are determined by the receiving environment and the expected flow volumes. Factors such as soil types, slope and the proximity of potentially sensitive environments and constraints such as creeks, bores, wells etc determine the extent, location and type of disposal system chosen.

The NF1000 Grey Water System has a reserve capacity of 1000ltrs where pump loading is necessary to allow for 24hrs emergency storage should a pump fail. The NaturalFlow Series NF1000 Grey Water System is capable of treating 14000ltrs per week of grey water.

## Worminator® & Dose Chamber Specifications

Tanks are made of Cotene 9050 which is a linear medium density polyethylene, designed specifically for rotational moulding of large tanks and products that require a high level of rigidity. It contains a fully formulated long term UV stabilization package (with a minimum UV8 rating) and is suitable material for wastewater treatment containment meeting all the requirements of Section 4.3.3 of AS/NZS 1547:2012 which cross references the structural performance requirements of its section 2.4.2.3 back to the relevant provisions of AS/NZS 1546.1, which for plastic septic tanks constructed via by rotational moulding using thermoplastics (polyethylene) are set out in Section 9 of that Standard. These tanks have an expected lifespan of 50 years.

*See our website: [www.naturalflow.co.nz](http://www.naturalflow.co.nz)*

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## **Grey Water Treatment Tank Specifications**

### **Grey Water Treatment Tank**

1000ltrs Nominal capacity

1200mm Diameter over main body

1100mm O/A Height

## **Installation Location and Certification**

These tanks are not designed for vehicle loads and shall be located no closer than 1.50m to a driveway, road frontage or a building. If for any reason the tank is located where vehicle traffic may drive over the tank or approach closer than 1.50m, or where it may be trampled on by farm stock then the tank should be protected by a concrete slab designed to support these loads. Surface water must also be diverted from flowing into the installation.

Installation must be certified to AS/NZS 1547:2012, the certificate to be issued and held by the regulatory authority.

## **High Water Table Installations**

All tanks have been engineered and designed with support ribbing for maximum strength, in accordance with the NZC 3604. Clauses B1 and B2 for structure and durability, to withstand any hydraulic pressures, both lateral and uplift, created by high water table conditions, even when the tanks are completely empty at install stage.

As per the NaturalFlow Systems installation instructions, in these conditions, tanks must be anchored in with concrete around base, as per the installation instructions, to height as specified.

## **Plumbing Pipes and Fittings**

All internal plumbing is done with PVC pipes with appropriate connections according to AS/NZS 1260 and AS/NZS 4130.

## **Backfill and Bedding**

Place and bed to NZBC G13/AS2, using compacted granular metal, in layers not exceeding 100mm.

## **Electrical**

Where a pump is required on a flat site electrical connection must be installed according to AS/NZS 3000 and the control and alarm system must be in a weatherproof housing located in a readily visible position.

*If in doubt contact the experts on 0800 628 356 or [sales@waterflow.co.nz](mailto:sales@waterflow.co.nz)*

# NATURALFLOW SERIES NF1000 GREY WATER SYSTEM SPECIFICATIONS

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## Warranty

WATERFLOW NZ LTD warrants that the NaturalFlow System will be free from defects in material and workmanship for the following periods of time from the date of installation as set out in the following conditions:

1. Roto-Molded tanks 15yrs
2. Filter media 5yrs
3. Dosing float/and or pumps 2yrs
4. WATERFLOW NZ LTD will at its discretion replace or repair such components that prove to be faulty with the same or equivalent part at no charge.
5. Warranty of operation only covers the performance of the Wormerator© and Grey Water systems as connected to the effluent inflow for which they are designed, and also installed to the criteria as set out in the relative installation instructions and procedures.

Warranty excludes defects due to:

- A) Failure to use the system in accordance with owners manual.
- B) A force majeure event outside the reasonable control of WATERFLOW NZ LTD such a but (not limited to) earthquake, fire, flood soil subsidence ground water table variations or plumbing fault.
- C) Modifications to surrounding landscape after installation
- D) The actions of a third party
- E) The system required to bear loads (either hydraulic or biological) greater than that for which it was designed
- F) Any modifications or repairs undertaken without the consent of WATERFLOW NZ LTD
- G) Failure, where applicable, to secure and plant disposal field.

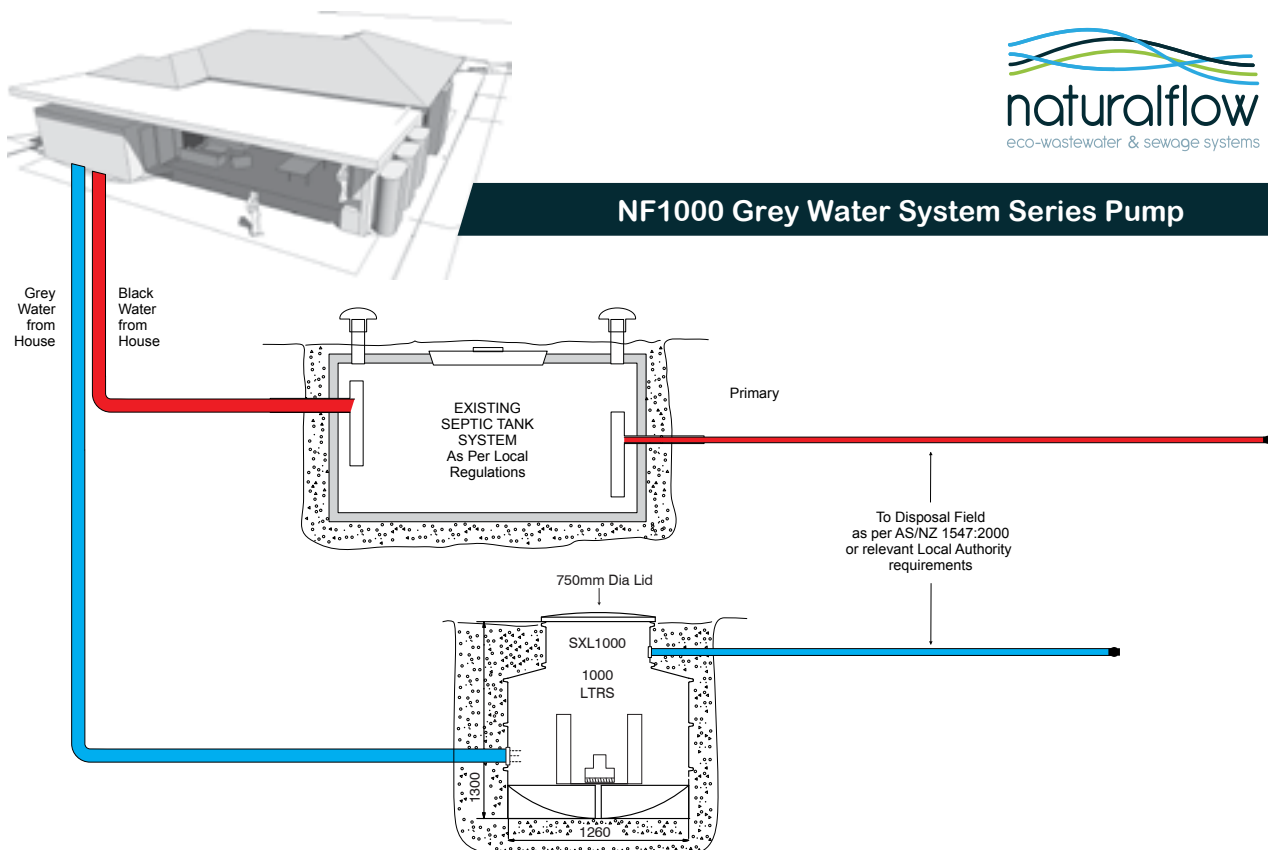
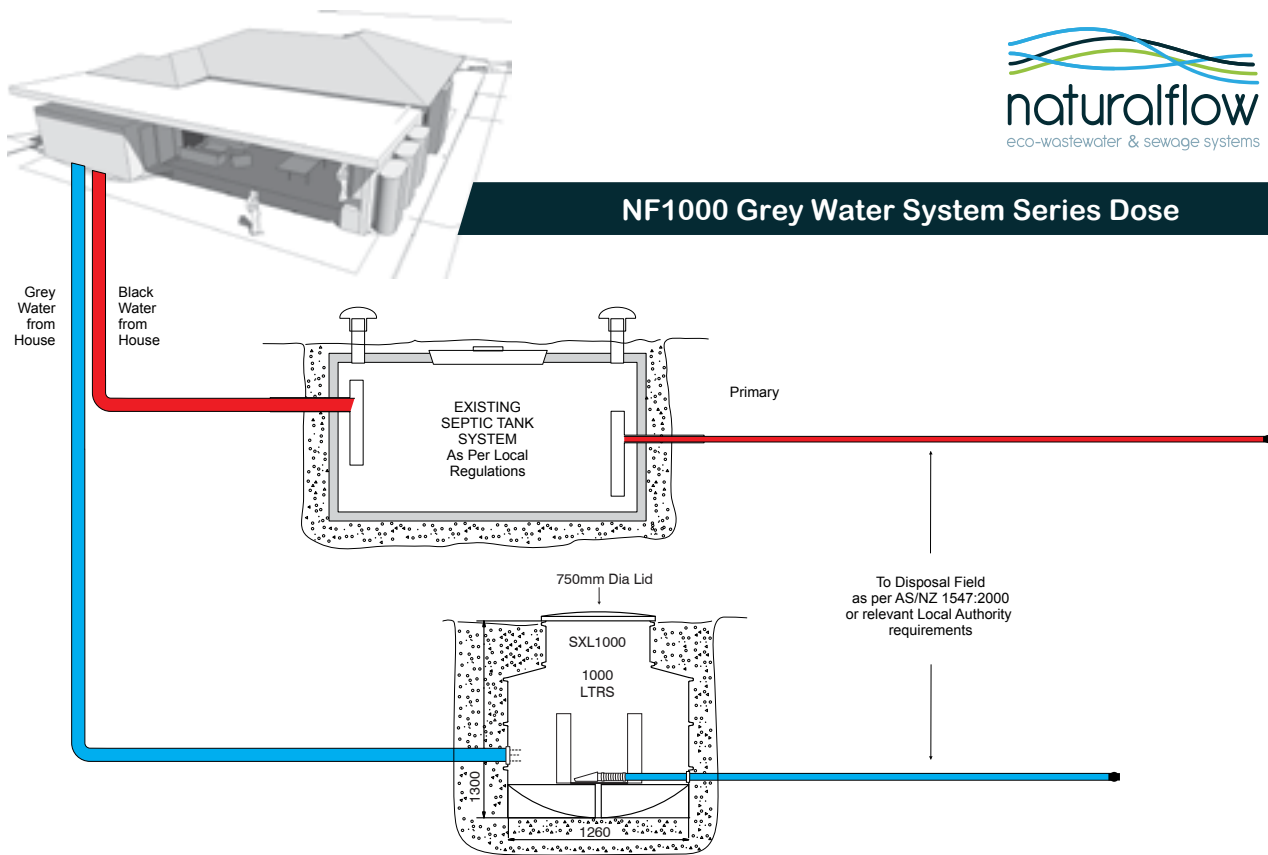


Dean Hoyle  
Managing Director

*See our website: [www.naturalflow.co.nz](http://www.naturalflow.co.nz)*

# NATURALFLOW SERIES NF1000 GREY WATER SYSTEM SPECIFICATIONS

## • NaturalFlow Series NF1000 Grey Water Flow Charts





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*“We do it simpler”*



**Call us today to discuss your needs**

**0800 628 356**

Or for more information [www.naturalflow.co.nz](http://www.naturalflow.co.nz)



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