

# ECOROCK

## NON-ELECTRIC WASTEWATER TREATMENT

The Innovative System



# BIOROCK

engineered for tomorrow



# THE FUTURE OF WASTEWATER TREATMENT

BIOROCK is home to an internationally-acclaimed team of wastewater specialists who share the goal of providing innovative, sustainable, and eco-friendly water treatment systems.

Our level of expertise and attention-to-detail guarantees only the best, most reliable products, providing the market with the ultimate non-electrical wastewater treatment technologies.

## ADVANTAGES AND BENEFITS OF THE ECOROCK SOLUTION

- ECOROCK ■
- Electrical Plants ■
- Organic Media Plants ■

## THE ECOROCK SOLUTION

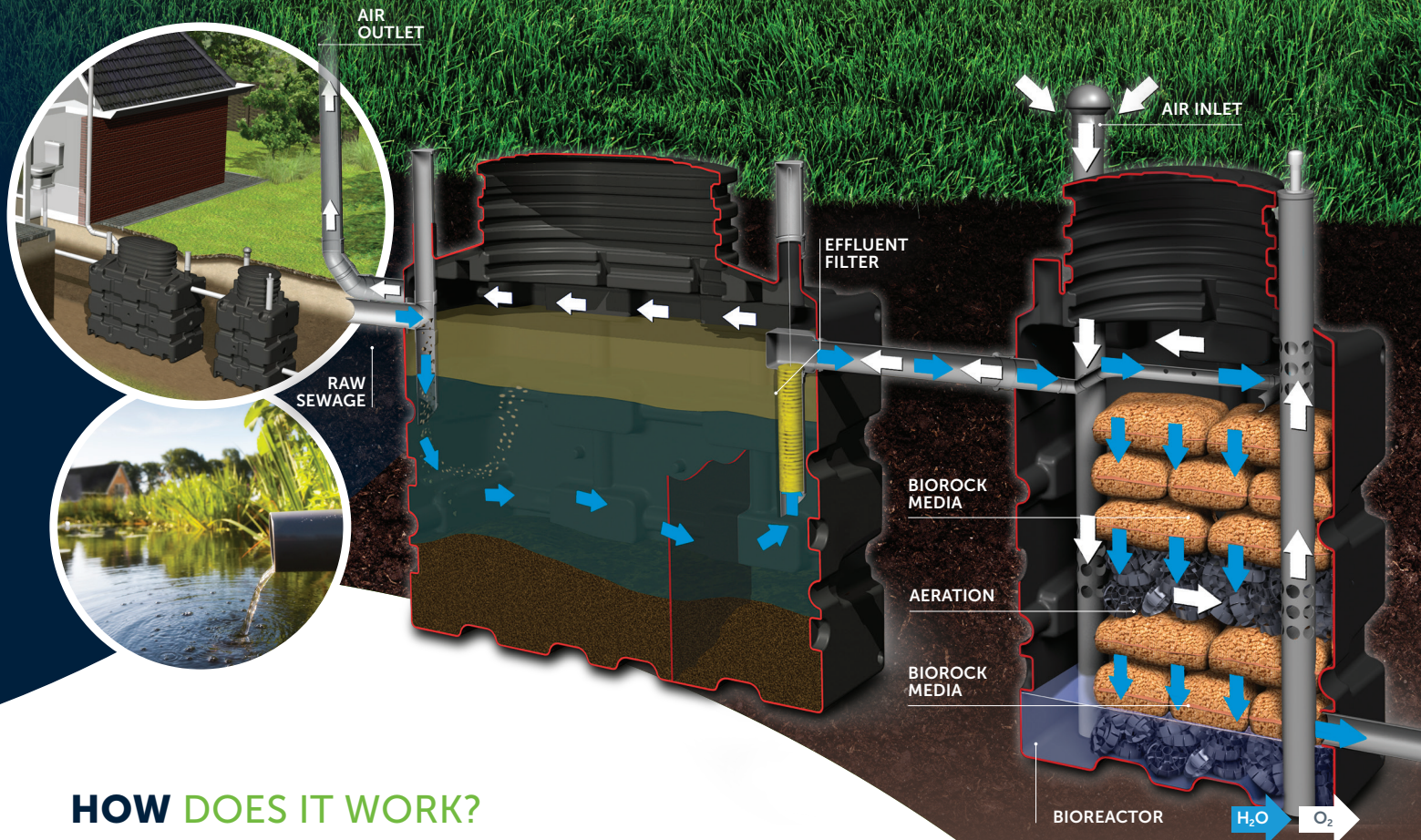
Our **ECOROCK system** is the perfect solution for your home wastewater treatment. It is totally silent, odourless and is barely visible

With a capacity for 4 to 15 persons, this innovative sewage system is particularly ideal for your home wastewater treatment.

ECOROCK combines everything you need to successfully and cost-effectively treat your wastewater, while keeping your house sewage system hygienic and eco-friendly.

Do you already have a functioning primary tank and just want to **retrofit your treatment unit**? No problem! Our ECOROCK solution fits most of the primary tanks on the market.

Media Lifespan Is Up To 10 Years	✓	✗	✗
Low Operational Costs	✓	✗	✗
Minimal Annual Maintenance	✓	✗	✗
Effortless Installation	✓	✗	✗
Non Electric	✓	✓	✗
Long Septic Tank Pump-Out Intervals	✓	✓	✗
Odourless	✓	✓	✗
Silent	✓	✓	✗
Long Absence Periods	✓	✓	✗



## HOW DOES IT WORK?

### Step 1: Primary Tank

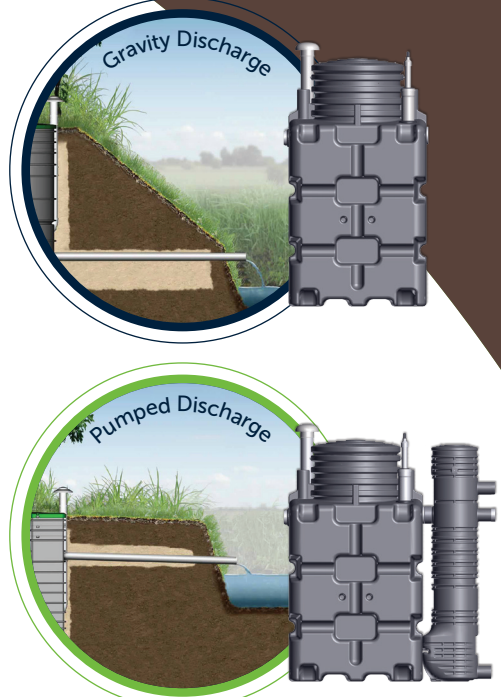
The PRIMARY TANK clarifies the sewage water by fats, oils, greases and organic solids. The sewage then passes through an effluent filter, before discharging into the BIOROCK reactor.

### Step 2: BIOREACTOR Process

Our BIOREACTOR further purifies the pretreated wastewater using a biological process. To naturally treat the wastewater, our systems use our unique BIOROCK Media, an exclusive and very efficient carrier material for bacteria.

### Step 3: Discharge

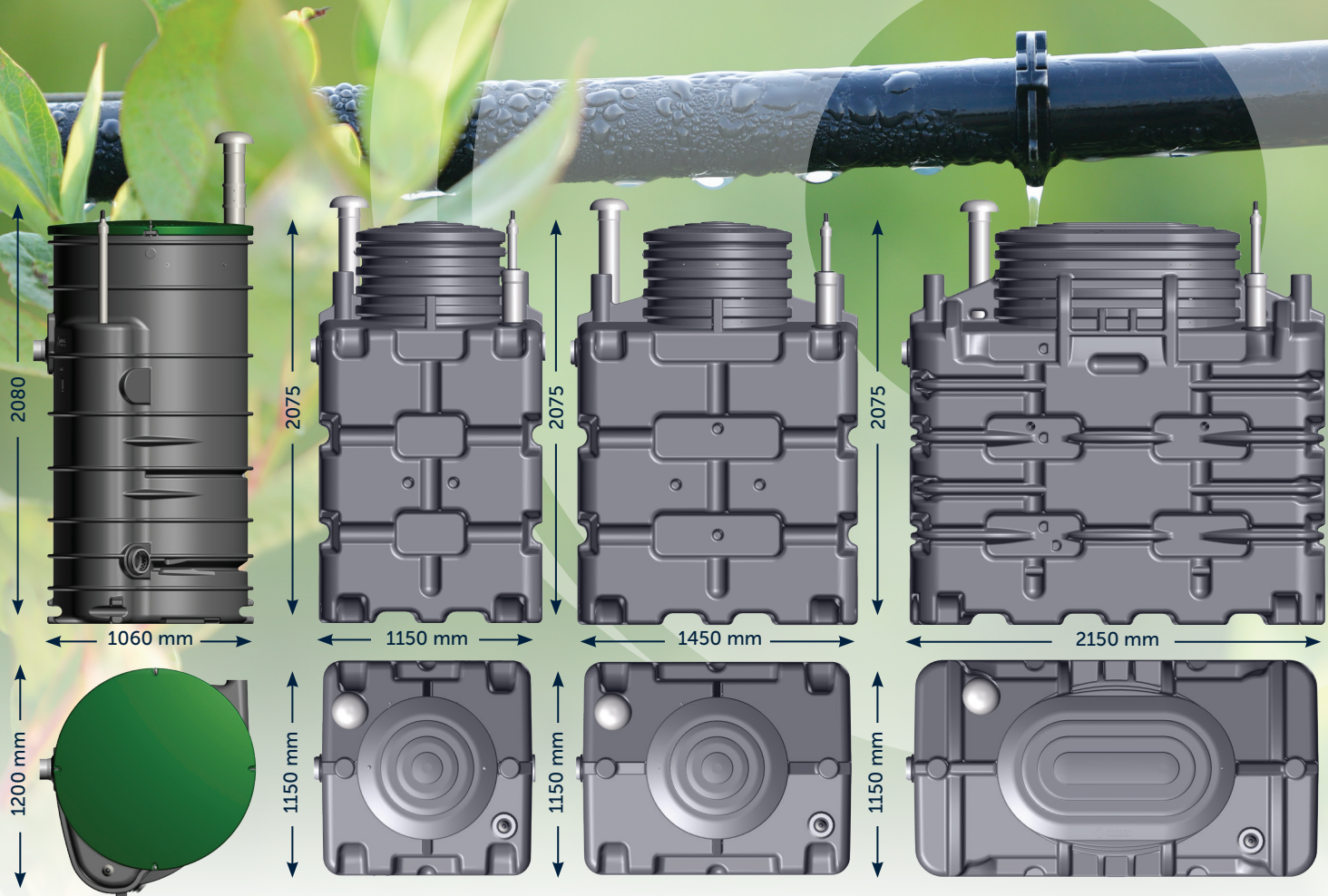
Depending on the ground type, effluent will be discharged by gravity, or by a pump.



## THE UNIQUE BIOROCK MEDIA

Our **exclusive media** is degradation-resistant, stable and sustainable - keeping the purification system working effectively over the long-term. You will exclusively find it in BIOROCK systems





## ECOROCK SPECIFICATIONS

DIMENSIONS	VOLUME BIOREACTOR	WEIGHT (EMPTY)
ECOROCK-1000	1000 liters	163 kg
ECOROCK-1500	1500 liters	197 kg
ECOROCK-2000	2000 liters	232 kg
ECOROCK-3000	3000 liters	304 kg

Do you need a non-electric plant with a larger capacity?  
We have a solution for every project!

Find more information in our brochures for wastewater treatment plants with capacities for 30 people and up.

## SAVE MONEY WITH ECOROCK

One of the main benefits of having an **ECOROCK treatment unit** is that it's a sustainable and economical investment. Our system requires minimal maintenance, does not need electricity, and has a long lifespan.

**You will constantly save on electricity, maintenance, and tap water costs as you can reuse the purified water for irrigation.**

**BIOROCK**  
engineered for tomorrow

ECOROCK-UK-07/2021

Call us today for more information

**BIOROCK Sewage Treatment Ltd**  
Adamson House (Ground Floor), Towers Business  
Park, M20 2YY Manchester

☎ 0161 246 6065 ✉ info@biorock.co.uk

[www.biorock.co.uk](http://www.biorock.co.uk)



**CE** BIOROCK units are approved and tested by many International Standards.



25 Year warranty on tanks  
10 Year warranty on media

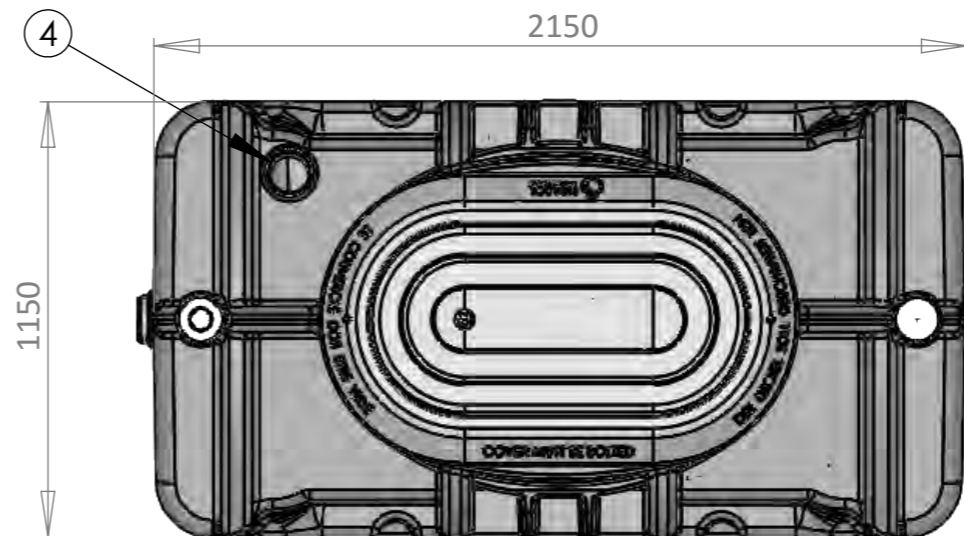
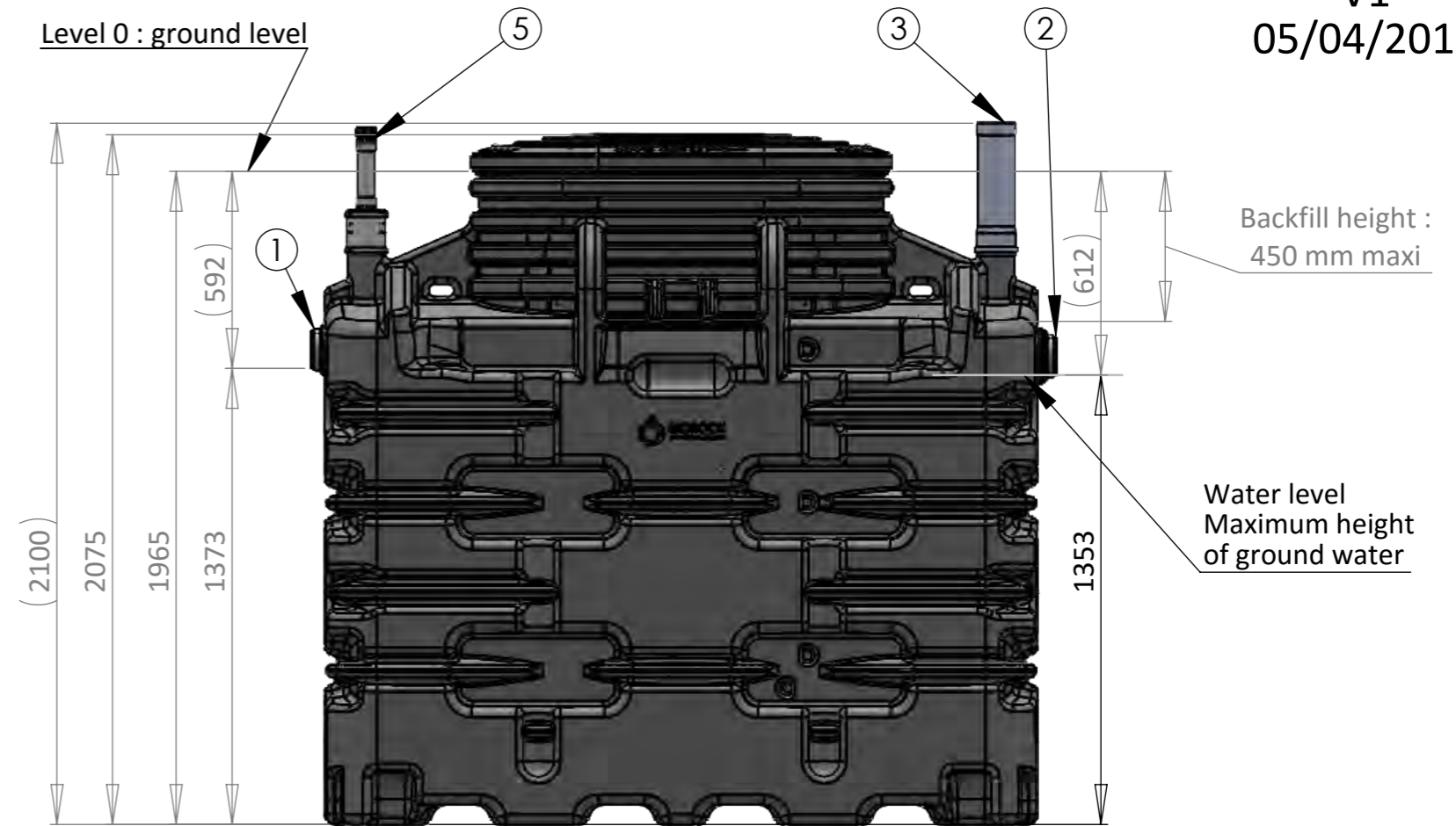
*\*subject to conditions*

# Primary tank

## Volume 3000 L

V1  
05/04/2016

1	Water inlet
2	Water outlet
3	Access to effluent filter
4	Air outlet
5	Rodding point



Characteristics	Value	Unit
<b>Primary Tank (PT)</b>		
Material	HDPE	
Tank volume	3000	Liters
<b>Specification</b>		
Overall length	2150	mm
Overall width	1150	mm
Total height of the tank	2075	mm
Overall height	2100	mm
Total weight (without water)	200	Kg
Pipe diameters	110	mm

This primary tank can be installed in high ground water table.

Overall tolerance : 3%

Service :				
ORIGINATOR				
	NAME	SIGNATURE	DATE	TITLE:
AUTHOR	AQ		05/04/2016	
APPROV.				TITLE:
CHANGES				
	NAME	SIGNATURE	DATE	TITLE:
AUTHOR				
APPROV.				TITLE:
CHANGES				
AUTHOR				Nb. of PLAN
APPROV.				FTE-X3000.2
				A3
				SCALE:1:20

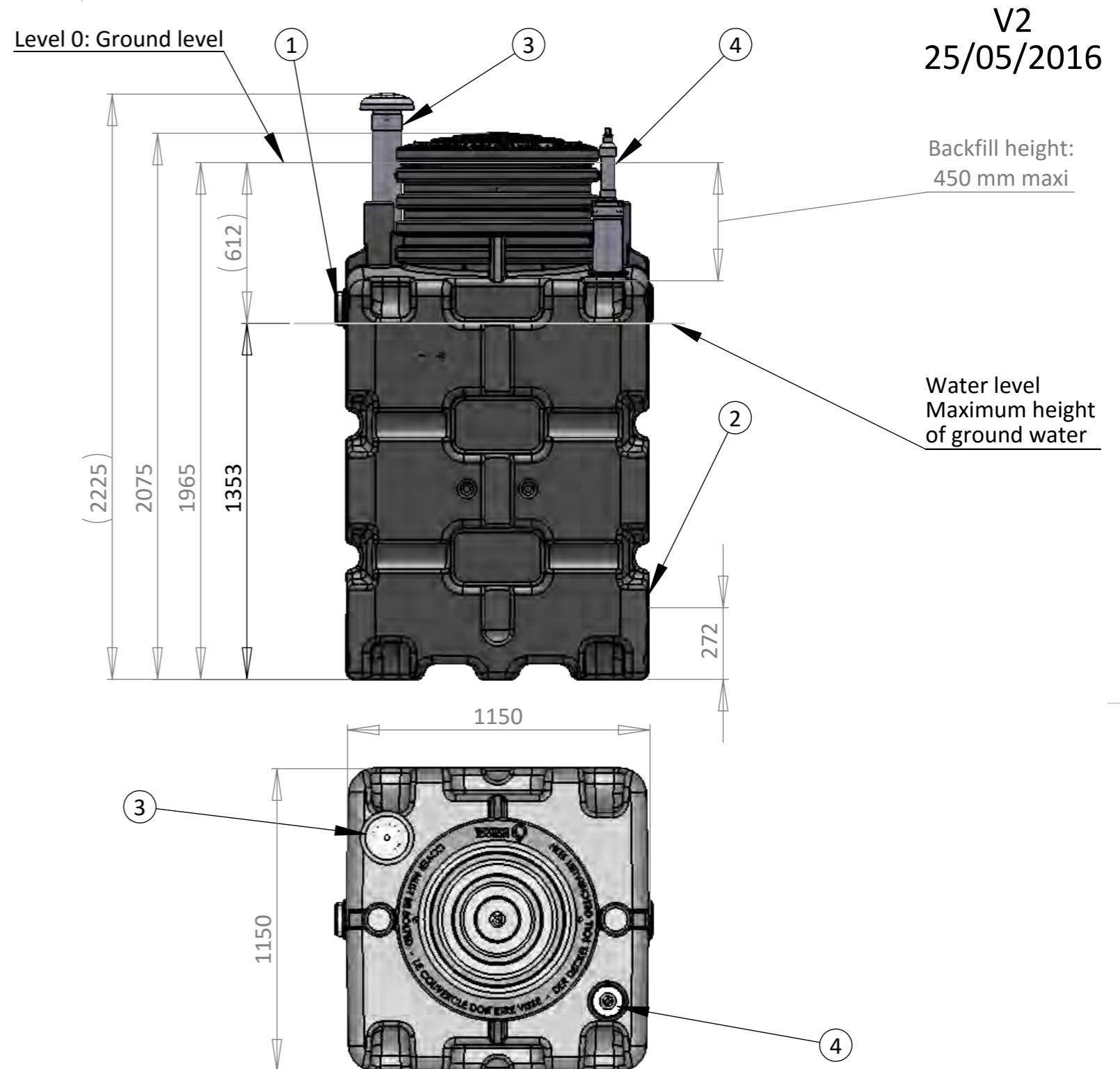
# Treatment Unit Tank Volume 1500 L

1	Water inlet
2	Water outlet
3	Air inlet
4	Overflow Alarm

Characteristics	Value	Unit
<b>ECOROCK-1500 Treatment Unit</b>		
Minimum volume of pre-treatment*		liters/PE
Capacity in population equivalent		PE
Daily volume of wastewater **		liters/day/PE
Daily hydraulic load		m <sup>3</sup> /day
Organic load per PE		gr.BOD <sub>5</sub> /PE/day
Organic load raw effluent up to		kg BOD <sub>5</sub> /day
Specification	Value	Unit
Tank Volume	1500	Liters
Overall length	1150	mm
Overall width	1150	mm
Total height of the tank	2075	mm
Overall height (+ventilation pipe)	2225	mm
Total weight (without water)	197	Kg
Pipe diameter	110	mm

This treatment unit can be installed in high ground water table.

\*minimum 2000 litres of pre-treatment  
\*\*according to DIN EN 12566-3



Overall tolerance: 3%

Service :

ORIGINATOR			
NAME	SIGNATURE	DATE	
AUTHOR: AQ		29/04/2016	
APPROV.			
CHANGES			
NAME	SIGNATURE	DATE	TITLE:
AUTHOR: AQ		25/05/2016	
APPROV.			
CHANGES			
AUTHOR:			Nb. of PLAN
APPROV.			UT-X1500

BIOROCK

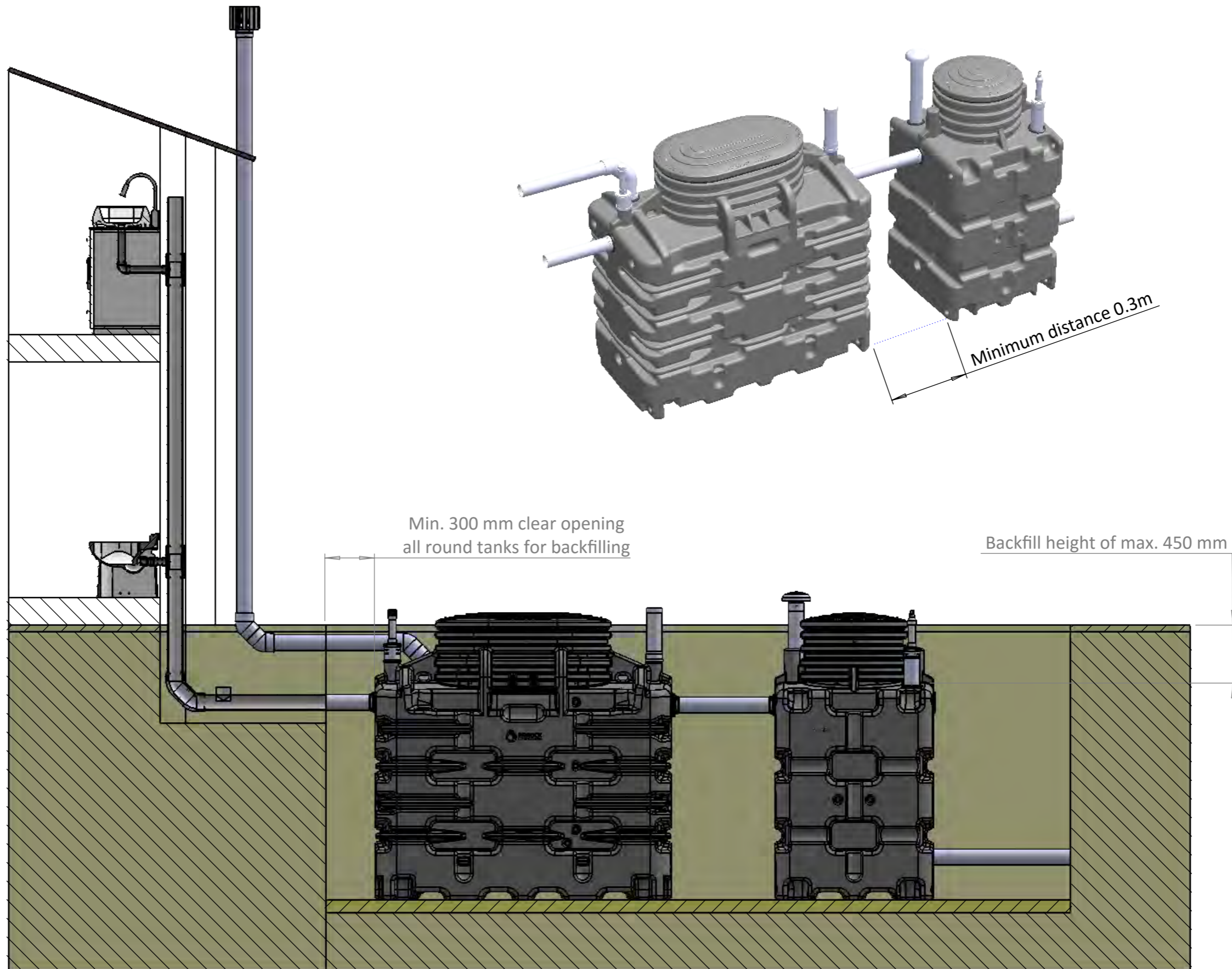
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A3



# Installation in dry ground conditions BIOROCK-ST2-3000 + ECOROCK- 1500

V1  
02/05/2016  
F-X6



# TREATMENT PERFORMANCE RESULTS

## BIOROCK Sewage Treatment Ltd

5300 Lakeside, Cheadle Royal Bus. Pk. Cheadle SK8 3GP

### EN 12566-3

Results corresponding to EN 12566-3 and S.R. 66

PIA-SR66-1703-1026

### BIOROCK

Aerobic biological gravity filter

Nominal organic daily load	0.27 kg/d			
Nominal hydraulic daily load	0.75 m <sup>3</sup> /d			
Material	Polyethylene			
Watertightness	Pass			
Crushing resistance (Pit test)	Pass (also wet conditions)			
Durability	Pass			
Treatment efficiency (nominal sequences)		Efficiency	Effluent	
		COD	96.3 %	26 mg/l
		BOD <sub>5</sub>	98.7 %	4 mg/l
		NH <sub>4</sub> -N*	90.5 %	3 mg/l
		SS	99.3 %	3 mg/l
Number of desludging	Not more than once			
Electrical consumption	0 kWh/d			

\*determined for temperatures  $\geq 12^{\circ}\text{C}$  in the bioreactor

Performance tested by:

**PIA – Prüfinstitut für Abwassertechnik GmbH**

**CSTB – Centre Scientifique et technique du Batiment**

**CERIB – Centre d'Etudes et de Recherche de l'INDustrie du Béton**

This document replaces neither the declaration of performance nor the CE marking.



Notified Body  
No.: 1739



Certified according to  
ISO 9001:2008



Elmar Lancé

March 2017