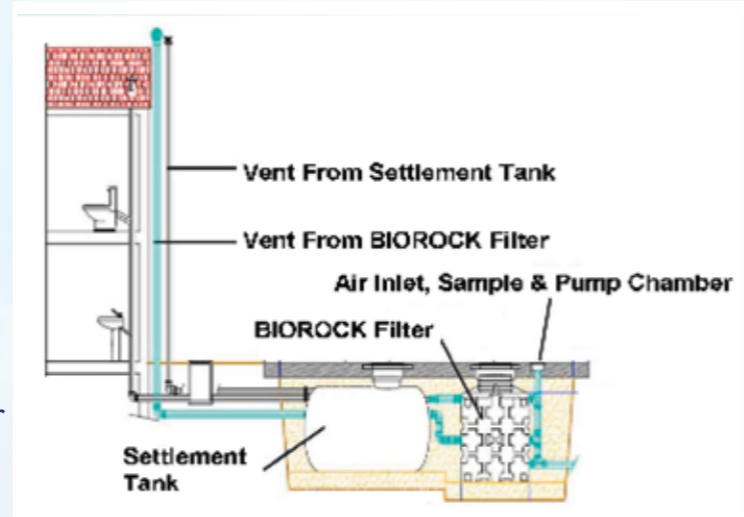


BIOROCK® - Installation

The main benefit of the BIOROCK is that it is quick, easy and cheap to install.

The BIOROCK operates in a unique way and although it is easy to install it must be installed or overseen by trained personnel who understand the system.

Please contact us below to find installers in your area.



BIOROCK® - Maintenance

Like all sewage treatment units, the system requires regular servicing. The BIOROCK comes with a 15 year tank guarantee which is also only valid if the unit is serviced as per the manufacturers' instructions by qualified Engineers.

Typical de-sludge intervals are 3 to 4 years. Service agreements are available through Waste Tech Environmental Ltd.

Keep our streams and rivers safe for our children. Never allow unqualified persons to tamper with your unit.

BIOROCK® - Technical Specification

| | BIOROCK 5 | BIOROCK 10 | BIOROCK 15 |
|-------------------------------|---|---|---|
| Population | 5 | 10 | 15 |
| Settlement Tank | 2676mmx1200mmx1600mm (Length x Width x Height) | 2787mmx1500mmx1800mm (Length x Width x Height) | 4202mmx1500mmx1800mm (Length x Width x Height) |
| Settlement Tank Inlet Invert | 500mm | 500mm | 500mm |
| Settlement Tank Outlet Invert | 550mm | 550mm | 550mm |
| BIOROCK Biofilter | 1150mmx1150mmx2040mm (Length x Width x Height) | 1400mmx1150mmx2040mm (Length x Width x Height) | 2150mmx1150mmx2040mm (Length x Width x Height) |
| Biorock Inlet Invert | 600mm | 600mm | 600mm |
| Biorock Outlet Invert | 1740mm | 1740mm | 1740mm |

BIOROCK® - Contact

Tel
Fax
Email



BIOROCK

SEWAGE TREATMENT PLANT

EN 12566-3 certified

No Moving Parts / No Air Compressor / No Electricity

Packaged Sewage Treatment Units

Septic Tank Upgrades



Certified to
100% Efficient
to European
Performance Standards



**SAVE UP TO €700
PER YEAR - EVERY YEAR**

THE ONLY SUSTAINABLE SEWAGE TREATMENT PLANT



The Biorock is designed to biologically purify pre-settled domestic wastewater, free of oils and grease. It is a modular conception and operates in a unique way that eliminates the need for electricity to power the treatment process.

The Biorock Sewage Treatment Plant uses no energy. Other sewage treatment plants require a continuous supply of electricity to drive the compressors, pumps, motors and discs that are continually needed to oxygenate liquid based systems.

The Biorock is the most sustainable Sewage Treatment Unit available as the whole treatment process operates under gravity and should electricity be required for the outlet it can be done via solar power. If however mains electricity is used to pump the treated effluent a year it costs around 50 cent per person per year.

As a result of its simple operation a 5 person Biorock will save you approximately **€700 per year every year** on running costs compared to the Irish market leader. **This is a saving of approximately €3500 over 5 years.**

The bigger the system the better the saving.



5 Person BIOROCK Filter



5 Person BIOROCK system with the optional 3000L BIOROCK Settlement Tank

THE BIOROCK TYPICALLY PRODUCES EFFLUENT TO A 3:3:1 STANDARD

NO OTHER PLANT CAN COMPARE WITH THIS EFFLUENT QUALITY

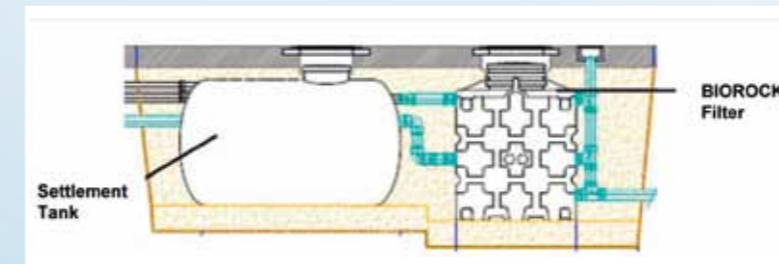
ADVANTAGES OF BIOROCK

- No energy consumption for the purification
- Can operate using NO electricity if required
- Long emptying interval
- No internal moving parts
- Lowest running costs of any system
- Smallest carbon footprint of any system
- Best effluent quality of any standard UK system
- Ability to handle absence periods (holidays)
- Fast start up period (1 up)
- Ability to handle intermittent loadings (peak and low flows) i.e. holiday homes
- Compact and underground installation
- Low visual footprint
- East to install
- Minimum maintenance
- Odour and noise free
- Official Certificate of EN 12566-3: 2005
- Due to its modular construction populations of up to 150 can be catered for.

BIOROCK® - How it Works

The BIOROCK treats wastewater in the way nature intended. In nature sewage is broken down in the air and the soil not in water. This is because oxygen is the key requirement for aerobic digestion and there can only ever be a limited amount of oxygen in water.

The BIOROCK is a dual tank Sewage Treatment Plant - Settlement Tank followed by the BIOROCK Filter.



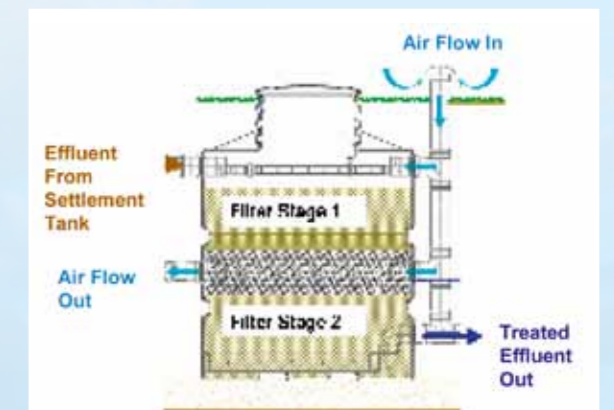
The raw sewage first enters the settlement tank which separates the solids from the liquid part of the effluent.

This pre-filter digests most of the solids anaerobically and only requires emptying every 3 to 4 years. The Primary Effluent then enters the BIOROCK biofilter which uses layer of natural stone fibre material in contact with air to treat the effluent

in exactly the same way as Nature treats effluent in the soil or on the margins of a pond.

Bacteria grow in the stone fibre and digest the organic material as it trickles through. Instead of using electricity-guzzling compressors to provide the air, the BIOROCK Biofilter utilises the wind and natural 'chimney draft' to pull the air through the plant with no electricity required.

The natural stone fibre works with nature, not against it and is self cleaning.



The Settlement Tank and Pre Filter are included in the sewage treatment package.

BIOROCK® - Options

- **Gravity** - For sites on a slope no electricity is required at all as the outlet can be run straight to a soakaway or watercourse via gravity.
- **Standard Pump** - For most sites not on a slope a pump will be required to raise the treated effluent to within 500mm below ground level. From here the treated effluent will run under gravity to your soakaway or watercourse. This pump is the only electrical component and costs around 50 cent per person per year to run.
- **Solar Powered Pump** - Where it is difficult or costly to run electricity to the BIOROCK a solar powered pump can be provided
- **Septic Tank Upgrade** - If you already have an existing rectangular or cylindrical septic tank it can be upgraded to a full Sewage Treatment Plant by simply adding the BIOROCK Filter on to the outlet.