

BALMORAL HYDROCLEAR CAP 6

Serves 1-6 people

Total Capacity 3800L

Maximum Daily Flow 1200L/day

Organic Load 360gBOD/day

Desludge 12months

A **continuous aeration plant** which operates using a unique bio-media system and delivers a pollutant removal level of 96.2% and can be used with 40m percolation area in order to provide 97.5% removal. This has been confirmed by DOENI.

BENEFITS

Bio Media System similar to the MBBR system, there is no fixed media eliminating blockages that are commonly found in smaller treatment plants.

Durable & Stable Product made from tough durable polyethylene, it is easy to transport and has a wide base for stability.

Saves Money with an easy installation due to the systems compact size and light weight, it also promotes low maintenance reducing costs.

Easy Maintenance - At full occupancy the system only need to be emptied every 6 months, with maintenance of the compressor easily carried out located in the neck of the tank.

Compact System perfect for homes of up to 6 inhabitants (4 bedrooms).

Low Noise with a near silent air compressor housed beneath the flat lid, the operation of the system is virtually silent.

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(028) 8075 8220

HOW IT WORKS

Chamber 1 - Primary Settlement

Raw sewage flowing to the CAP unit is received in the primary settlement zone. Here, gross solids (primary sludge) settle to the bottom of the tank, where they remain until the tank is desludged. The settled sewage displaced from the primary zone then flows into the submerged filter zone, passing under a scum baffle.

Chamber 2 - Reactor Vessel

Flow circulation in the submerged filter zone is generated by the hydraulic effect of the outlet air diffuser. This causes settled sewage entering the filter zone at high level to be drawn down through the media, aerating the sewage in the process. The flow circulation ensures that the influent sewage receives several passes through the filter bed at low flow. In the filter zone, as the sewage passes over the filter media it is purified by micro-organisms growing on the surface of the media. Growth of these micro-organisms results in an excess which is shed as solid particles known as humus solids. Humus solids settling at the bottom of the filter zones are recirculated with the flow of incoming sewage and are deposited on the top of the primary settlement zone.

Chamber 3 - Final Settlement

Sewage displaced from the submerged filter zone flows via a DIP pipe into the final settlement zone. Liquid displaced from the humus zone has now been fully treated and is known as final effluent. It is suitable for discharge to a watercourse or soakaway as defined in the consent to discharge issued by the Environment Agency. Humus solids from the final settlement tank are recirculated to the primary tank via the recirculation pipework. This helps reduce the sludge build up in the humus tank and prevents stagnation during very low in-flow.

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