



CLEARGREY™
MBR

Grey water purification
and recycling system



ADVANCED FLOW
SYSTEMS™

At Huliote, we are committed to being a green company and we bring a message of real water saving, for protecting the quality of the environment.

The **CLEARGREYMBR™** system is the ultimate solution for anyone who is truly interested in saving and utilizing every drop of water.

Advantages:

- Double saving - the water can be used both for flushing the toilet and for irrigation of gardens, lawns and trees.
- Easy to maintain - flush the membranes only once or twice a year, depending on the discharge rate.
- Unique function for self-cleaning of the membranes by a flow of air bubbles, while enhancing the biological purification process.
- The system produces clear, clean and odorless water, which comply with the strictest European standards and conform with and even exceed the reclaimed water quality requirements, as specified by the Inbar Committee and the Halperin - Aloni committee.
- The system is modular and can be scaled to any discharge rate, from a single house up to an unlimited number of apartments and users.

The water purification principle of the **CLEARGREYMBR™** systems

The **CLEARGREYMBR™** system utilizes innovative German technology, patented under the name MicroClear®.

The system purifies the grey water which comes from bathrooms and washing machines. The water is treated through a biological process using oxygen consuming aerobic bacteria and by physical filtering through Ultra filtration (UF) membranes, with tiny 0.04 µm holes.

The resulting water quality exceeds the quality required for tertiary treatment and "premium quality". This water can be reclaimed not only for irrigating gardens, but also for use in washing machines and for flushing toilets. These uses enable continued water saving in winter, when garden irrigation is not required.

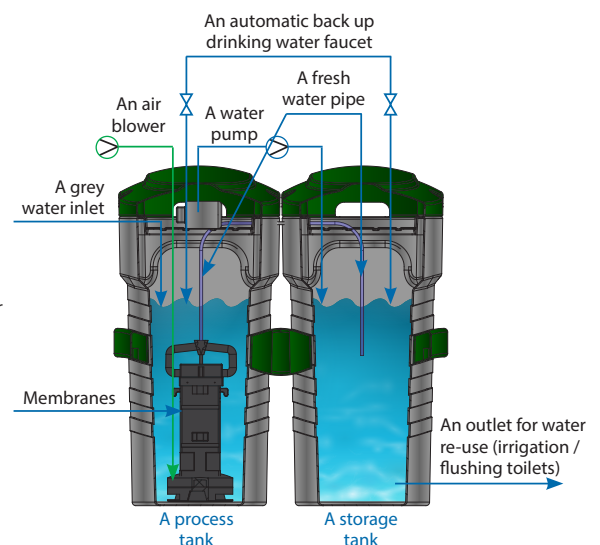
The operation principle of **CLEARGREYMBR™** system:

Process tank

- The grey water is collected in this tank (water from bathroom showers and sinks, as well as washing machines). The biological process starts here, by a blower that provides oxygen to the aerobic bacteria in the water. The flux of air bubbles creates a continuous cleaning process of the surface area of the membrane. The tiny size of the holes in the membranes creates a barrier which prevents the transfer of all known types of bacteria.

Storage tank

- After an hour the vacuum pump begins to operate. Its function is to pump the water through the tiny holes of the membrane. The water which passes through the membrane is purified water that is routed to the storage tank.



CLEARGREYMBR™ System's discharge rate and technical data

- The purification and recycling systems are designed to treat a daily discharge ranging from 0.8 cubic meters to hundreds and even thousands of cubic meters per day. The array of membranes is modular and is suited to deal with different discharge rates as needed. The same applies to the size of the tanks, oxygenation rate and the other required parameters. There are kits for systems without tanks starting from a discharge rate of 0.8 cubic meters per day. Systems for quantities exceeding 1 cubic meters per day must be designed in accordance with a detailed specification of the consumption and the designation.
- The system includes two tanks of identical size.

