

Enviro-Septic® System advantages

- Due to the multiple configurations possible, it offers a large design flexibility.
- The installation is quick, easy, and does not require any special tools or filtering media that require periodic replacement.
- It can be installed in sloped areas without the need of supplementary embankments. This reduces the costs and provides an aesthetically pleasing finished product.
- Excellent QUALITY/DURABILITY/PRICE ratio.
- No mantle required

Enviro-Septic® System characteristics

- It makes it possible to build an effective infiltration system having a longer service life compared to traditional systems.
- The installation is quick, easy, and does not require any special tools.
- A system that forgives! The round shape of the biomat which has established on the circumference of the pipe encourages the rejuvenation of the treatment and evacuation capacities following improper use of the system.
- A tested technology: more than 100 000 installations to date in North America.



ADVANCED ENVIROSEPTIC®

Preserving nature's ways.



Biological and ecological treatment system

No moving parts | No electricity | No mantle

The simplest, most cost efficient tertiary quality Class 4 system



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PROTECTING OUR ENVIRONMENT

Approved as an alternative to a Class 4 System producing Tertiary Quality Effluent

Over 150,000 systems installed!

Approved in Canada, the USA, Mexico and Europe

The Enviro-Septic® System is easy to install, does not require a stone layer, does not require a mantle, does not require hydro if gravity flow is achieved, no moving parts, no media to replace, and now is priced similar to that of a conventional, pipe and stone system.

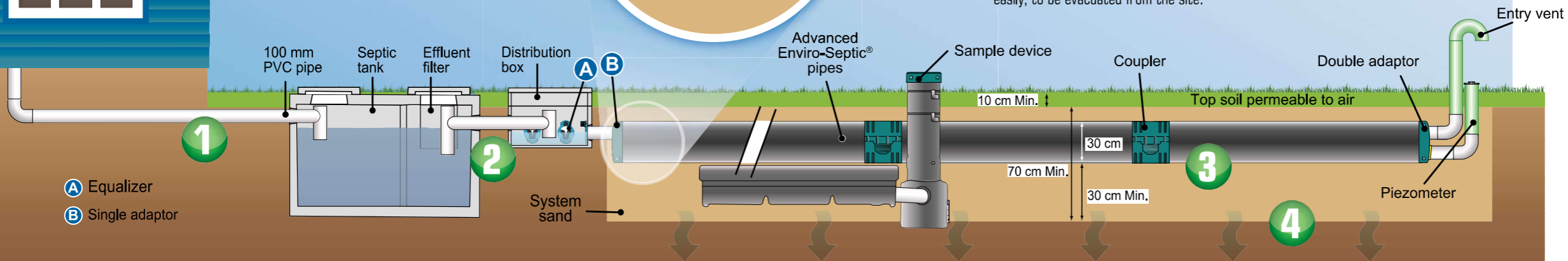
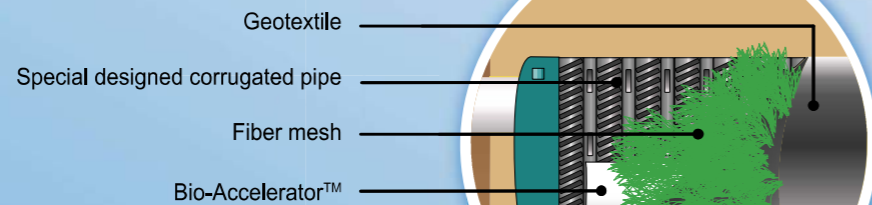
The system requires system sand which is readily available at most sand and gravel suppliers across Ontario. In some case System Sand is priced below filter sand or septic sand.

Looking for a cost effective and efficient system that produces tertiary quality effluent?

BMEC Authorization & Design Information Available

THE 4 STAGES OF THE WASTEWATER TREATMENT

- 1 The wastewater leaving the house goes into the septic tank where the solids are separated from the liquid.
- 2 The septic tank effluent then flows by gravity into the distribution box where it is evenly distributed into the rows of Advanced Enviro-Septic® pipes.
- 3 The bacteria attaches itself to the walls of the Advanced Enviro-Septic® pipes. They will feed on the pollutants found in the effluent.
- 4 The tertiary quality effluent will now safely infiltrate into the underlying soil protecting the environment.



- A Equalizer
- B Single adaptor

The Advanced Enviro-Septic® pipes is a patented product comprised of four components

- A cylindrical pipe made of high density polyethylene. The walls of the pipe are corrugated to increase the surface area for heat transfer. They are also perforated in order to let the effluent flow out. Each corrugation has a unique notched design which encourages the flow of air around the pipe. The flow of air is necessary for the proliferation of the bacteria that is responsible for the treatment of the wastewater.
- The Bio-Accelerator™ allows for a fast ramp-up time.
- A randomly oriented fiber mesh covers the pipe, facilitates the supply of oxygen and acts as a support structure for the biomass.
- A non-woven geotextile membrane is sewn around the pipe to prevent sand from entering the pipe.



ENVIRO-SEPTIC® PROCESS

- A The wastewater from the septic tank will flow by gravity into a distribution box equipped with equalizers. From the distribution box the wastewater is evenly distributed into the rows of Advanced Enviro-Septic® pipes.

The effluent arriving into the Advanced Enviro-Septic® pipes is cooled to ground temperature. The corrugations of the pipe facilitate this process by providing a large surface area for heat exchange. The system acts as an underground radiator. The cooling process encourages the separation of greases and some of the suspended solids. The solids, that are lighter than water, float to the surface as foam. The heavier solids will end up at the bottom of the pipe to create scum. These solids remain inside the pipe and helps prevent the soil from becoming clogged.

- B The effluent leaves the pipe through the perforations found on the entire circumference of the pipe. Afterwards, it works its way through the mat of plastic fibers where the bacteria have settled to treat the additional amount of suspended solids. The mat of plastic fibers is conditioned by the liquid level fluctuations inside the pipe, which is caused by the peak periods of water use in the house. This aerobic/anaerobic condition encourages the proliferation of the bacteria performing the treatment.

This process is similar to the deterioration of a wood picket fence. The deterioration always starts at the ground level where the humidity conditions change from day to day, and where the bacteria accelerate the wood's deterioration.

- C The effluent travels through the geo-textile where another layer of bacteria is forming on the internal surface. By capillary action, the geotextile and the surrounding sand gather and distribute the effluent on the pipe's circumference, which facilitates the evacuation of water to the surrounding ground. This phenomenon can be compared to the wick of an oil lamp in which the fuel moves towards the area where the combustion occurs.

- D The treatment continues as the effluent passes through the system sand that surrounds the Advanced Enviro-Septic® pipes. When the water finally reaches the receiving soil, almost all of the contaminants have been removed from the water. It thus infiltrates into the ground much more easily, to be evacuated from the site.

