

TONITOTEC WASTE PRODUCTS

QUALITY NOT ON COMPARISON



ABOUT US

Tonitotec is a leading bio-digester septica installer

Tonitotec systems are:

1. Not exhausted
2. Maintenance free
3. 7 years written warranty
4. Installed by trained technicians.
5. Meet the recommended effluent(wastewater) discharge for soaking limits.
6. Flexible on the positioning.
7. Made out of reinforced, properly vibrated concrete.
8. Airtight and watertight thus no smells

Best onsite sanitation systems

We solve waste water challenges

TONITO-TEC WASTE PRODUCTS

Home of waste water management Kenya



WHAT IS TONITOTEC BIODIGESTER

WHY YOU NEED A BIODIGESTER SEPTICA

A Tonitotec biodigester is an onsite sanitation sewer system that is installed instead of an ordinary septic tank. Unlike septic, it is not exhausted because the organic solid droppings we dispose of in the toilets are able to degrade and the resultant water-soaked to the ground.

We install a grease interceptor on the kitchen drains as a solution for this greasy water. Our soakages are at least two times the daily discharge from a building.

TONITO BIODIGESTER BENEFITS

- **NOT EXHAUSTED**
- **7 YEARS WARRANTY**

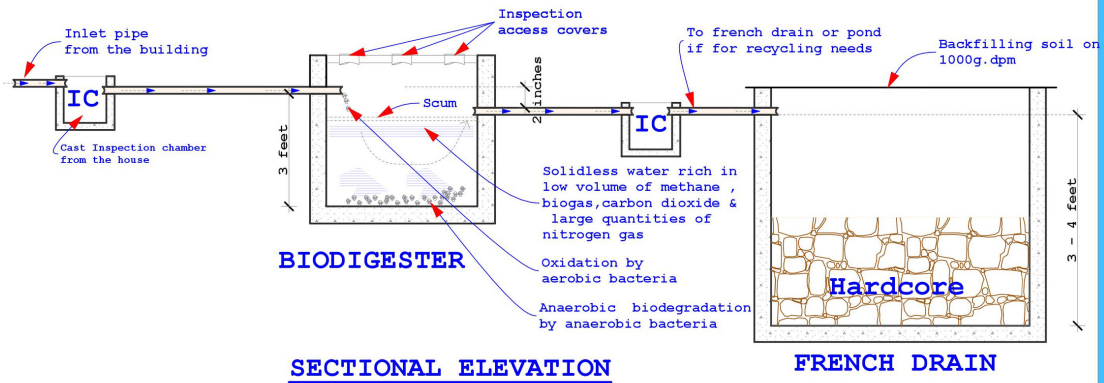


Factors that we consider

1. The capacity of the proposed building. Every building is subdivided into housing units. Each unit has a maximum number of people that it can accommodate at any given time. These people are the ones that generate waste water. On average, a single person will generate 123 liters per day. So, to get the local consumption per day (Lpcd), I will multiply this value with the number of people in the entire building (p.e). With these values I will be capable of calculating the size of the sewer plant based on; hydraulic retention time (Hrt) of 6-8 hours and mean cell residence time (mcrt) of 7 days. The explanations for the latter will be done in future posts. This means that the soakage' sizes will be directly proportional to at least 5 times more the daily discharge. From this information, you can easily tell that there is no size of a sewer system that fits all. That's said, the number of people that you are looking forward to house in your building, will influence the size of suitable onsite sanitation sewer system and also the cost for the biodigester.
2. Your location. Where you are building is important to us since we have to travel to make it to your place so that we can provide a solution for you. As you will come to appreciate, Sites around Nairobi area tend to have a similar cost approach. This is because of their proximity to our offices. When we talk about a location, other factors come to play like; availability of skilled manpower and ease of acquiring building materials. This will also affect the cost of the biodigester that we will install at your site.
3. The scope of work to be done. Our onsite sanitation sewer systems are installed underground within your compound. This simply means that you should be expecting some civil works like excavations, filling in hardcore and backfilling to your normal compound ground level. Still, our products are made out of well vibrated and reinforced concrete. So, there will be indirect waiting costs for curing and the construction team will also need subsistence from our company for their accommodation. As much as people want to pay the least cost that they are able to negotiate, the construction team will expect to be paid in full and on time. If you have been in the construction industry in Kenya, you very well know that suppliers will be expecting nothing short of their payments.
4. Nature of soil. Type of soil is important in onsite sanitation as all water generated from within the building, has to be contained within the confines of

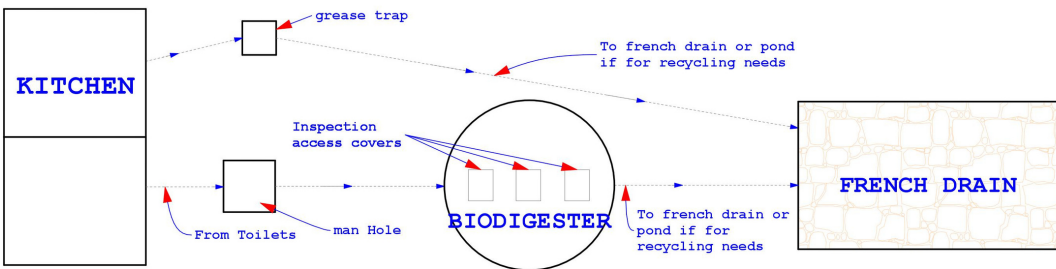


BIODIGESTER ILLUSTRATION PLAN



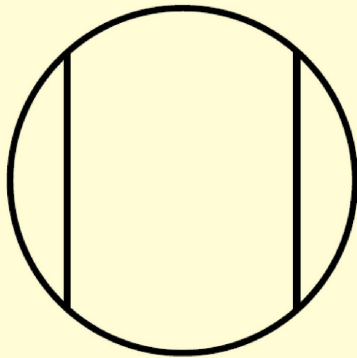
SECTIONAL ELEVATION

FRENCH DRAIN



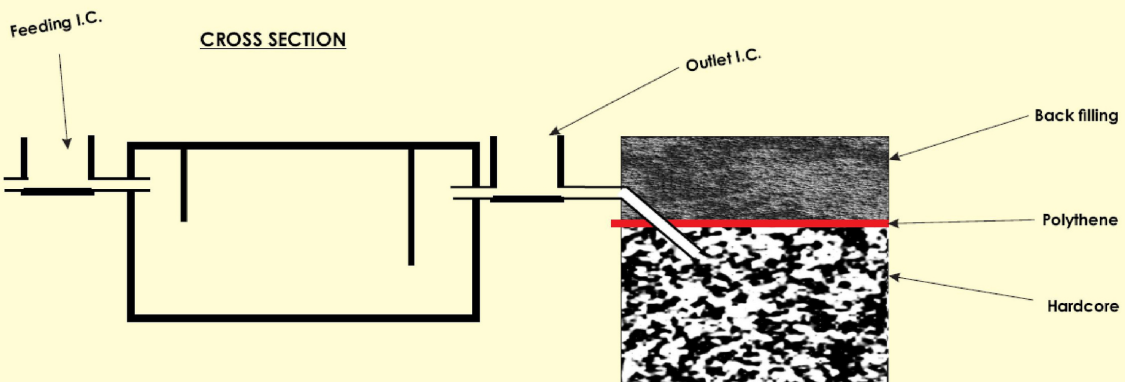
GROUND LAYOUT PLAN

TOP ELEVATION



BIO-DIGESTER

CROSS SECTION



Tonitotec onsite sanitation system drawings

BETTER METHOD OF HANDLING WASTE WATER

Institutional waste water

For institutions like schools, hospitals and churches can benefit from a Tonitotec onsite sanitation sewer system. Locally, they are called biodigester but they are primary waste water treatment plants. The resultant water can be soaked or further treated for reuse.

Basically a biodigester is an onsite sanitation sewer system gadget. By onsite I mean that waste water is contained within the compound where it has been generated. The water should be contained underground within that building's compound. I know that you have been to suburbs where waste water is channelled by the roadside. Disgusting, right! What those buildings lack is an onsite sanitation sewer system. Tonitotec bio is just one of the few effective onsite systems in Kenya. When we talk about a gadget, we mean something like an incubator. This provides a conducive environment for microorganisms to grow and multiply so that they can eat up/degrade the organic matter in the waste water. I know you are wondering if those microorganisms die. Yes they do but their regeneration time is only 30 minutes. The by product for degradation is largely water, methane gas and traces minerals like sodium.

Prepared by:

Anthony Muriuki
0728849209



OUR CLIENTS



SCHOOLS

HOSPITALS

HOTELS

CHURCHES



ALL OVER KENYA

since March 2012

In the past 9 years, we have installed biodigester septica systems in majority of Kenyan counties for varied clientelle.

0728849209