

Sewage, Fosse & Septic Tank Sanitation in Portugal

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Most town & city homes in Portugal will have a fairly bog (pardon the pun) standard sewage system that most of us have lived with for most of our life & those don't need any explanation here but many/most rural homes don't have that facility & instead rely on either a 'fosse' system which is also sometimes known as a French drain system or alternatively the sealed septic tank system so let's look at those last two.

A fosse consists of one or more underground compartments which (most commonly) has a bare earth floor (not concrete) & the solids & liquids fill the first compartment & then overflows into the second compartment & then the third compartment (if there is one) & solids sink to the bottom of each compartment & break down (by chemical process) from there whilst liquids seep away into the soil & if working correctly, such a system should never need emptying at all.

It's often said that you should never flush ordinary toilet paper into a fosse but from my experience it's not a problem at all IF (note the big IF) the fosse is working as it should. However, feminine hygiene products & prophylactics etc should never be flushed into a fosse.

A properly functioning fosse is meant to operate at full or near to full capacity, so don't panic if you look into an inspection hatch & see it's almost full as if it is working properly then it doesn't need to be emptied.

However, the bad news is that a fosse can go wrong & stop working as it should & this is most likely to happen in a property has been unused for a considerable length of time & most common cause is the liquids have drained away, the solids have hardened on the bottom of the compartment & formed an impenetrable layer that prevents the new liquids soaking away & the easiest way to solve that problem is to first have the fosse pumped out & then dig a couple of trenches (usually 4-5 metres long each) from the last compartment of the fosse sloping downwards from the compartment & then knock a hole or two in the wall of the fosse (at the top) & lay in the required length of 'land drain pipe' which is a flexible, perforated pipe that allows the liquid to soak away into the soil & over time, the hardened solid layer at the bottom of the tank will soften & the chemical process of breakdown of solids will restart.

https://www.youtube.com/watch?v=rnR_y4-gdBI

Also try not to use bleach based products in anything connected to a fosse as it might slow or even stop the chemical breakdown process & it helps to maintain a healthy fosse if you empty an occasional sachet of 'Fosse Septique' or similar which you can buy from most supermarkets.

If a fosse stops functioning properly & simply can't be restarted & you are unable to install land drain pipe then you have the options of either installing a new one or simply treating it as a sealed septic tank which means you just need to contact your local Junta or Camara every few months & have them come & pump it out for you.

Which brings us to the sealed septic tank system & these are exactly what the name says in that it's a large (usually plastic) tank buried in the ground that is a simple holding tank that needs to be pumped out when full.

This system is not as common as a fosse in rural areas but is often required if the house is close to water such as an important trout river or anywhere at all near to an important water source such as Lake Cabril or Castelo do Bode & similar.

It's not uncommon for many Portuguese houses to suffer from sewerage smells in bathrooms & even sometimes kitchens or any room that has a waste pipe (and sometimes rooms that don't!) & although this can be caused by a faulty seal on a waste pipe access point (which is a metal plate on the floor) & easily fixed the most common cause (by FAR) is a lack of traps/siphon traps on the plumbing system & in some (but not all) cases this is relatively easily solved by fitting such items in appropriate places.

[https://en.wikipedia.org/wiki/Trap_\(plumbing\)](https://en.wikipedia.org/wiki/Trap_(plumbing))

Another cause of such smells can be a lack of elevation on the stench pipe & this is usually easily solved by adding a few metres of pipe on top to take it above roof level.

It should be noted that Portuguese plumbing is very often ummmm..... not exactly what many of us would wish for or are used to & waste & drain pipes are often significantly smaller in bore than many other countries & the degree of fall on them is very often only a fraction of what one would wish for which sometimes means a lot more blockages that is desirable & one essential tool you will eventually need is a pressure washer with a jetter drain & sewer cleaner so if you haven't got one then try to find someone who has as they make a difficult job easy & as a word of caution, NEVER, EVER put any kind of fat or oil down the sink.

[Clog Hog® Sewer Jetter Drain Cleaner — See It in Action - YouTube](#)

This piece would not be complete without mention (or should that be curse) of the stunningly ridiculous design of the push button toilet syphon valve used here which really are the spawn of the devil & I'm utterly convinced was designed by a madman or a sadist.

You can expect the syphon valve to only last something like 2 -3 years after which they are very likely to need replacing & the way to do it is to first turn the water supply to the cistern off, flush it so the cistern is empty & then

ignoring what looks to be the logical solution of unscrewing the collar around the push button, try to lift the lid of the cistern up & either backwards or sideways (left or right) & it will probably come away from the cistern itself & if that doesn't work then you might have to push the centre button down & lever the collar upwards to disconnect it from the valve itself. (As I said, spawn of the devil!)

Once you can see into the cistern & the valve inside it, you then need to look underneath where you will see 2 threaded bolts with wing nuts & when the wing nuts are removed, you can lift out the cistern, tip any remaining water down the loo & only then can you use your pipe grips to unscrew the syphon valve & replace it..... But your troubles are not over yet, as once the new syphon valve is installed & the cistern refitted, you now have to adjust both the overflow setting & the flush button to make them work as they should & then once everything is refitted & correctly adjusted you can then expect to have to play with those settings once every 2 or 3 months & the more toilets you have, the more toilets you have to go wrong.

And I'm happy to say I managed to explain that little lot in layman's terms with only making a single toilet humour joke right at the start.

So I'm quite flushed with pride about that! ;)