

Soak Away Pit Dimensions and Notes:

1. For families, you can generally build a good soak pit with a 1 meter diameter and 1 ½ meters depth. For public places it depends on the quantity of wastewater generated. E.g. for a small public place of 100 people, the pit can be 1m diameter and 3-5 m depth.
2. For village or full concession use, build one *at least* 2 meters diameter and 2 meters deep.

Some Considerations:

1. Soil infiltration? Soil Type?

If you have sandy soil, the water will drain more quickly than with more clayey soil, but it is not as supportive on the walls. Clayey soils tend to need a bigger soak pit to compensate for the slow infiltration.

2. Amount of water outflow?

The source of wastewater affects outflow. You might want to increase the size of your soak pit depending to the quantity of wastewater produced. E.g. in a public place where there is a huge quantity of wastewater, a soak pit may *not* be used and an appropriate method can be selected for more accuracy.

3. Does water have particulates? Soap only?

Water with particulates in it will fill your soak pit hole quickly! In this case, you might need to add a makeshift settling tank or clarifier before the water drains into the soak pit. You could also add a screen to your pipe and periodically clean the surface to facilitate drainage without problematic solids.

It has been found that in areas with bad infiltration and hard soils, layers of sand and gravel in the bottom of the soak pit help to maintain the bottom of your hole by creating spaces for continual water flow and seepage. If your soil absorbs a lot of water, you will have nothing to worry about, and might be able to fill it with only rock. Clay and rocky soil definitely needs these sand and gravel layers to do the job right.

Don't Forget Maintenance

The life cycle of a soak pit is generally 3-5 years (although the wash area may last longer since it is mainly a concrete slab – if children misuse it or large herd animals walk on it, this may decrease its life cycle). How you cover your soak pit may increase or decrease this cycle. If you choose the traditional, village way to cover your soak pit, the cost is cheaper initially, but 3 or 5 years later, it may need to be opened up, cleaned out, and refilled with the layers of sand, gravel, and rocks. Opening up layers of sticks and mud may be difficult, or may have decomposed in a way that eventually clogs the PVC pipe. Using the improved cover (a cast, concrete slab) makes opening up the soak pit easier in the future, if there are problems. The improved cover also ensures that the open space in the middle of the soak pit stays open to encouraged seeping of the wastewater. Keep in mind that just because your soak pit has a problem, it does not mean that you need to start from the beginning again. Soak pits may be opened, cleaned out (spreading out small amounts of the wastewater over large areas for fast seepage), and re-filled with the same rocks. Put on your gloves (that wastewater can be dangerous!) and re-use the same hole.