

GRAVITY

A conventional gravity system is the simplest and often cheapest septic system available. This system consists of a septic tank and a drainfield (AKA leech field). The septic tank must be placed accordingly so that it is downhill from the home/building's plumbing. A bio-microbial process in the septic tank treats the waste before it reaches the drainfield. As the septic tank fills, effluent leaves through an outlet and is transported by gravity to the drainfield. The effluent is then dispersed by a distribution box into several lateral lines where it is filtered through the soil. By the time the effluent has filtered through the soil and reached the water table, it is clean.

A pump will be incorporated into the system if gravity flow cannot be used to transport effluent from the septic tank to the drainfield. This can be done multiple ways depending on site conditions. Systems that include pumps will also include high-water alarms which will go off if the system begins to back up.

Gravity systems should have an operation and maintenance inspection done every three years of operation. Concurring reports may need to be turned in to the county.

Septic systems are sized according to the amount of waste they will be treating, usually estimated by the number of bedrooms in the home. For non-residential buildings, water usage usually determines the size.

The most basic drainfields include parallel, 60-foot-long lateral lines that are spaced six to eight feet on center. More intricately designed drainfields may include lateral lines of varying lengths (from 36 to 60 feet) that branch out from the distribution box in multiple directions.

Upon installation, the only parts of the system that will be visible from above ground are 24-inch riser lids above the tank, a distribution box lid, and observation port lids at the ends of the lateral lines. Each of these lids will be flush with the final grade and can be walked on, mowed over or disguised to lessen noticeability.

Drainfields should be treated as fragile to increase their longevity. Large animals such as cows or horses should not be kept on drainfields and vehicles should not be driven over them. Vegetation with intrusive roots should not be planted near them. Finally, a home owner should be mindful of what is going into the system.