

Percolation Test/Procedures

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The starting point for determining what septic system you need on your new home, or replacement system on an old home, is the percolation test. This is a procedure done to determine how fast the soil in your lateral field area will absorb water. The faster it absorbs water, the smaller the field that is needed.

When you contact our office for a new septic system, you will usually end up talking with Mike Downing about this. Someone else may take the initial information but Mike is the one that does most of the tests and will make the arrangements to meet with you. When you call, we fill out a request card that has all the contact information for you on it, the location of where the system will go in, and some details about the house (number of bedrooms, presence of such things as garbage disposals, water softeners, etc.)

We would caution that percolation tests are not done as soon as you request them. Because we do all the work for four counties (plus Lake Panorama) there is ALWAYS a lengthy list of tests to be done. We do juggle them around to be sure no one has to wait a long time.....but failed systems, nearly completed houses, etc. do get first consideration. So be sure to request the test well in advance of when you really need it whenever possible.

About a week before the test is done, the technician (Mike) will call to set an exact date, arrange to meet someone there, etc. We prefer to meet someone on site to be sure that we do the test in the right spot. Also, it is a good time to answer whatever questions you may have. Also, a One Call is done to be sure all under ground utilities are located.

In the Chapter I rules on septic systems in the Appendix (see that web page) there is a detailed procedure of how the test is done. In general terms, a series of holes are dug 3' deep and 6" in diameter. A plastic sleeve is put in and pea gravel is put in the annular space between the hole wall and the plastic pipe. The holes are soaked for a minimum of 4 hours and then timings are done for a minimum of an hour to determine the rate that the water is absorbed. This information along with the information on your house determines the tank size and the lateral field size.

Some soils can absorb water so slowly that lateral fields are not usable. In such cases, sand filters that surface discharge are used in the rural areas only. Within Lake Panorama some sites can utilize a high tech system called drip irrigation. But it should be noted that at the Lake some lots perc so poorly that no system can be installed and permission to build a house will be denied.

Some people will be familiar with a soil testing technique called **soil analysis**. Many counties have soils experts that study the soil structure, color, composition, etc. The size of the system is determined by what information he collects. In our four counties we do not use that method and anyone considering it should first get permission from this office. One should also be aware that the cost of this test is two to three times more expensive than a percolation test.

Also, everyone should be aware that either the percolation test or the soil analysis method is only a guide to how the soil will work for a septic system. Although 90+% of the time perc tests and soil analysis will provide good information and the system will be fine, there are always exceptions where a soil will test out okay but a system will fail. The testing does not guarantee anything but it does provide information that makes the system much more likely to be successful.

As shown on the web page on pricing, the cost of the percolation test is two-level. In the rural areas, it usually only takes one meeting to arrange the test so the test costs \$200.00. The fee is \$225.00 within Lake Panorama. The higher cost is due to the fact that because of the small lots and poorer terrain several meetings with real estate people, contractors, buyers, sellers, etc. are usually required before the percolation test site is chosen.

Again, be sure to request the percolation test as early in the project as possible. When systems fail, no one can plan ahead. Due to the serious consequences of a failure, those are moved to the top of the list.