

Percolation Test Requirements

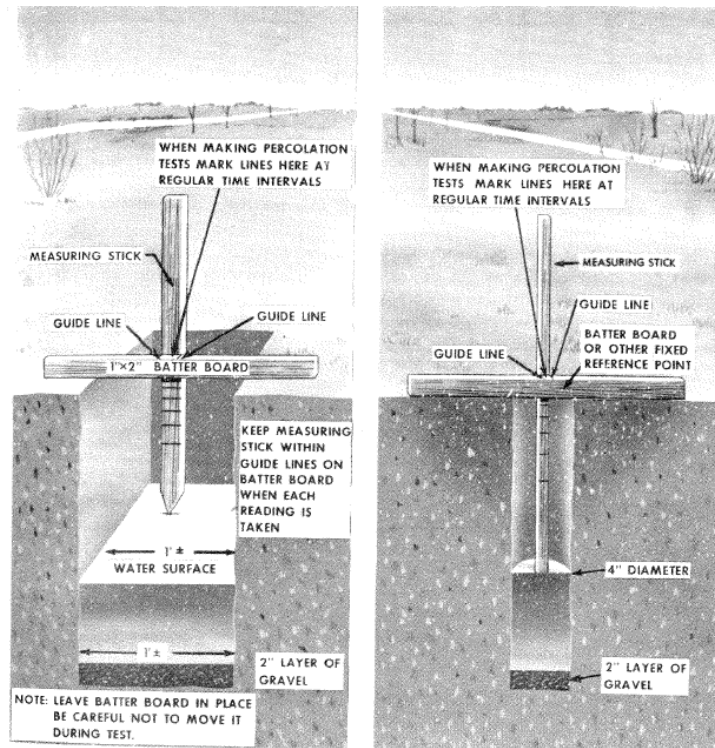
Soils percolation test shall be prepared by a **Qualified Professional (QP)** or by an individual under the supervision of a QP. The following are considered QP: A California Professional Geologist, a California Certified Engineering Geologist, a California Registered Professional Engineer, California Registered Professional Soil/ Geotechnical Engineer or a California Registered Environmental Health Specialist.

The following are requirements for a soils report from a soil percolation test. Please address these points on the soils report and include a summary and type of method used for the soil percolation test.

- A minimum of two percolation test holes are required for each septic system
- A minimum of three percolation tests per test hole is required
- Percolation testing shall be performed within 35 feet of the proposed leach field
- The location for percolation testing shall be selected so as to provide a good representation of the entire leach system
- A site map shall be included showing the location of the following:
 - Proposed/existing structures including leach line location
 - Boring/ test holes
- The slowest percolation time observed shall be used to determine leach field size unless five or more test are performed per hole. If five or more test are performed the average percolation time may be used
- Test holes depths shall be representative of the leach line installation depth
- All percolation rates shall be displayed in minutes per inch
- Each report shall be wet stamped and signed with an original signature by the QP who either performed or supervised the testing
- Data log must be submitted showing all tests. Submit a Kern County “Percolation Test Data Log” form or use a similar log. Show rate in minutes/inch.
- Percolation tests shall be made in general accordance with the *Public Health Service - Manual of Septic Tank Practice*. Describe the method used in the report. The following is an acceptable method of conducting a test:
 - Dig or bore a hole with horizontal dimensions from 4 to 12 inches and vertical sides to the depth of the proposed leach line
 - The sides and bottoms of the holes shall be scarified so as to remove the areas that became smeared by the auger
 - 2-4 inches of gravel shall be added to the bottom of the test holes to protect the bottom from scouring and sediment
 - Presaturation – carefully fill the hole with clear water to a minimum depth of 12 inches over the gravel and allow the soil to saturate and swell for a minimum of

4 hours. In most soils it is necessary to refill the hole by supplying a surplus reservoir of water to keep water in the hole for at least 4 hours and preferably overnight. In sandy soil where the first 6 inches of water seeps away in less than 20 minutes (after swelling period is complete) a shorter presaturation period may be used

- After presaturation is complete, fill the test hole with a minimum of 12 inches of water over the gravel and measure the rate of fall in minutes per inch
- Use percolation rate to determine California Plumbing Code CPC soil type (1-5) and to determine leach line length
- **NOTE:** The Ryon method may be used in lieu of the CPC method to determine leach line length for projects that are fully engineered
- **NOTE:** Leach lines and seepage pits are not allowed in Type 1 soil. Imported fill material or a mound system may be used but will require a percolation test of the imported fill to be conducted and reviewed by Environmental Health before installing leach lines
- **NOTE:** 100% expansion area may require additional percolation testing when used



Examples of percolation test methods

Percolation Rate (min/in)	CPC Soil Type
<1	Disposal not allowed, contact EH for guidance
1 to 3	2
3+ to 10	3
10+ to 25	4
25+ to 60	5
Greater than 60	Disposal not allowed, contact EH for guidance