



INSTRUCTION MANUAL

CASAGRANDE PIEZOMETER

Model CP

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1 APPLICATIONS

The CP piezometer series are used as open standpipe or Casagrande type piezometers. They are designed to economically measure pore water pressure or ground water level.

2 PRODUCT

The CP piezometer series consist of a porous plastic filter, which is crush resistant for CP15 model and protected inside a perforated rigid PVC body for CP1 model. An adaptor allows the use of PVC riser pipes. The latter are provided with flush screw joints.



Figure 1: CP15 (left) and CP1 (right) models

3 INSTALLATION PROCEDURE

1. Drill a hole to suitable depth and diameter in the ground.
2. Use PVC cleaner to clean the end portions of all pipes and piezometer tip.
3. Use PVC solvent cement to glue piezometer tip to a first pipe.
4. Follow carefully specified borehole sealing procedures which can incorporate a bentonite plug at bottom of borehole, clean filter sand at location of piezometer tip and bentonite or cement-bentonite plug above piezometer tip.
5. Assemble PVC pipes together by screwing the screw joints and using a layer of Teflon tape or Teflon liquid at each joint to avoid the joint threads to be stuck. The threads are of self-locking type and do not require further sealing.

Note: It is necessary to seal the joints. A good watertightness is important to be sure that measurements are done at filter level and not above.

6. If necessary, prepare the bottom plug in the borehole and the lower part of clean sand filter.
7. Lower the chain of piezometer tip and pipes to the specified depth in the hole while adding the necessary number of pipes.
8. Complete the specified sealing of the borehole by adding filter sand and bentonite or bentonite-cement.
9. Allow for some time for water level to stabilize. That period depends on soil permeability.
10. Use a vented protective cap on top of pipes between readings.
11. Take readings of water level thanks to a probe as CPR model (see separate manual for use instructions). A piezometer as PWS model allows a continuous monitoring of the pore-water pressure.

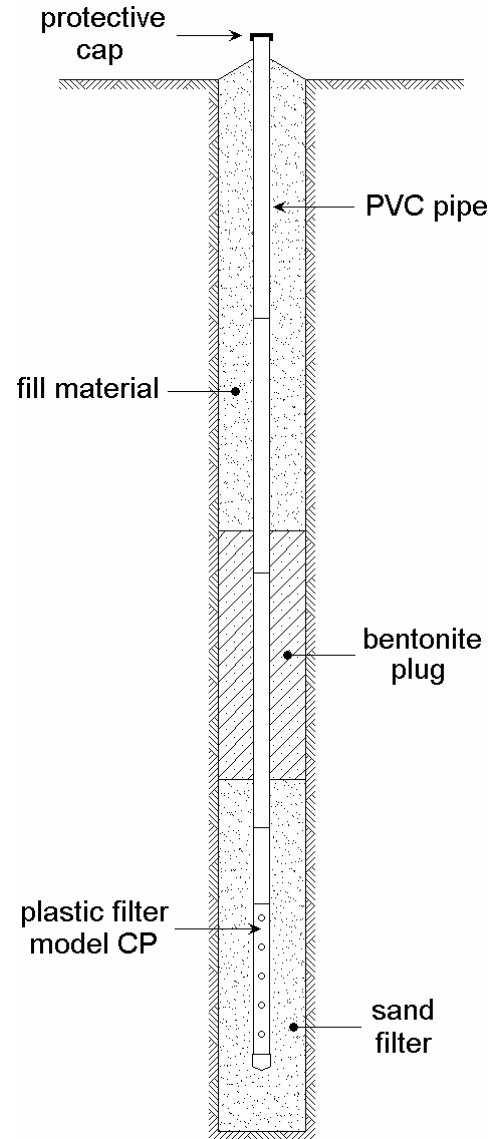


Figure 2: Typical installation