



Installation:

The depth of the sampler is measured at the middle of the ceramic tip, so the bottom of the sampler will sit 3cm below the desired sampling depth.

- Place all samplers to be installed in a bucket of RO water to soak for at least 20mins before installation. Undo the stopcocks on the sample tubes to allow the water to travel into the ceramic.
- Auger a slightly oversized hole, using a 43cm auger. Auger the hole to 1cm below where the bottom tip of the ceramic will sit, which should be 4cm below the desired sample depth.



- Place the soil from the auger into a small jug and mix it with water until the slurry is the consistency of yoghurt.
- Pour slurry into the hole to a depth of around 1cm.
- Insert the soil solution sampler vertically into the hole and pour the remaining slurry around the shaft.



- Use a narrow stick to poke around the shaft to remove all the air bubbles.



- If the top of the sampler shaft is resting below the soil surface, pack a small amount of bentonite on top and poke slightly down the sides of the shaft, using the stick as before. Avoid placing bentonite too far down the shaft, as it will interfere with the operation of the ceramic cup.



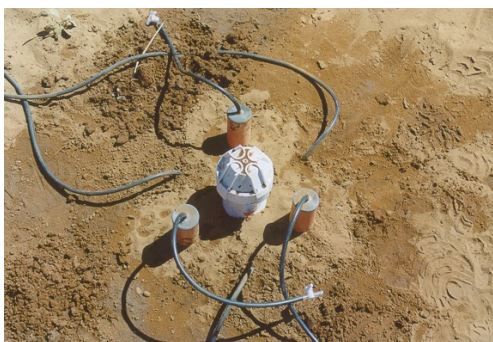
- If the top of the sampler is resting above the soil surface, do not add any bentonite, just pack the slurry to the top of the hole and pat dry soil around the shaft.
- Cover the remaining hole with soil, and pack down firmly without compressing or moving the sampler.



- Close the stopcock on the sample tubing.
- Install all other samplers in the immediate area.



Instructions for installation and use of Sentek SoluSAMPLER



- Stake the sample tubing from all the samplers in a vertical position, with the stopcocks at the top. This prevents soil or insects from contaminating the tubing.



- With all samplers installed, flood the area with around 10L of low EC water, and allow the water to infiltrate overnight. This will bed down the samplers, and ensure good contact between the soil and ceramic cup.

Taking Soil Solution Samples:

- Irrigate the area of the samplers at least 1 day before taking the sample.
- Take a 50mL syringe with no needle, and insert it into the stopcock. Undo the stop to allow air flow, and pull a full 50mL on the syringe.
- Hold the suction on the syringe and shut the stop.
- Remove the syringe from the stop, and expel the air from the syringe shaft.
- Replace the syringe in the stopcock, and carefully open the stop. Pull a full 50mL on the syringe, and close the stop.
- Leave the suction applied for at least 4 hours, or preferably overnight.
- To retrieve the sample, insert a clean and dry syringe into the stopcock.
- Open the stop, and gently pull on the syringe. Liquid will run into the reservoir. Keep the suction on the syringe until liquid has stopped running into the reservoir. There should be at least 5mL to take an EC reading.

- Close the stopcock, and carefully disconnect the syringe.
- Empty the syringe into a clean, dry and labelled screw top sample container.
- Open and close the stopcock to release all the pressure.

