EnviroPro® sub-surface soil probes - installation guide

The following items are required for the installation of EnviroPro® soil probes:

A 36 to 38mm diameter soil auger and a slurry as described below:

1 - Mix 1kg of fine sand (e.g. Unimin AFS85 grade) and 100g of Bentonite (civil grade, e.g. Unimin Active Gel 150). Place the dry mixture into a suitable container with a lid and shake for 10 to 15 seconds.

2 - Add 1 litre of water, replace the lid and shake again for 20 to 30 seconds.

3 - Wait for 10 to 20 minutes and shake the slurry again, after which the slurry is ready for use.

The weight of the above mixture is 2.1kg and the volume is about 1.4 litres.
The amount of slurry required to install an 8-sensor probe is about 0.7 litre, about 1kg.
Always shake the slurry for a few seconds before pouring it into the hole in the ground.

EXAMPLE:

Install an 8-sensor EnviroPro® soil probe in the ground as follows:

1 - Using the auger, drill a 95cm deep hole (10cm deeper than the length of an 8-sensor probe).

2 - Pour approximately 0.7 litre of the slurry into the hole.

3 - Push the probe into the hole, 2 to 5 kg of force is sufficient, do not apply more than 15kg of force. As the probe is pushed into the hole it displaces the slurry at the bottom of the hole. The slurry mixture fills air gaps around the probe and provides uniform contact with the soil. In order to monitor the top 10cm of the soil, the top end of the probe needs to be 2.5cm (1") below the surface of the soil.

4 - Remove any surplus slurry mixture from above the probe and cover the top of the probe with soil.

NOTES:

A - Always allow more slurry than needed for the number of probes to be installed, so as to be prepared for the unforeseen. For example, the probe position may be on top of a rip line so needing more slurry to fill the cavity caused by ripping.

B - If the probe cannot be pushed down to the required depth on the first attempt, pull up the probe, clean out the existing hole and re-pour the slurry into the hole. This may be necessary if a side of the hole collapses. Do not apply more than 15kg of force to the top of the probe.

C - This slurry method is optimised to give the best results. Using other slurry methods (e.g. slurry made from the existing soil) makes it very difficult to avoid air gaps between the probe and the soil. Air gaps significantly degrade the performance of the soil probes.

GUARANTEE :

This product is guaranteed against faulty workmanship or defective material, for a period of 5 (five) years from the date of delivery by EnviroPro® Soil Probes.
EnviroPro® Soil Probes undertakes to replace without charge all defective equipment which is returned during the period of guarantee (transportation costs prepaid) provided there is no evidence that the equipment has been abused or mishandled in any way.
In the interests of continuous product improvement, EnviroPro® Soil Probes reserves the right to alter any specification without prior notice.

EnviroPro® soil probes

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