

Installation Methods

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Camilla
April 1
Statesboro
April 3

Installation Method 1

- Direct installation method (Drill & Drop):
 - Consists of drilling a hole that is similar to the diameter of probe and forcing the probe into the hole.



- This allows for sensor to soil contact while disturbing the native soil horizons a little as possible.

Installation Method 2

- Slurry installation method:
 - Consists of drilling a hole that is larger than the diameter of probe and using the extras soil removed from the hole to create a slurry mixture with water.
 - The slurry mixture is poured back into the hole with the sensor to eliminate any air pockets or lack of sensor to soil contact.
 - The main problem with this method is the soil horizons are usually mixed around the sensor.





Hazelhurst,
GA



Prattville, AL



Florence, SC

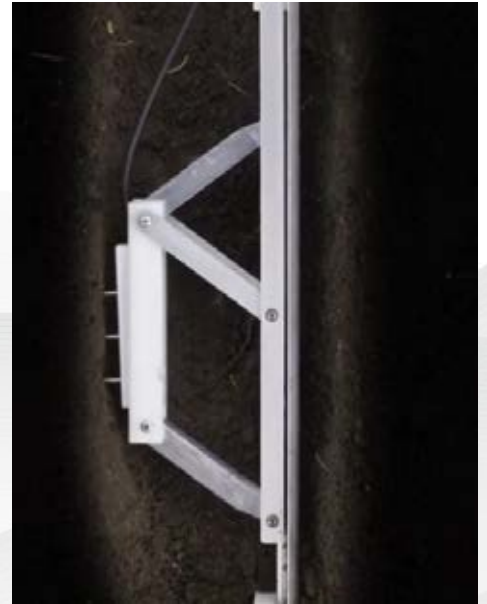
Installation Method 3

- CropX probe:
 - Consists of drilling a hole with the proprietary CropX drill bit.
 - The probe is twisted into the soil with an installation bar with slight downward pressure.
 - The sensor is designed to be installed at different depths.
 - No disruption to the soil profile.



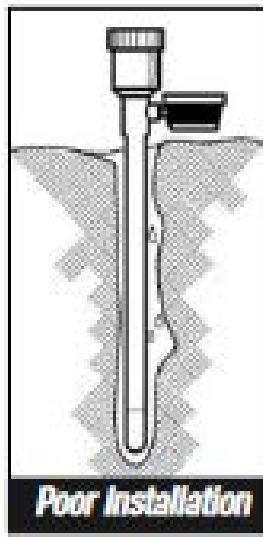
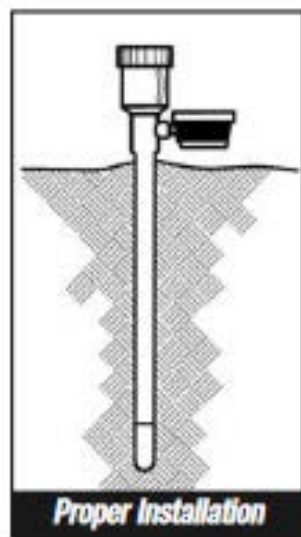
Installation Method 4

- Meter Teros probe:
 - Consists of digging a large diameter hole
 - The probes are installed into the side of the hole at the specified depths
 - Use a type of pvc or conduit to protect wires
 - Repack the native soil into the hole
 - No disruption to the soil profile.



Watermark Sensor Prep

- Tensiometers and watermarks should be soaked in clean water for approximately 24 hours prior to installation.
- They are then installed using the slurry method



Depth Placement in the Soil Profile

- Sensor depths are important to capture moisture movement in the profile:
 - A shallow sensor reading is good to capture smaller rainfall and irrigation events.
 - Can be used to develop weighted averages.
 - Recommended sensor depths:
 - Cotton
 - 4-6", 8-12", 16-24"
 - Corn
 - 8", 16", 24"
 - Soybeans
 - 6", 12", 18"
 - Peanuts
 - 4", 8", 16"

General Installation Tips

- Saturate sensor to assist with calibration
- Mark end rows with flags
- Mark sensor with bike flag
- Affix any antenna to the flag
- Note any important information
 - (serial #, Soil conditions, Ect.)



General Removal Tips

- Saturate sensor beforehand to soften the ground
- Some sensors have GPS features
- Carefully remove sensor. Do not pry



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THANK YOU!



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Ag Day



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Dr. Wesley Porter
Extension Precision Ag and
Irrigation Specialist

**COTTON AND
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Topics:
The latest in cotton and peanut
research.

Tifton, Georgia