

## Preparing for Installation

Before installing the Fertile Earth™ SmartFeeder, read all of the instructions carefully. It's a good idea to do a "dry run" installation (without cutting, applying glue, or assembling the tank), to be sure you understand the instructions before permanently attaching components. Each 1 gallon refill feeds up to 5,000 sq. ft. of turf per month. The device installs into a 1" line or adapts to a 3/4" line with the appropriate adapters (not included). Consult an irrigation specialist for assistance.

## Where to Install Your Fertile Earth SmartFeeder

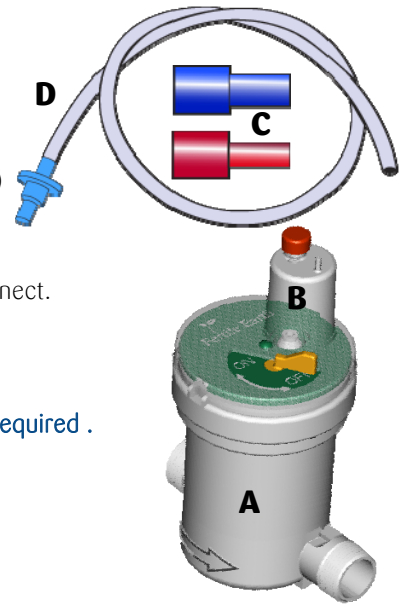
The Fertile Earth™ SmartFeeder can be installed on either a pressurized or non-pressurized line. To feed your entire landscape, install the device on the pressurized side of the line after your backflow prevention device and before all valve boxes (or "T's" in the line). All areas of the landscape down-stream from the SmartFeeder will be fertilized. To feed a specific area in your landscape, install the device on a non-pressurized section after the valve, followed by a check-valve to prevent any siphoning of fertilizer from the reservoir. A code-compliant backflow prevention device is required before installation. Check with a licensed plumber or your local building official to make sure you understand the requirements for back flow in your area.



## In the Box:

The following items are included in your box

- A. Injector & Body (black section)
- B. SmartFeeder Siphon Cap (Red Prime button, Yellow ON/OFF switch)
  - Already attached to the injector body
- C. Flow Directors (1 Blue, 1 Red)
- D. Fertilizer retrieval hose with blue quick connect.



## Additional Items Needed:

The following items are not included but may be required .

- A Shovel
- Phillips Screwdriver
- PVC Cutter or Hack Saw
- PVC Primer and Glue
- Adaptors.** Consult an irrigation specialist for help adapting to your sprinkling system. For 1" PVC, we recommend that you purchase 1 THREADED PVC UNION (1" NPT) and 1 SLIP PVC UNION adapter (1" NPT) from the same manufacturer so that you can interchange the parts to create 2 complete union assemblies with one threaded side, and one slip side on each.
- Teflon® Pipe Tape
- Standard Valve Cover Box (required to protect the device)
- Optional Slip Fix telescoping pipe extender for easier retrofitting into existing sprinkling systems.

## Installing the Injector

Install the SmartFeeder in a standard or jumbo valve box to protect the device from the elements. Install in an area that is not likely to be flooded with water. Make sure that install the device so that there is enough room for the injector and 1 gallon bottle of fertilizer.

### 1. Shut off the water main

Tip: You may also want to manually open one valve to allow water to drain out of the line.

### 2. Dig the hole

Dig your hole between your backflow device and the first valve box in your system. Make sure the hole is big enough to accommodate a standard valve cover box.

### 3. Cut out a Section of Pipe

Cut out the minimum amount of pipe required to accommodate the adapters you have chosen to install into your sprinkling system. *Note: If you do not have room to install the device between your backflow device and your first valve box, build a diversion in the pipe. **IMPORTANT: You may want to build a bypass as shown in Figure 4 to facilitate winterization.***

### 4. Insert the Flow Director

The Flow Director (Part C) nozzle controls the fertilizer injection rate. For most installations, use the **BLUE** nozzle for systems with 15-30 GPM (Friction loss < 5 PSI), into the side labeled "FROM MAIN" of the Injector base (Figure 1). Use the **Red** nozzle for drip systems or systems with less than 12 GPM. (Friction loss < 10 PSI)

### 5. Apply Teflon Tape to Threads

Apply Teflon Tape to the threads on the injector base to minimize the potential of leaking. See (Figure 2)

### 6. Install the SmartFeeder Injector (A)

Using the adapters you purchased separately for your sprinkling system, install the SmartFeeder with the arrow pointing in the direction of the water flow. Allow any glued connections to dry before pressurizing. Make sure that a Flow Director (step 4) is present before proceeding or your device may not function properly. To facilitate future access to the Injector and fittings, LEAVE THE BASE OF THE INJECTOR EXPOSED.

## Attaching Fertilizer Bottle

### 9. Attach the Retrieval Hose (D) to the Siphon Cap (B)

FIRST TIME INSTALLATION ONLY: Press the retrieval hose (the cut end opposite the blue quick connect) over the tube on the Siphon Cap (next to the RED button) so that it is snug and air-tight.

### 10. Attach the BLUE Quick Connect on the other end of the Retrieval Hose to the Bottle.

Lift the tab on the fertilizer bottle cap and press the blue adapter into the hole making sure that you puncture the seal.

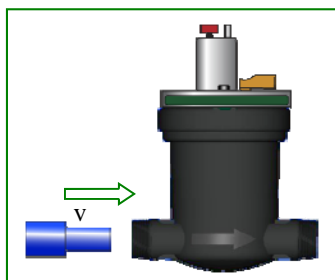


Figure 1: Insert a flow director

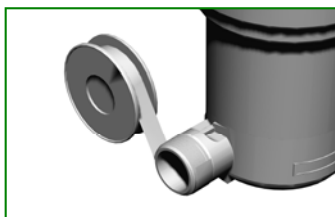


Figure 2: Applying Teflon Tape

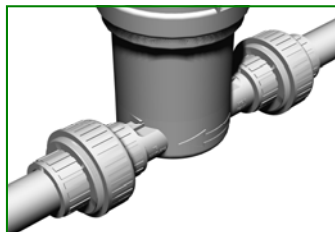


Figure 3: Typical Installation

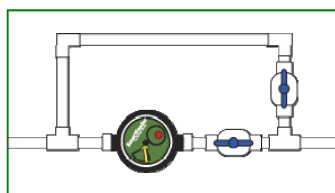


Figure 4: Optional bypass for systems that are blown out for winterization.



Figure 5: Open the bottle cap and press the Blue quick connect into the opening on the bottle.

## Replacing Fertilizer Refills

### 11. Tip & Prime

Tip the fertilizer bottle so that it is slightly past horizontal and press the RED button on the Siphon Cap. The fertilizer should flood the tube and begin filling the siphon cap as shown below. Make sure that the siphon cap is at least HALF full and then place the bottle of fertilizer in the valve box next to the injector. You are now ready to fertilize!

### PROPER PRIMING

The siphon cap works like an medical IV device. You should see a constant drip while the system is running. For best results make sure the clear area Siphon Cap cylinder is at least half-full of liquid and that all connections are snug and air-tight.

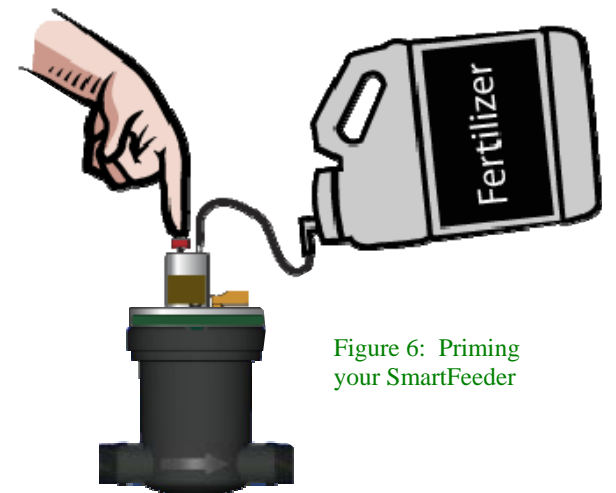


Figure 6: Priming your SmartFeeder

## A PROPERLY INSTALLED SMARTFEEDER



Figure 5: A properly installed SmartFeeder will look something like the illustration above. Notice that the valve box has been placed in the opposite direction of the irrigation system piping to make plenty of room for the fertilizer bottle. A jumbo valve box may also be used to accommodate larger fertilizer bottles for larger landscapes.

Troubleshooting: If you are having difficulties with your device, make sure all connections are snug & airtight and that your SmartFeeder is on. **IF YOU WINTERIZE BY INJECTING AIR INTO YOUR IRRIGATION SYSTEM, YOU MUST INSTALL A WINTERIZATION PLUG (right) TO AVOID CAUSING DAMAG TO THE SMARTFEEDER INJECTOR.**

