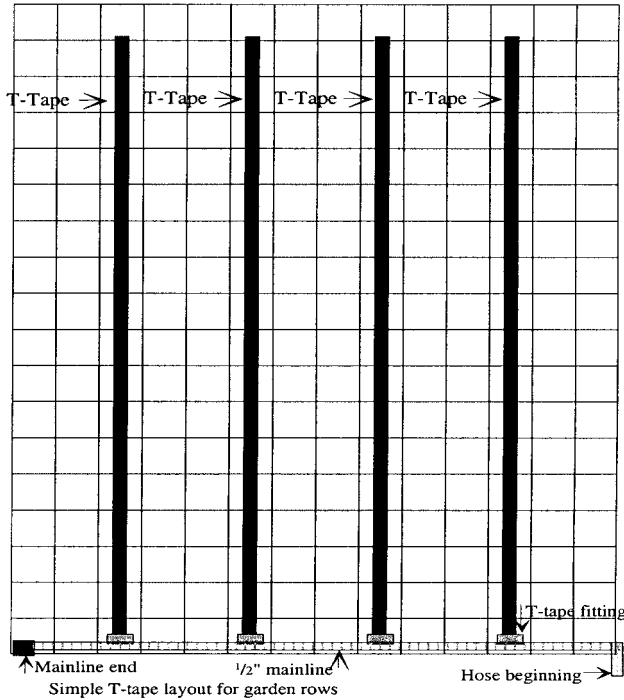


Drip Irrigation Considerations

Before setting up a T-tape or Emitter System figure out how much water is available for your plan. Calculate the rate of flow of water your well or city system provides by measuring the time needed to fill a 1 gallon pail from your spigot. Divide 3600 by the number of seconds it takes: that will be the number of gallons per hour. Don't plan to use more the 80% of that number. If it took 15 seconds to fill the pail, the rate of flow is 240 gph and your layout should not require more than 192 gallons per hour.

Next, draw a layout of your garden or the area you wish to irrigate:



To plan your T-tape layout, draw the lines you plan to lay and calculate the total length of line you are going to use. Next, determine how much water this will require. The low-flow T-tape we supply uses 20 gph per 100' at 8 psi, so a layout using 1000' of T-tape would use 200 gallons of water each hour it is running.

If your plan calls for more water than you can supply, you can use T-connectors and shut-off valves in the mainline to direct the water to different areas of the garden. If you are going to divide your garden to water at different times, consider planning your rows so that plants with similar watering requirements are in the same section.

If your garden is on a slope, plan to lay the mainline at the top and have the drip tape lines run downhill. Different soil types will require different amounts of water.

Using emitters and sprinklers:

Lay out sections of mainline along your nursery rows, using the couplers to join sections. For young plants and trees, one or two emitters per plant are sufficient, larger trees or shrubs will require more emitters, you can get 1/4" line and barb connectors to lay the emitters along the drip line of the plants for better irrigation.

To assemble your drip irrigation:

Attach the vacuum breaker directly to the spigot. If you are using a Y-spigot, attach the breaker to one of the outlets.

Attach the filter to the vacuum breaker. Attach the pressure regulator to the filter. (The cap at the bottom of the filter is for flushing out the filter.)

Attach a garden hose or the smart-loc hose-beginning to the pressure regulator.

To use Smart-Loc fittings:

Turn the collar clockwise until it meets the body of the fitting to open it, put the tubing over the barb and slide it as far as it will go toward the body of the fitting, turn the collar clockwise over the tubing until the col-

lar is tight. Hand tight should be sufficient. Tug to test the connection. (If the connection appears to leak, try tightening it further with a pair of pliers. T-tape is fitted to its connectors in the same manner.

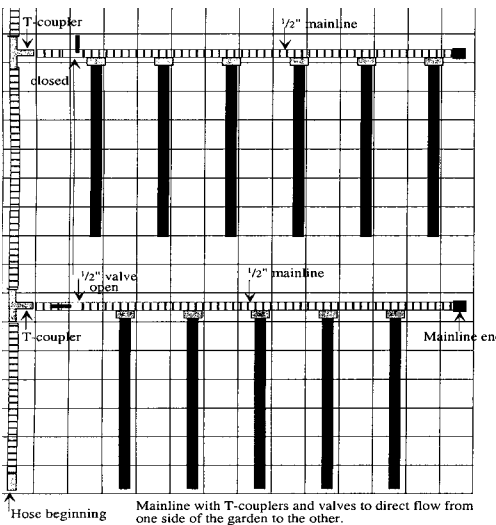
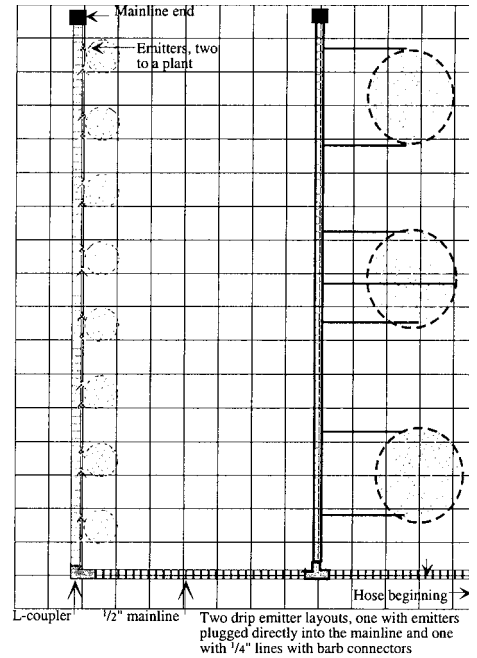
Lay out your T-tape along the garden beds according to your plan. Lay the mainline out and cut to desired length, insert the hose end with cap. Use the punch to make holes in the mainline where the T-tape will connect. Drive the punch firmly into the mainline until you hear a pop. It helps to hold the mainline on either side to stiffen it and prevent it from collapsing.

Insert the barb end of the T-tape fitting into the hole and slide the tape over the larger barb and tighten as above. Repeat for each T-tape line. (If you've punched a hole in the wrong location, use a goof plug to repair the hole and punch a new one.)

Once the mainline is laid out and the holes punched, you can use the U-shaped hold-downs to keep the system in place.

Before closing off the T-tape ends, run water through the system to flush it out. Open the end of the mainline so it will flush as well.

To close the ends of the T-tape, slide the sleeve end over the tape so that the wider opening is toward the end of the T-tape, fold the end of the T-tape over three times and slide the sleeve-end over the folds. It will wedge tight and seal the tape.



For emitters follow the steps above to install the filter and mainline beginning. Lay the mainline along the nursery beds and punch holes for emitters where needed. Pop in the emitters and flush the line.

If the area you are irrigating is far from the spigot, you might want to make the connection between the mainline and the spigot with a garden hose or a separate piece of mainline fitted out with hose beginnings

and ends so that it can be taken up if you want to mow or move things back and forth.

You can leave irrigation in the garden over the winter. If you plan to do that, thoroughly purge the lines of water. T-tape will last two-to-five years if left outside and up to seven years if taken in at the end of each season. Mainline tubing will last up to eight years exposed to sunlight, longer if covered.

See page 2 for a schematic of a drip irrigation hookup.



Drip Irrigation Schematic

