

Drip Irrigation Installation Guide

Materials:

- 50 gallon barrels
- Tubing (Raindrip ½ inch x 200 ft Polyethylene Drip Irrigation Distribution Tubing)
- T-connectors (½ inch diameter insert Tee connector)
- End caps/plugs (½ inch diameter)
- Spigot (American Valve ½ inch Compression Brass No-Kink Hose Bibb)
- Power Drill with 1/8” bit and bit to install spigot
- Knife or scissors
- Wooden stakes
- Window screen mesh
- Rope
- Wooden Platform (about a foot high, to place barrel on).

Hosing Lengths per each System

system	mainline	Total bed length	Total system length
1	50	142	192
2	52	96	148
3	46	96	142
4	38	106	144
5	15	58	73
Total	201	498	699

Instructions

1. Drill a hole in the barrel just big enough to fit the spigot in tightly.
2. Insert the spigot with the faucet facing outward, and tightly screw the nut on the inside of the barrel to hold it in.
3. Position the platform on level ground where the barrel placement is indicated on the diagram.
4. Place the barrel on the platform near the edge with the spigot pointing down the hill.
5. Look at the diagram to see where the tubing is going to be placed, and lay it out one piece at a time. Cut each piece to the appropriate length to travel down the beds. Do not just follow the lengths indicated on the diagram, but rather cut the tubing according to how long you need it. The tubing has a

tendency to coil, so use the wooden stakes to help stretch it out and hold it in place.

6. Take the pieces of tubing that run along the actual beds and drill drip holes in them using the 1/8 inch bit in the power drill. Drill holes along the tubing in 8 inch or so intervals, while trying to keep all the holes pointing to the ground.
7. Connect the pieces of main line tubing (without holes) to the spigot, and then connect them in a straight line down the hill using the T-connectors.
8. Connect the bed lines (with holes) perpendicular to the main line onto the T-connectors.
9. Plug any free ends of the lines with caps. Note: the bottom of the supply line will have an unconnected joint on the T-connector. To plug this, simply connect another short piece of tubing and put the cap in the tube.
10. Rearrange the lines so that they all run where they are supposed to, and they all run downhill.
11. Fill the barrel $\frac{1}{4}$ of the way with water, and turn the spigot on. Then observe how the water is flowing through the lines.
12. Adjust the tubing to try to get an even water flow through all the lines by raising the height, downhill angle, or level of the beds.
13. Once this test is finished and the system is working well, turn off the spigot.
14. Place the screen mesh on top of the barrel and pull as tight as possible.
15. Wrap rope around the barrel under the lip, but over the screen to hold it on.
16. Stand back, dust off your hands, pat each other on the back, and congratulate yourselves on a job well done. ☺