

## Parts Needed To Cover 25 x 60 sq. ft:

- 5 - 10 ft  $\frac{3}{4}$  inch schedule 40 PVC For the Main Line
- 18 - 10 Ft  $\frac{1}{2}$  inch schedule 40 PVC For the Rows
- 9 -  $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{1}{2}$  reducing Tee's (slip) -schedule 40
- 36 -  $\frac{1}{2}$  x  $\frac{1}{2}$  x  $\frac{1}{2}$  fipt (female threaded) Tee's -schedule 40
- 18 -  $\frac{1}{2}$  Union (Slip x Slip) - schedule 40
- 5 -  $\frac{3}{4}$  Union (Slip x Slip) - schedule 40
- 9 -  $\frac{1}{2}$  Ball Valves
- A few  $\frac{1}{2}$  inch and  $\frac{3}{4}$  couplings for repairs..lol
- Hose Adapter
- 1 -  $\frac{3}{4}$  Cap
- 9 -  $\frac{1}{2}$  inch Caps
- Primer and Glue

My setup is made from a 50 ft main line, 5 pieces of  $\frac{3}{4}$  inch PVC and 9 rows made from  $\frac{1}{2}$  PVC, 2 pieces joined with a slip union making each row 20 ft long each.

Each row is spaced 6 ft apart, each sprinkler is spaced 6 ft apart, this makes a 6x6 ft grid.

This setup is being used for 2 plants.

### **I set it up as follows:**

I pre measured all of the PVC and marked the main line with a marker indicating the order in which they were to be installed.

**Main Line** – 5 pieces of  $\frac{3}{4}$  inch PVC, 10 ft long each.

I started my first row one foot in from the end, and measured and marked the PVC every 6 ft on all 5 pieces to the end.

Where the pieces of PVC meet, I joined them with a  $\frac{3}{4}$  inch Union; this makes assembly/disassembly fast and easy.

You will need a  $\frac{3}{4}$  inch cap at the end of the main, and a hose adapter at the start.

**Rows** – 18 pieces of  $\frac{1}{2}$  inch PVC, 10 ft long each.

Although the Ball Valves were not included in Thad's plans, I wanted to be able to control the water a little more.

I measured 3 inches in and marked the PVC for a Ball Valve

Three more inches in (6 inches in from the start of the row), I marked the PVC for a  $\frac{1}{2}$  inch Union. **This part of the rows, the assembly with the ball valve and coupling will be glued to the reducing Tee's on the main.**



At 1 ft in from the beginning of the row, I marked it for a  $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$  fipt Tee, and every 6 ft from there on to the next 10 ft piece of  $\frac{1}{2}$  inch PVC that makes my 20 ft rows. I got 4 Tee's (sprinklers) per 20 ft row.

I added a  $\frac{1}{2}$  inch Union where each 10 ft piece of PVC connected to make the rows.

You will need a  $\frac{1}{2}$  inch cap at the end of every row.

I cut the PVC with a table saw; it's fast and accurate, not great on the blade...lol. My son and I glued, it takes about 20-30 seconds to dry.

When joining the PVC via Unions, the more level the PVC is, the easier it goes together.

After the Rows and Main were cut and glued, I disconnected the first foot of every row at the Unions just after the ball valves and glued them to the  $\frac{3}{4} \times \frac{3}{4} \times \frac{1}{2}$  fipt reducing tee's on the main.

Place a Sprinkler head in every Tee in ever row, 36 in all for per setup.



It took an hr to measure and mark all of the PVC, another 3 hrs to cut it and glue it all together, and 30 minutes to set it up.

There were no leaks when I tested, a few heads were clogged from soil getting into the PVC, I turned off the row, removed the head, turned on the row and flushed, works like a charm!



The biggest expense will be the Unions and the PVC.