

BASIC INFORMATION NEEDED BEFORE CALLING FOR DRIP IRRIGATION SYSTEM

Approximate acres to irrigate? _____
 How many rows? How long? _____
 Type of water source is?.....Well.....River.....Pond.....City water.
 How far is the water source from the field? _____
 Approx. how many feet of elevation from the water source to the field? _____
 If you have your own pump, how many G.P.M.? At what PSI. _____
 Need to do all of your field at one time? Or break into zones? (A small water source may determine the amount of zones)

TEST INFORMATION

Determining amount of water in a well? 1. Check inside of your well cap. 2. Ask your well driller. 3. Check it yourself, put a pressure gauge and valve next to your hydrant, close the valve to approx. 30 PSI, use a 5 gal. pail or barrel and check fill time with your watch. Note; Your well may have a small water pump and a large amount of water, if so, a larger pump may be used. To check an engine pump, pressurize pump to approximately 50 PSI and check with barrel and your watch.

How much water do I need for my irrigation system?
 See charts inside of back cover. (GPM per acre)

Standard drip tape has 12" emitter spacing and flow rate is .45 GPM per 100 ft. at 8 PSI. Can be used for rows up to 500 ft. long. For longer rows up to 1000 ft. lower flow drip tape must be used or a larger diameter drip tape. To find flow (GPM) needed for a field or zone, multiply total linear ft. of drip tape x drip tape flow rate. Example; total linear ft. of drip tape 12,561 ft. ÷ 100 (for the flow rate per 100 ft.) x flow rate .45 = 56.5 GPM.

PLEASE CALL FOR MORE INFORMATION.

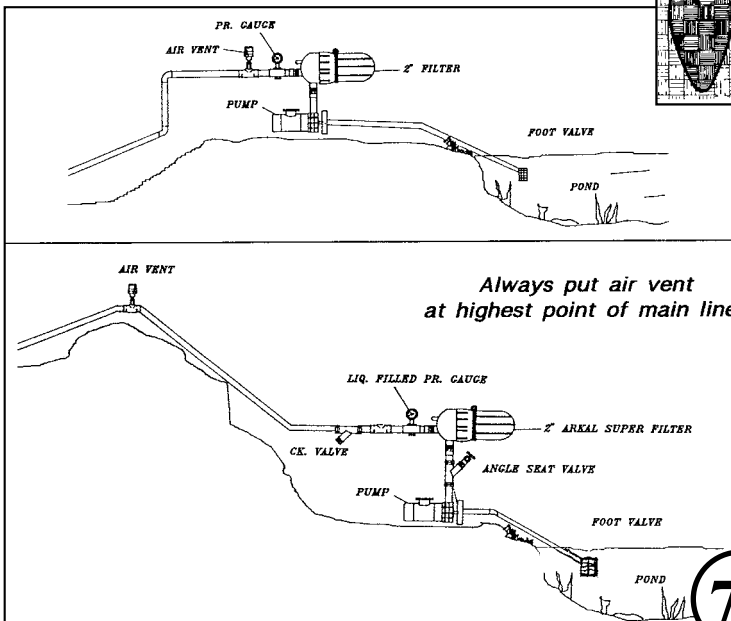
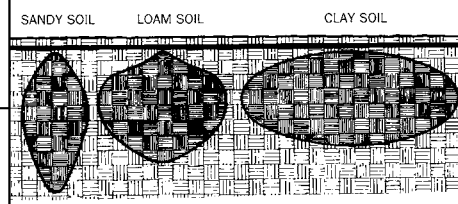
Square feet per acres = 43,560 sq. ft.
 1 acre = 208.71 ft. sq.
 1" an acre = 6,500-13,500 gallons (Drip irrigation depending on row spacing)
 1" an acre = 27,154 Gallons (overhead irrigation)
 1" per hour an acre = 452.57 GPM (overhead irrigation)

Row Spacing (INCHES)	Plastic FEET PER ACRE
48"	10,890'
52"	10,052'
56"	9,334'
58"	9,012'
60"	8,712'
62"	8,431'
64"	8,168'
66"	7,920'
68"	7,687'
70"	7,467'
72"	7,260'
76"	6,876'
80"	6,534'
84"	6,223'
88"	5,940'

HELPFUL TIPS

- ***2.31'** of gravity is needed to create **1 PSI**.
- ***1 Cubic foot** of water equals **7.48 gallons**.
- ***Inches per hour**= **.00221 x GPM flow ÷ acres**.
- ***.38 Liter = 1 Gallon**

TYPE OF SOIL DETERMINES WATER SPREAD



CLIMATIC CONDITIONS DURING CROP	Suggested Average Acre inches per day	Daily Pump Operation								
		2 Hrs.	4 Hrs.	6 Hrs.	8 Hrs.	10 Hrs.	12 Hrs.	16 Hrs.	20 Hrs.	24 Hrs.
		G. P.M. PER ACRE								
Cool & Humid	.20	45.3	22.6	15.1	11.3	9.1	7.5	5.7	4.5	3.8
Warm - Semi-Humid	.25	56.6	28.3	18.9	14.1	11.3	9.4	7.1	5.7	4.7
Warm - Dry	.30	67.9	33.9	22.6	17.0	13.6	11.3	8.5	6.8	5.7
Very Dry - Hot	.35	79.2	39.6	26.4	19.8	15.8	13.2	9.9	7.9	6.6
Very Dry - Hot Winds	.40	90.5	45.3	30.2	22.6	18.1	15.1	11.3	9.1	7.5

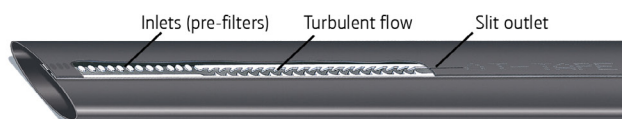
NOTE: Chart based on 7 Day per week operation.

For 6 day pump operation multiply G. P. M. per acre by 1.166
 For 5 day pump operation multiply G. P. M. per acre by 1.4

DRIP IRRIGATION INFORMATION

T-Tape Drip Tape

Most recognized and trusted drip tape brand in the world. T-Tape Drip Tape can be installed on the ground, under plastic, or even subsurface. Industry leading in material strength, design, and quality production standards.



Note: Dropper spacings of 12" will give a continuous wetted strip. It is not necessary to have a dropper at each plant.



Rivulis
Irrigation

THE WORLD'S LEADING DRIP TAPE

✓ WHAT MIL DRIP TAPE SHOULD I USE?

6 Mil Drip Tape is recommended for experienced growers only. Used for short season crops that are not under plastic mulch. Minimal insect resistance.

8 Mil Drip Tape is widely used throughout the USA for basically all vegetable crops, under plastic mulch or along rows.

10 Mil Drip Tape is used in heavy rocky soils and where insects and wire worms are a problem. Also used for over winter crops like strawberries.

15 Mil Drip Tape can be used for multi-year crops, including brambles and vineyards.

20 & 25 Mil Drip Tape is used in orchards, vineyards, etc. Has multi-year use.

✓ WHY SO MANY FLOW RATES?

- * Row length will determine flow rate, zone size, or field size.
- * Flow rates are also used to size main lines, pump size, or water available.
- * Fields with row length over 500 feet require "low flow" drip lines or special larger diameter drip lines.
- * Large diameter model #700 "low flow" will go up to 1500' row length.
- * A more even distribution is achieved with low flow drip tape and larger zones.

✓ HOW DO I KNOW HOW MUCH WATER I NEED?

* The standard flow drip tape is .45 GPM at 8 PSI. This flow is per 100 feet of row. Multiply linear feet of drip tape by flow rate.

EXAMPLE; 5,000 feet of drip tape X .0045 flow = 22.5 GPM pump flow requirement.

Drip tape requires low pressure. Only 8 to 15 PSI at the head lines will give approximately 10 PSI in the drip lines.

✓ HOW DO I MAINTAIN 10 PSI?

* Drip line pressure is maintained with a pressure regulator in the head line. Also a pressure gauge is needed there to assure the pressure is 8 to 15 PSI before entering the drip lines. Pump pressure must be higher.

✓ WHY IS A FILTER NEEDED?

* Water in the drip lines lead through a small turbulent channel to make each dropper drip the same amount of water. Unfiltered water may clog these channels. Also well water must be filtered. No filter is needed for town or city water.