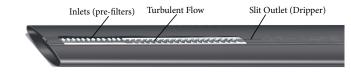
## **DRIP IRRIGATION INFORMATION**

#### Rivulis 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: Dripper spacings of 12" will give a continous wetted strip. It is not necessary to have a dripper at each plant.



#### *√ 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.

## √<u>HOW DO I MAINTAIN 10 PSI?</u>

\*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 dripper 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.

# BASIC INFORMATION NEEDED BEFORE CALLING FOR DRIP IRRIGATION SYSTEM

Approximate acres to irrigate?
How many rows? How long?
Type of water source is? <u>Well</u> <u>Pond</u> <u>City water</u> .
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.  $\div$  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.

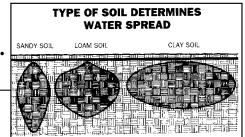
1" an acre = 6,500-13,500 gallons (Drip irrigation depending on row spacing)

1" an acre = 27,154 Gallons (overhead irrigation)

1" per hour an acre = 452.57 GPM (overhead irrigation)

#### 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



Row Spacing	Plastic
Inches)	FEET PER ACRE
48″	
52"	
56"	9,334′
58"	9,012'
60"	8,712′
62"	
64"	8,168′
66"	
68"	
70″	7,467′
72"	7,260'
76″	
80"	
84"	
88″	

PUMP	PONT VALVE
AIR VENT	Always put air vent at highest point of main line
	LIQ. FILLED PR. GAUGE  Z AREAL SUPER FILTER  E. VALVE  ANGLE SEAT VALVE  PUMP
	POOT VALVE

CLIMATIC CONDITIONS	Average	Daily Pump Operation								
DURING CROP		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