



190 Sanhedrin Circle  
Willits, CA 95490

[dripworks.com](http://dripworks.com)

MANUAL

LARGE

# ROW CROP IRRIGATION KIT



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# INTRODUCTION



Welcome to the world of efficient and hassle-free irrigation with DripWorks' Drip Tape Row Crop Irrigation Kits. Whether you're a commercial farmer or a backyard gardener, drip tape irrigation has long been favored for its ability to efficiently water long rows and garden beds.

At DripWorks, we're excited to introduce our new line of Drip Tape Row Crop Irrigation Kits, designed to meet the diverse needs of growers like you.



# ALL ABOUT YOUR KIT



Boasting 4,000 feet of 15 mil low-flow drip tape, this kit can effectively water up to forty 100-foot rows or approximately 1/4 acre of land, providing ample coverage for sizable crops and fields.

## Features

- 4,000' of Drip Tape
- Filter and PSI Regulator
- 3/4" and Drip Tape Fittings
- Punch and Hold Down Stakes
- 200' of 3/4" Mainline Tubing



# PARTS LIST

## LARGE

- 1 - 4,000' Roll of Low-Flow Drip Tape ([TAZ1508L](#))
- 2 - 100' Rolls of 3/4" Mainline Tubing ([34100](#))
- 1 - 1" Amiad Tagline Filter ([FAMCPI](#))
- 2 - 3/4" Easy Loc Female Hose Beginnings ([ELFH34](#))
- 2 - 3/4" Easy Loc Couplers ([ELC34](#))
- 2 - 3/4" Easy Loc End Caps ([ELMC34](#))
- 40 - Drip Tape Row Starts ([LSB](#))
- 40 - Drip Tape End Plug ([LSPLUG](#))
- 4 - Drip Tape Couplers ([LSC](#))
- 1 - Female Hose x 1" Female Pipe Adapter ([AFH1FP](#))
- 1 - Male Hose x 1" Female Pipe Adapter ([AMH1FP](#))
- 1 - 260" Roll of Thread Sealant Tape ([PCTEFMS](#))
- 10 - 1/4" Goof Plugs 1 x 10 pack ([14GP2-10](#))
- 1 - Miracle Punch Tool ([PUM](#))
- 200 - 3/4" Hold Downs - 2 x 100 packs ([SUHD-100](#))



### Without Timer:

- 1 - High Flow Hose Y ([HYVHPL](#))
- 1 - 1" 12 PSI Pressure Regulator ([PR1S12](#))
- 1 - 1" Male Pipe x 1" Male Pipe Nipple Adapter ([TMN](#))

### With Timer:

- 1 - Galcon Bluetooth High Flow Timer ([TGNHFBTK](#))
- 1 - Galcon Alternator Valve ([TGNALT](#))
- 2 - 12 PSI Pressure Regulator ([PRSLHH12](#))

# BEFORE YOU START

Drip tape is ideal for straight, flat rows. **The only tools required are a pair of scissors or pruners.**

- The pressure regulator in this kit requires a minimum 2 GPM (120 GPH) to regulate the water pressure to the 12 PSI needed for the drip tape
- Use at least 600' of drip tape in your system to meet this minimum flow rate (Using less may cause leaking at fittings and possibly damage the drip tape)
- This is a high-flow system designed to connect to a 1" mainline. If needed, an optional hose thread adapter (AFH1FP) has been included. To achieve full capacity, it requires a minimum flow rate of 8 GPM (in manual mode) and a minimum 16 GPM (if automated). The maximum amount of drip tape per zone is 2,400'



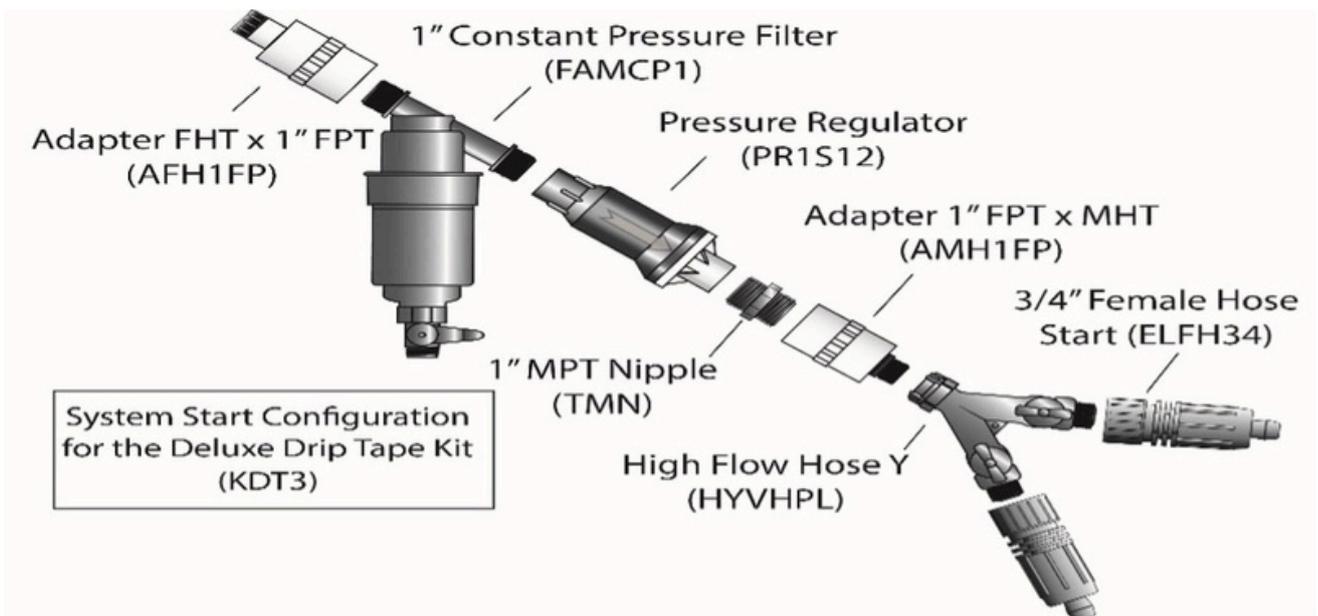
# INSTALLATION

## WITHOUT TIMER (KDT3)

### System Start & Additional Parts

This portion of the kit includes the filter, pressure regulator, a hose Y, two hose start fittings, two repair couplers, adapter fittings, Teflon tape, end fittings, goof plugs, hold down stakes, and a roll of mainline tubing.

1. Connect the filter (FAMCP1) to the faucet using the AMH1FP. If needed, install a hose extension (not included) between the faucet and AFH1FP to take the weight off your faucet.
2. Connect the pressure regulator (PR1S12) to the filter outlet.
3. Connect the AMH1FP to the pressure regulator outlet using the TMN.
4. Connect the AMH1FP to the high flow hose Y (HYVHPL).
5. Connect the barbed ends of the female hose starts (ELFH34) to the mainline.
6. Connect the female hose starts to the hose Y.
7. Unroll the mainline tubing (34100) through the area to be watered.
8. Close the mainline tubing with an end fitting (ELMC34).
9. Secure the tubing with hold-down stakes (SUHD-100).



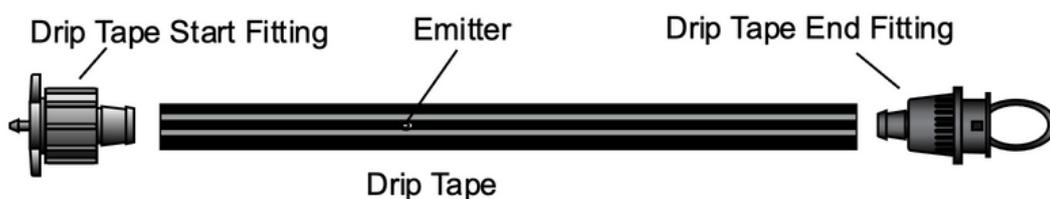
# INSTALLATION

## WITHOUT TIMER (KDT3)

### Drip Tape

The KDT3 Kit comes with a 4000' roll of low-flow Toro Aqua-Traxx drip tape. Each side of the hose Y (zone) can support up to 2,400' of low-flow, 8" spaced drip tape. In addition to the drip tape, this portion of the kit includes a punch, drip tape start and end fittings, and four drip tape couplers.

1. Use the punch to make holes in the mainline where each row of drip tape will begin.
2. Lay the drip tape (TAZ1508L) out—striped side up—where desired, making sure that one end reaches the mainline tubing.
3. Attach the large, barbed end of a drip tape start fitting (LSB) to each length of drip tape and turn the start fitting's locking collar clockwise to \*tighten.
4. Insert the small, barbed ends of the drip tape start fittings into the punched holes.
5. Close each length of drip tape with a Drip Tape end fitting (LSPLUG).
6. Open one side of the hose Y, turn the water on, and check to be sure all lines are working.



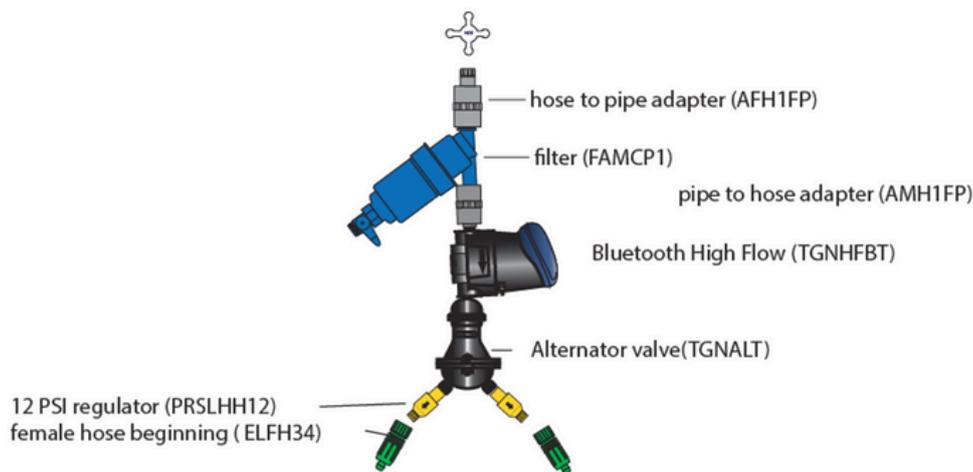
**\*Some leakage may occur out of the drip tape start fittings. A quarter turn with pliers will tighten the locking collar.**  
**Run one watering zone at a time. For further zoning, install a Header Kit (KHA34).**

# INSTALLATION

## WITH TIMER (KDT3-T)

### System Start & Additional Parts

This portion of the kit includes the Galcon Bluetooth timer, filter, pressure regulator (2), Galcon Alternator Valve, hose start fittings (2), repair couplers, adapter fittings, Teflon tape, end fittings, goof plugs, hold-down stakes, and a roll of mainline tubing.



1. Connect the filter (FAMCP1) to the faucet using the hose to 1" pipe adapter (AFH1FP) adapter.
2. Connect the 1" pipe by hose adapter (AMH1FP) to the outlet of the filter (FAMCP1).
3. Connect the Bluetooth Galcon timer (TGNHFBT) to the 1" pipe by hose adapter (AMH1FP). You will use the adapters included with the timer.
4. Connect the Galcon Alternator Valve (TGNALT) to the Galcon Bluetooth timer (TGNHFBT).
5. Connect the pressure regulators (PRSLHH12) to the Galcon Alternator Vales outlets.
6. Connect the barbed ends of the female hose starts (ELFH34) to the mainline (34100).
7. Connect the female hose starts (ELFH34) to the pressure regulators (PRSLHH12).
8. Unroll the mainline tubing (34100) through the area to be watered.
9. Close the mainline tubing with an end fitting (ELMC34).
10. Secure the tubing with hold-down stakes (SUHD-100).

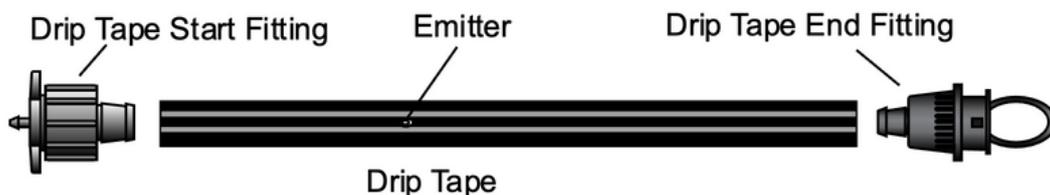
# INSTALLATION

## WITH TIMER (KDT3-T)

### Drip Tape

The KDT3-T Kit comes with a 4000' roll of low-flow Toro Aqua-Traxx drip tape. Each side of the Galcon Alternator Valve (zone) can support up to 1,800' of low-flow, 8" spaced drip tape. In addition to the drip tape, this portion of the kit includes a punch, drip tape start and end fittings, and drip tape couplers.

1. Use the punch to make holes in the mainline where each row of drip tape will begin.
2. Lay the drip tape (TAZ1508L) out—striped side up—where desired, making sure that one end reaches the mainline tubing.
3. Attach the large, barbed end of a drip tape start fitting (LSB) to each length of drip tape and turn the start fitting's locking collar clockwise to \*tighten.
4. Insert the small, barbed ends of the drip tape start fittings into the punched holes.
5. Close each length of drip tape with a Drip Tape end fitting (LSPLUG).



**\*Some leakage may occur out of the drip tape start fittings. A quarter turn with pliers will tighten the locking collar.**

**Run one watering zone at a time.**

# GROWING TIPS & TRICKS

## 01 Proper Spacing

Ensure adequate spacing between plants to prevent overcrowding, which can lead to competition for resources and increased susceptibility to pests and diseases.

## 02 Mulching

Apply mulch around plants to help retain soil moisture, suppress weed growth, and regulate soil temperature. Organic mulches like straw or compost can also improve soil structure and fertility over time.



# GROWING TIPS & TRICKS

## 03 Soil Moisture

Check soil moisture levels to ensure plants receive adequate hydration. Use a moisture meter or dig a small hole near the root zone to assess soil moisture content

## 04 Crop Rotation

Practice crop rotation to prevent the buildup of pests and diseases in the soil. Rotate crops annually to different areas of the garden or field to maintain soil health and reduce the risk of soil-borne pathogens



# BEST CROPS

## FOR YOUR IRRIGATION KIT



### Tomatoes

Tomatoes thrive with consistent and controlled watering. Ensure proper spacing between plants to allow for adequate airflow and prevent disease

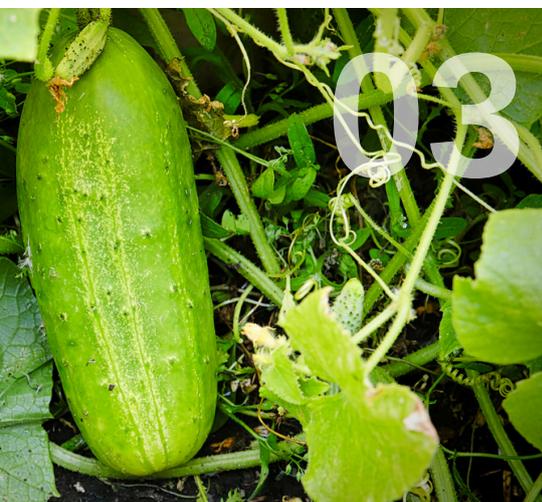
### Peppers

Peppers benefit from regular and uniform moisture levels provided by drip irrigation. Plant them in well-drained soil and avoid overwatering to prevent root rot.



### Cucumbers

Cucumbers are susceptible to fungal diseases if leaves remain wet for prolonged periods. Drip irrigation helps keep the soil consistently moist while minimizing foliage moisture, promoting healthier plants and higher yields



# BEST CROPS

FOR YOUR IRRIGATION KIT



## Zucchini & Squash

These varieties appreciate consistent moisture throughout their growing season. Your row crop kit reduces the risk of powdery mildew and other fungal infections common in squash.

## Leafy Greens

Leafy greens like lettuce, spinach, and kale thrive in well-drained soil with the even moisture levels that drip irrigation provides.

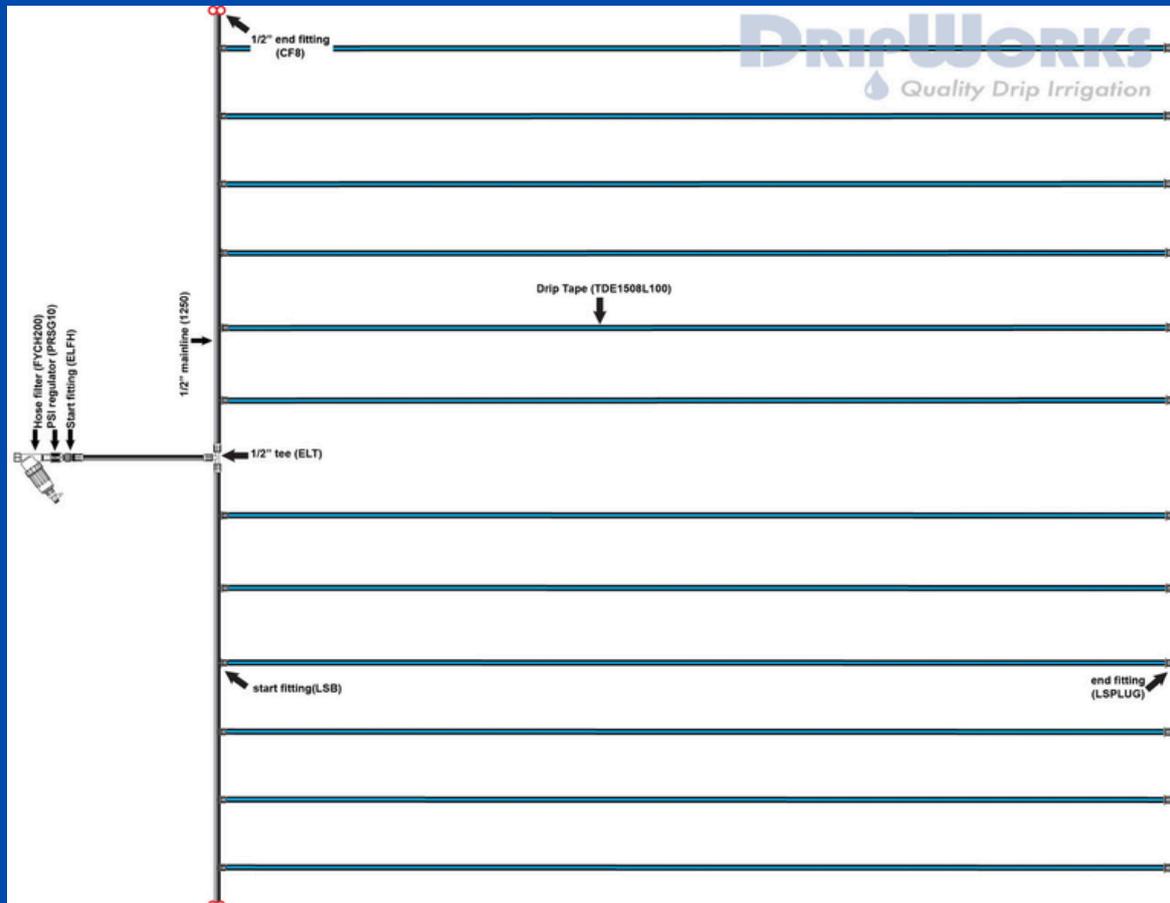


**LEARN MORE  
GROW MORE**

[dripworks.com/blog](https://dripworks.com/blog)

# GALLERY OF PLANS

## PLAN 1



**Approximate water usage for plan: 57.6 GPH**

**Row crop garden for a Small High-Tunnel (20' x 24') using Drip Tape (TDE1508L100) 8" OC.**

**This plan is for a 12 rows at 24 feet long of traditional row crops. It uses our 15 mil Low-Flow Drip Tape with emitters spaced 8" on center.**

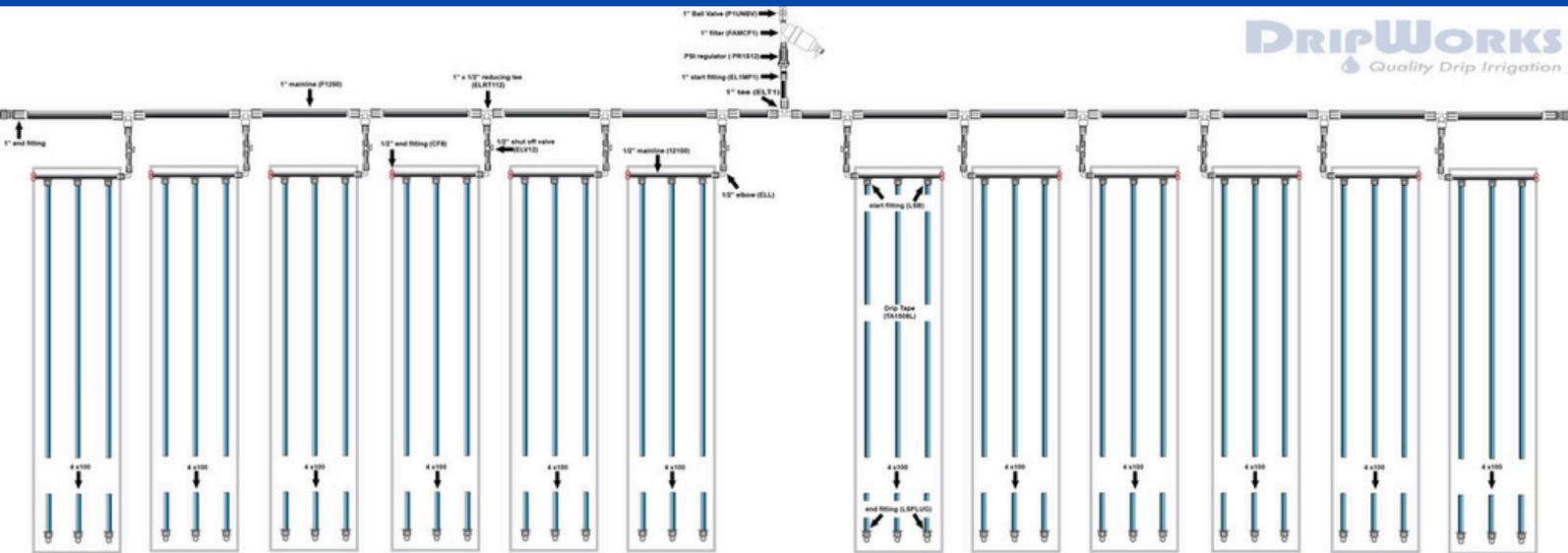
**Replace LSB with LSBSO for individual row shut-off. System layout NOT to scale. This layout was made to work with our 20' x 24' high tunnel.**

**[MORE INFO HERE](#)**

[ACCESS ALL PLANS HERE](#)

# GALLERY OF PLANS

## PLAN 2



**Approximate water usage for plan: 780 GPH**

**Row crop garden beds framed and raised 4' X100' (13) low flow Tape (TAZ1508L) 8" OC.**

**This plan is for 13 framed and raised beds 4' X 100'. It uses our 15 mil low flow Drip Tape (TAZ1508L) with emitters spaced 8" OC.**

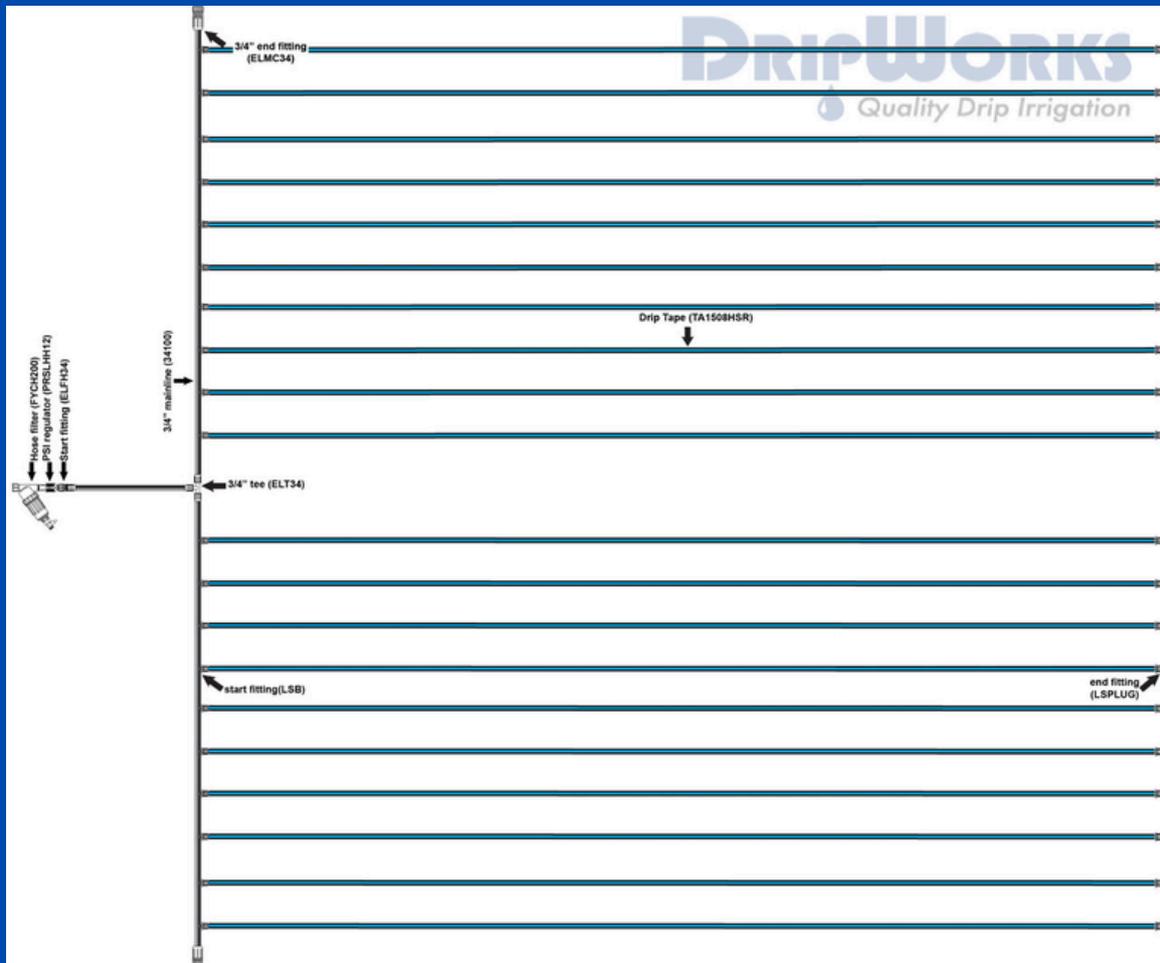
**Assumes 15 GPM and clean pre-filtered water. Plan NOT to scale. Beds are 4' x 100'. Similar size beds could use this layout. If flow is not sufficient, isolate with valves.**

**[MORE INFO HERE](#)**

[ACCESS ALL PLANS HERE](#)

# GALLERY OF PLANS

## PLAN 3



**Approximate water usage for plan: 480 GPH**

**Row crop setup for Large High Tunnel (30'X '60') using Drip Tape (TAZ1508HSR) 8" OC.**

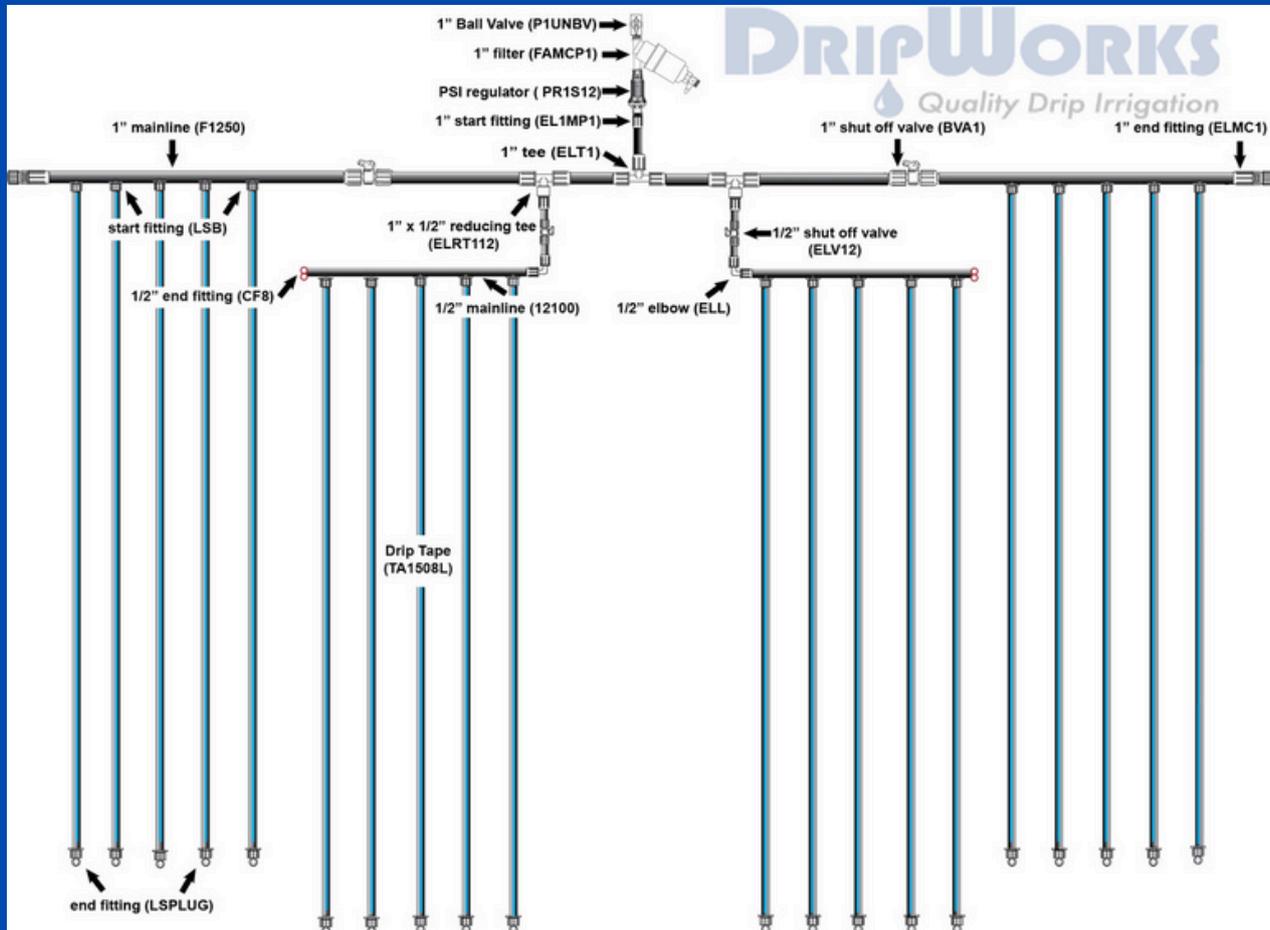
**This plan is for a Large High Tunnel setup. It uses 15 mil high-flow Drip Tape (TAZ1508HSR) with emitters spaced at 8" OC.**

**20 rows 60ft long similar variations may work. Plan not to scale.**

**[MORE INFO HERE](#)**

# GALLERY OF PLANS

## PLAN 4



**Approximate water usage for plan: 800.00 GPH**

**Row crop garden with 20 rows at 200 feet long (4 zones) using Drip Tape (TAZ1508L) 8" OC.**

**This plan is for a small field of row crops divided into 4 watering zones each zone water usage is 200 GPH. It uses our 15 mil low-flow Drip Tape (TAZ1508L) with emitters spaced 8" OC.**

**Assumes water is pre-filtered if not city water. 13.33 GPM approximate water usage for this plan. Plan layout is not to scale.**

**[MORE INFO HERE](#)**



# CONTACT

If you have any other questions about our products or about installing your drip system, please contact us!



800-522-3747



support@dripworks.com



DripWorks.com



190 Sanhedrin Circle, Willits,  
CA 95490



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