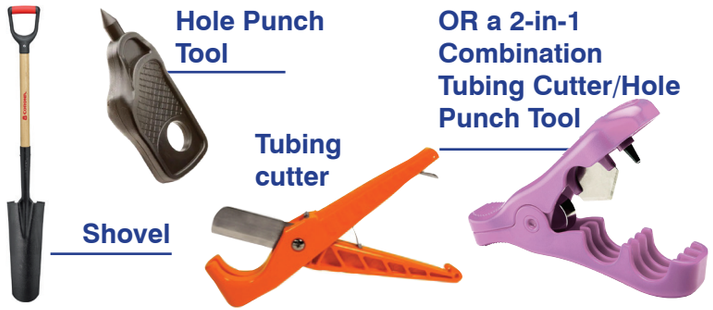
GETTING STARTED

What is Drip (Micro) Irrigation?
Drip (or micro) irrigation is designed so water drips slowly to the roots of plants. The benefits of using drip irrigation include:

- Water conservation
- Greater efficiency (target each plant)
- Healthier plants
- Cost savings

TOOLS YOU NEED:



THINGS TO CONSIDER

There are two types of drip irrigation designs: dripline and point source.
The type of design you choose is based on the plant material you are installing and overall design of your landscape.

A drip irrigation system can incorporate both point source and dripline, as long as they are on separate valves/zones.

FAQ

For point source, what size mainline should I use?
The conventional mainline tubing used is commonly referred to as ½" tubing and is normally all that is needed for a typical residential drip system. Because the actual diameter varies by region, the "true" size will vary based upon the product most used in your area.

How many zones do I need?
You will need separate zones for point source and dripline configurations, as already mentioned. A single mainline should be able to transport enough water for a typical residential application, regardless of whether it's a point source or dripline system.

What kind of mainline fittings should I use?
There are many options, ranging from barbed inserts to a variety of compression type fittings. Their popularity amongst contractors varies by region, so you'll want to check with your local Horizon store to find out what's used in your market.

Are there different distribution tubing fittings?
Not really. All distribution tubing uses barbed fittings inserted into the mainline and then connected to distribution tubing, which is typically ¼".

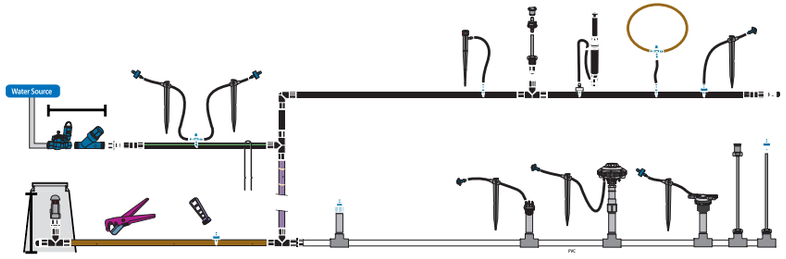
Which emission device should I use for point source?
It depends on the plant material and the application. Trees and shrubs are most commonly watered using drip emitters, or adjustable micro bubblers, while micro sprays are a better solution for flower beds and dense ground cover plantings.

Can I water my trees and shrubs on the same zone?
No, you should separate different classes of plant material into separate zones because they will require different watering schedules. Examples of different plant material classes are trees, citrus, shrubs, drought tolerant plants, and cactus & succulents. Consult your local Horizon expert for help in determining how to move forward.

DRIP
IRRIGATION GUIDE

Presented by Horizon

POINT SOURCE



best used for:

Trees

Potted Plants

Sparse Planting

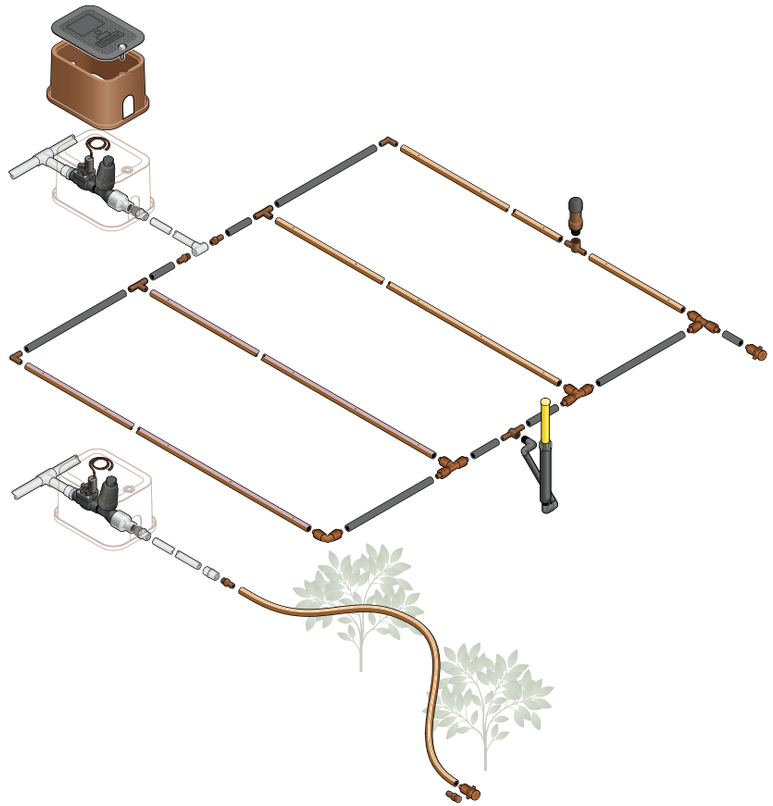
Mixed Planting

Point Source drip systems utilize a supply line, usually polyethylene (PE), to transport water throughout the site, where it can be delivered to plants by emission devices.

The main benefit of a Point Source system is it allows you to put water near the plant's root zone.

EMITTER TYPE	CONNECTION	FUNCTION
Drip Emitters	Directly to the plant at the end of distribution tubing.	Low flow emitters for watering the root zones of plants, trees and container plants
Microsprays	Install directly onto rigid risers or using ¼" tubing and stakes.	Use when higher flows are needed up 30 gph for small area coverage. Throw water up to 12'
Micro Bubblers	At the end of distribution tubing. Micro bubblers often come with integrated stakes.	Adjustable higher volume emitters for watering single or multiple plants.

DRIPLINE



best used for:

Sloped Planting

Trees

Dense Planting

Dripline is inline emitter tubing that is run throughout the planting area. In this product, the emitter is co-extruded during manufacturing so that it's integrated into the tubing.

You can choose dripline based on emitter spacing (12", 18" or 24"), flow rates (.4, .6 or .9 gph) and coil length (100', 250' or 500').

5 essential components to any drip system

1

Valve(s)

If you are using both types of drip systems in your design you will want each of them on it's own valve to allow different watering schedules.

2

Filter

Keeps sediments from clogging the emission devices.

3

Regulator

Used when the incoming pressure is too high for the emitters or fittings.

Drip Zone Kit

Consider replacing the individual valve, filter and regulator with a Drip Zone Kit.

4

Drip Adapter

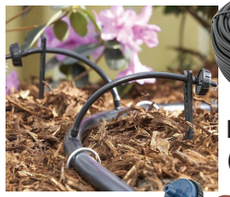
Transitions from the pressure regulator to the drip mainline.

5

Flush Endcap

At the end of the system, to allow you to manually blow the system out regularly.

Additional components



Mainline Tubing

Distribution (spaghetti) Tubing

Emitters

Stakes

Micro bubblers

Microsprays

Point System:

- Mainline tubing & fittings
- Distribution (spaghetti) tubing & fittings
- Drip emitters
- Microsprays
- Micro bubblers
- Stakes

Dripline System:

- ½" Dripline tubing & fittings
- ¼" Micro dripline tubing & fittings