

# INSTALL HUNTER DRIPLINE SUBSURFACE WITH EASE

Hunter®



## Getting Started

Hunter Dripline (HDL) can be used at grade or buried below grade (subsurface) to efficiently apply water to the landscape. It is acceptable to bury at a maximum depth of 8" (20 cm) provided care is taken to understand how often to irrigate, how much water to provide, and how to maintain a properly working system. Below are recommendations for using HDL for subsurface applications under turf or dense plantings to help ensure a long lasting and healthy landscape:

## Soil

- In general, a sandy loam is ideal as a planting medium.
- Soil compaction is important for the success of any subsurface irrigation method. Soil should be compacted to a rate of at least 80% to enhance the capillary movement of water.
- Sharp objects and debris such as rocks should be removed from the area.
- Sod should be rolled out to remove any loose areas or air pockets to ensure consistent contact with soil surface.

## Burial Depth

*For dripline installations 2" (5 cm) and shallower*

- Temporary overhead irrigation is not mandatory, although some situations (based on climate) may require a temporary overhead system for 2 to 4 weeks.
- Aeration is not feasible at this depth.

- Scheduling: Frequent and short irrigation cycles should be considered. The goal is to keep the soil around the dripline moist without overirrigating and creating puddling at the surface. This will likely require multiple start times daily during peak season.

*For dripline installations between 2" and 4" (5 cm and 10 cm)*

- Temporary overhead irrigation is recommended for 2 to 6 weeks to help establish plant material.
- Aeration is not feasible with dripline buried from 2" to 4" (5 cm to 10 cm).
- Scheduling: Frequent and short irrigation cycles should be considered. Daily scheduling is likely, dependent on climate factors, but slightly longer cycles at this depth will allow better root growth and assist in preventing root intrusion. Keep the soil slightly moist around the dripline without overirrigating the surface or losing water below the root zone.

*For dripline installations between 4" and 8" (10 cm and 20 cm)*

- Temporary overhead irrigation is highly recommended.
- Where aeration may occur, dripline should be installed 6" (15 cm) or deeper and aeration should occur at depths no greater than 4" (10 cm).
- Scheduling: Slightly longer cycle time with slightly lower frequency than 2" to 4" (5 cm to 10 cm) installations. Proper soil compaction should allow for capillary action to keep the soil moist a few inches above. Care should be taken not to overwater or waste water below the root zone.

## Fittings

- Regardless of the style of fittings used, confirm all connections prior to backfilling on top of the dripline. It is better to spend the extra time during install rather than discover an issue after burial.
- PLD-LOC fittings offer a superior connection while also allowing the installer to complete the installation faster than with conventional barbed fittings.

## Accessories

**Air Relief Valve:** Allows air to enter/escape the dripline when necessary

- It is good practice to consider using an air relief valve for all subsurface installations. There may be unforeseen changes in zone height and the air relief valve will provide protection against unwanted debris or tubing collapse.
- HDL-CV has a working check height of up to 6' (1.8 m). If the full zone has a height differential of less than 6' (1.8 m), it is safe to eliminate the need for air relief.
- For HDL-PC, HDL-R, or any product without check valves, air relief valves should be used in order to prevent the back siphoning of debris into the emitter chamber after the irrigation cycle has completed.



**Flush Valve:** Allows debris to flush out of a dripline system

- It is good practice to install a flush valve at the end of any single dripline or grid of dripline
- Flush the zone prior to use. A general rule of thumb is one second for every 2' (0.6 m) of dripline; sometimes dirt is not visible right away.
- An automatic flush valve may be used for any dripline without check valves and will flush the line every time the system starts. Install after initial system flush.



**Eco-Indicator:** Indicates when a drip system is in operation

- The Eco-Indicator is a useful tool that pops up with a highly visible yellow stem when the system is running and pressure at the Eco-Indicator is at least 12 PSI (0.8 bar; 83 kPa).
- Recommend installation at the end of a zone where lowest pressures are likely to exist.
- The Eco-Indicator is a useful item for subsurface irrigation, especially when doing inspections.



## Plant Establishment

During plant establishment, irrigate close to or at the soil's maximum carrying capacity with subsurface irrigation (simultaneously with overhead irrigation if needed) to train roots to grow toward the wetted area. Once the roots are established, overhead irrigation may be halted.

## Root Intrusion

Root intrusion is a basic concern for any subsurface drip application. HDL's new flat emitter boasts a physical root barrier with dispersion pool that prevents hindered flow from the penetration of roots. Proper scheduling is far more important than any physical characteristic of any dripline. By creating a scenario of regular and consistent moisture through proper irrigation scheduling, HDL offers a cost-effective root-intrusion solution.

## Eco-Wrap® and Eco-Mat®

- When a higher level of uniformity and water savings is desired or required, there is no product in the market more efficient than Eco-Mat and Eco-Wrap.
- These unique specialty products are exclusively designed for subsurface applications and perform at an entirely different level than any dripline in the market.
- Visit: <https://www.hunterindustries.com/irrigation-product/micro-irrigation/eco-matr> for more details, video instructions, installation instructions, and design guide.

## HDL Tools and Information

**HDL Info:** <https://www.hunterindustries.com/irrigation-product/micro-irrigation/hdl>

**Calculator:** <https://www.hunterindustries.com/tools/hunter-dripline-calculator>

**Reference:** <https://www.hunterindustries.com/sites/default/files/rc-091-cheatsheet-hdl-us-web.pdf>