

## **Integrated Drip Irrigation for Planted-In-Place Tray System**

**Product NUMBER: IR6000**

### **Description:**

Easy to install, this durable integrated drip irrigation system for Columbia Green's trays secures the driplines in place, so they don't float to the surface or shift over time. The system provides low maintenance, successful plant establishment and adds supplemental irrigation during warm weather, protecting your green roof from temporary regional droughts and hot spells throughout the life of the green roof. Optional but recommended, this high efficiency, cost effective drip irrigation system locks into the tray preventing the driplines from shifting or floating to the surface.

Fabricated of a heavy duty polypropylene, the distribution header is easily placed within the Irrigation Tray Edger for concealment, UV protection giving the system a finished look. The header connects to the drip tape through simple barb/compression fittings, reducing the need for any special tools and pipe cements.

Once connected to the header, the high strength, pressure compensating drip tape is hooked into the the designed depression in the Columbia Green Tray edge, ensuring proper line spacing that won't shift over time. The drip tape is set at a 3/4" minimum depth into the growing media, so drip tubing will never be visible on the finished roof.

The Columbia Green Integrated Drip Irrigation system includes: The poly-header, drip tape and associated tray hooks and fittings. Our Irrigation Concealment Edger is also available to cleanly hide the header pipe. Please contact our team for flow requirements or system zoning information if needed. The system point-of-connection, controller, supply line to the header, backflow prevention, control valves and associated accessories are by others.

### **Installation:**

1. Prior to installation it is the Project Representative's responsibility to provide/verify the following:
  - a. Adequate potable water point of connection(s), which meet system flow and pressure requirements (see below).
  - b. All supply plumbing is installed per all applicable local and state building and plumbing codes.
2. Perform irrigation component installation only after tray have been properly installed, plumbing supply lines, remote control valves, and automated controllers/timers have been installed (parts by others) per manufacturer's recommendations.
3. Place poly-header along one side of the tray perimeter.
4. Punch poly-header and place barb/compression fittings 24" on center aligned with depressions at center of each tray.
5. Attach male threaded point of connection and capped end fittings at either end of poly-header and connect water supply source from remote control valve(s) to male threaded point of connection. Ensure pressure at valves is regulated to 15 psi maximum.
6. Connect drip tape to barb/compression fittings and lay out lines through tray depression. Extend drip tape the length of the green roof trays. **Place drip tape "blue stripe" up.** Cut drip tape, square, with shears where needed.
7. Secure drip tape at every tray with provided hooks at tray pinning locations.
8. Connect drip tape with tee and ell compression fittings around penetrations and vegetative perimeter to provide fully inter-connected system.
9. Place Irrigation Concealment Edger; secure poly-header in channel. Affix edger to tray with pin fastener.
10. Turn on valve(s) and run system to look for leaks and ensure connections are secure and system is fully functional.
11. Place growing media: slightly bury drip tape when placing media, typical 3/4" depth minimum. Maintain a flat horizontal plane in the drip tape when placing media. Avoid depressions and "dips" between trays.



**Storage:**

- Store components in a covered area, protect from extended exposure to sunlight and rain.
- Store away from sources of ignition and extremely high temperatures.

**Precautions:**

- Confirm that irrigation and associated supply plumbing meets all applicable local and state building and plumbing codes.
- Provide clean square cuts on all headers and drip tape to ensure proper seating of compression fittings.
- Use caution when lifting and carrying rolls of drip tape.
- Check system functionally prior to placement of growing media.

**LEED Information:**

- Manufacturing Location: El Cajon, CA 92020
- Post-Consumer Recycled Content: 0%

**System Information**

<b>Zoning</b>	<b>Quantity</b>
Application area per control valve <i>(valve by others)</i>	3,600 s.f. maximum
Operational Volume	9 - 30 GPM
Operation Pressure*	4 – 15 PSI
Filter Requirements <i>(at valve, supplied by others)</i>	140 mesh
<b>Drip Tape Information</b>	
Emitter Spacing	4 inches
Dripline Spacing	24 inches
Individual Emitter Flow Rate <i>(8 psi.)</i>	0.27 GPH
Individual Emitter Flow Rate <i>(10 psi.)</i>	0.30 GPH
Flow Rate /100 lf. <i>(8 psi.)</i>	1.34 GPM
Flow Rate /100 lf. <i>(10 psi.)</i>	1.50 GPM

\* Use Pressure reducing valves if needed to maintain 15 psi. Maximum at dripline.

**Packaging/Component Size:**

<b>Header</b>	
Thickness:	7 mil.
Dimension:	¾" dia. x 500' L. max.
Packaging:	Banded rolls
<b>Drip Tape</b>	
Thickness:	15 mil.
Dimension:	5/8" dia. x 4000' L max.
Packaging:	Roll
Weight:	63 lbs./roll

