


Microirrigation



 **Optional Water Efficiency Measure:** May contribute to the 30 percent water efficiency requirement, depending on the chosen WaterSense Approved Certification Method (WACM).



UNDERSTAND

- The term "microirrigation" describes a type of irrigation that applies water to the root zone of plants at a lower flow rate. Some examples of microirrigation devices include drip line emitters, point-source emitters, multiple outlet emitters, and microsprays.
- Microirrigation systems use 20 to 50 percent less water than conventional sprinkler systems.
- Microirrigation requires additional components to ensure the system operates efficiently. At a minimum, microirrigation systems should be equipped with the following components:
 - Pressure regulators to maintain the lower pressure required for microirrigation;
 - Filters to keep emission devices free from debris; and
 - Flush end assemblies to flush the laterals after the end of an irrigation cycle.



BUILD

- **WORK** with a certified irrigation professional to ensure that a microirrigation system is designed and installed properly. Certified irrigation professionals are experienced in the design and installation of microirrigation, as it takes expertise to ensure an efficient system. Find out more about professionals certified by a WaterSense labeled program at www.epa.gov/watersense/irrigation-pro.
- **INSTALL** microirrigation on separate zones from the rest of the irrigation system if standard spray sprinklers are used in other parts of the landscape.
- **INCLUDE** pressure-compensating drip if using drip irrigation. These products help deliver a constant flow rate over a range of pressures and are intended for landscapes with wide fluctuations in elevation, topography, and pressures.
- **ENSURE** that the microirrigation system is properly equipped with the additional system components (i.e., pressure regulators, filters, and flush end assemblies).



VERIFY

- **CONFIRM** that the station or zone pressure is within ± 10 percent of manufacturer-recommended operating pressure for the emission device or product being used. Verifiers can test this on a representative zone of the microirrigation system.

**NOTE: Consult with the Home Certification Organization for specific verification protocols.*

WaterSense Resources

WaterSense has developed two guides to help irrigation professionals and homeowners understand the benefits of microirrigation.

- *Adding Microirrigation to Your Services: A Mini-Guide for Irrigation Professionals* explains how designing, installing, or retrofitting an existing system with microirrigation can help customers save water and enhance plant health.
- *Saving Water With Microirrigation: A Homeowner Guide* describes the types of landscapes where microirrigation works best and suggests how to work with an irrigation professional to design and install a system.

To find these guides and learn more visit WaterSense's Microirrigation web page at www.epa.gov/watersense/microirrigation.

