

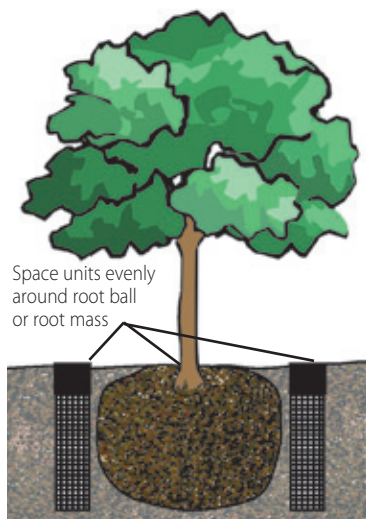


Installation Instructions for RWS and RWS-M - Root Watering System

For new or relocated trees:

Installation Steps:

1. Install RWS units, evenly spaced and positioned against root ball or root mass. The number of RWS units will vary depending on the size of the tree and watering requirements, but a minimum of 2-3 RWS units is recommended per tree.
2. Install optional RWS-Sock (part no. A22435) to prevent soil infiltration into tube.
3. Place units vertically with top even with ground surface. The RWS-M requires a 18" (45.7 cm) hole depth. The RWS requires a 36" (91.4 cm) hole depth.



4. For all models that are sold without plumbing hardware, add irrigation components as desired.

(1) Release grate lock: depress grate lock tabs one at a time while prying up grate with flat head screwdriver at provided grate removal notches (see figures below).

(2) Remove grate.

5. When installing flexible drip tubing, route tube through side inlet port and secure into drip tube mounting clasp as shown below. Assure emitter is pointing downwards. For all other models with pre-installed hardware, connect to lateral line.



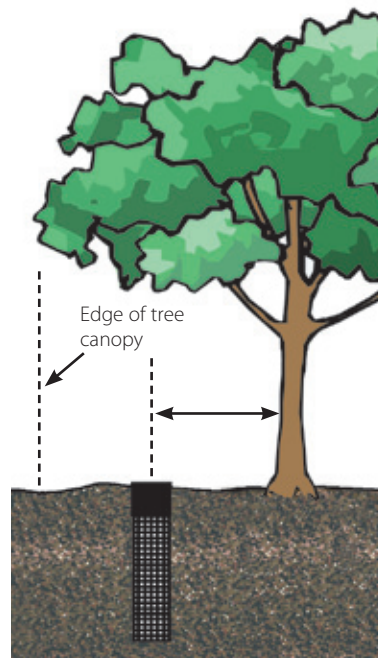
6. Install grate until top surface is below grate lock tabs. Assure tabs are secure over grate.

7. Fill area surrounding unit with soil.

8. Follow planting guidelines for specific tree species, and for local conditions.

For existing trees:

1. Position units evenly spaced, half the distance between tree trunk and edge of tree canopy. The number of RWS units will vary depending on the size of the tree and watering requirements, but a minimum of 2-3 RWS units is recommended per tree.
2. Install optional RWS-Sock (part no. A22435) to prevent soil infiltration into tube.
3. Core out holes to desired depth. The RWS-M requires a 18" (45.7 cm) hole depth. The RWS requires a 36" (91.4 cm) hole depth.
4. Place units vertically with top even with ground surface.



5. For all models that are sold without plumbing hardware, add irrigation components as desired.

(1) Release grate lock: depress grate lock tabs one at a time while prying up grate with flat head screwdriver at provided grate removal notches (see figures below).

(2) Remove grate.

6. When installing flexible drip tubing, route tube through side inlet port and secure into drip tube mounting clasp as shown below. Assure emitter is pointing downwards. For all other models with pre-installed hardware, connect to lateral line.

7. Install grate until top surface is below grate lock tabs. Assure tabs are secure over grate.

8. Fill area surrounding unit with soil.

9. Follow planting guidelines for specific tree species, and for local conditions.

Optional Drip Configuration

Rain Bird's 6 outlet drip manifold (EMT-6XERI) may be used in place of a bubbler. Use one or more of the outlets with the appropriate drip emitter to irrigate the tree. Remaining manifold ports may be used for additional RWS units or other drip irrigation applications. See Figure 2 below.

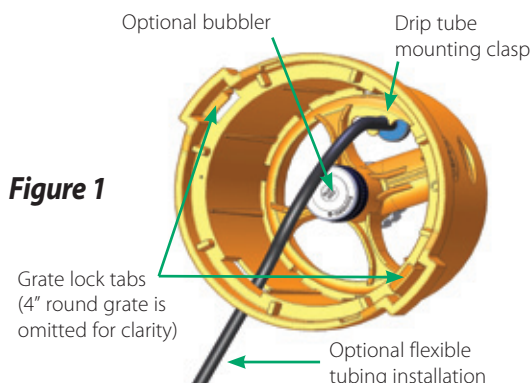


Figure 1

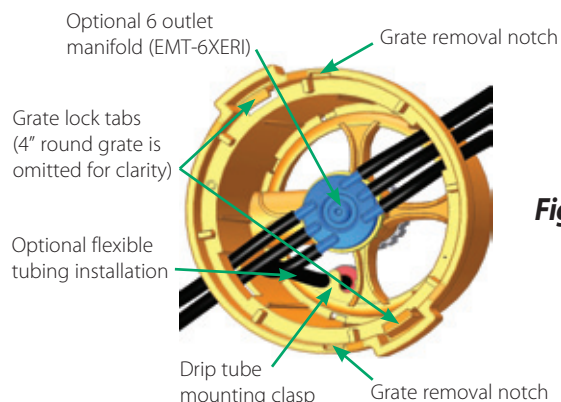


Figure 2

How to select and install a Root Watering System

The Rain Bird Root Watering System (RWS) consists of a perforated polyethylene cylinder with 14,000 openings to effectively deliver water, air and nutrients to the root system of trees and shrubs. It easily connects to irrigation lateral lines or can be installed in drip zones. It is available in 3 sizes: 36", 18" and 10".

Benefits include:

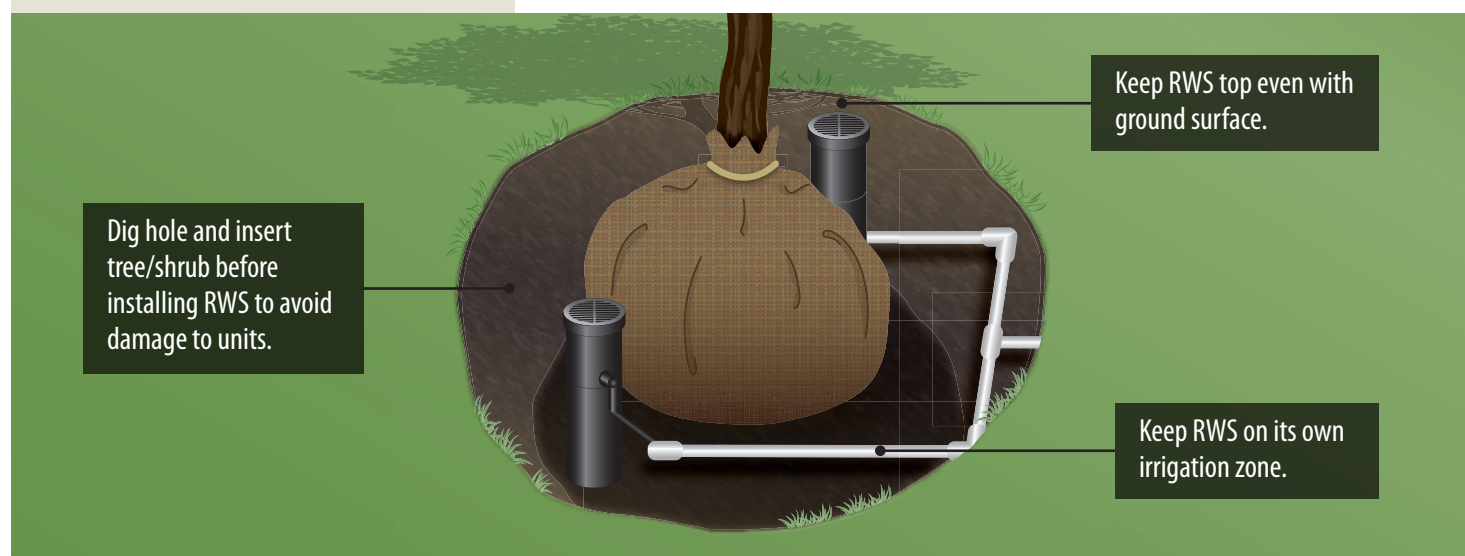
- Optimal growth rates – Deeper root growth and root mass means a healthier, faster growing tree
- Investment protection – Healthier roots help trees survive transplanting and provide stability in high winds
- Watering efficiency – Subsurface irrigation minimizes run-off and evaporation
- Landscape aesthetics – Installs at grade and helps minimize damage to hardscapes



Easy to install in just 3 simple steps:

- 1 Choose correct RWS units
- 2 Determine number of units per tree/shrub
- 3 Space appropriately

SEE PAGE 2 FOR DETAILED INSTRUCTIONS



RWS Installation Steps

The size of the root ball will drive the correct type, quantity and positioning of the RWS units.

Step 1:

Select the correct RWS product. Choose a bubbler flow rate appropriate for your soil type.

LARGE TO MEDIUM TREES	SMALL TREES & LARGE SHRUBS	SHRUBS & SMALL TREES
		
Root Ball Dia. > 36"	Root Ball Dia. 12" – 36"	Root Ball Dia. < 12"

		
36" RWS	18" RWS-M	10" RWS-S

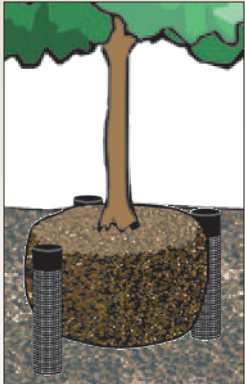


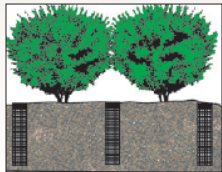
Step 2:

Determine number of units per tree/shrub.

3 or more RWS Per Tree	2 RWS-M Per Tree/Shrub	2 RWS-S Per Shrub NOTE: If less than 12" apart, use 1 RWS-S between each root ball.
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Step 3:

Space relative to root ball.

		<p>Isolated Shrub: 2 RWS-S equally spaced around root ball.</p> 
Equally spaced around root ball with no more than 30" between each RWS unit.	Equally spaced around root ball.	<p>Dense Plantings: 1 RWS-S between each plant.</p> 

FOR MORE INFORMATION:
www.rainbird.com/rws