Anatomy of a Water-Efficient* Commercial System

This commercial design guide highlights Rain Bird product and technology solutions for a healthy landscape that uses less water.

Rotors

In-Stem Pressure Regulation

Prevent water loss caused by uneven water pressure. Every 5 psi reduction in pressure reduces water usage by 6-8%. The 5000PRS Series Rotor has documented 15-45% water savings.

- 5000/5000 Plus Series Rotors with PRS
- TSJ-PRS Swing Joints

High Efficiency Nozzles

Rain Curtain™ nozzle technology delivers thick water droplets in a uniform, consistent pattern, eliminating overspray which results in water savings.

- All Rain Bird Rotors

Check Valve Devices

Prevent water from draining out of the system at the lowest sprinkler, which eliminates erosion and runoff.

- All Rain Bird Rotors

Vandal Resistance

Vandal-resistant rotors prevent water loss due to damage and abuse.

- 5500/7005/8005 Series Rotors

Central Control Systems

Automatic ET-Based Scheduling

Adjusts run times based on water loss from the soil through evaporation and water loss through plant transpiration ensuring that the right amount of water is applied without over watering or under watering. Automatic adjustment to watering schedules based on evapotranspiration (ET) can reduce water use by 20-40%.

- Maxicom®
- SiteControl
- IQ (programmable ET)

Flow Management

Optimizes available water and watering windows by automatically managing total flow demand placed on the water sources.

- Maxicom
- SiteControl

Flow Monitoring/Leak Detection

Reduces water loss by monitoring flows in real time to locate and isolate excessive flows caused by broken pipes, vandalized sprinklers or failed valves.

- Maxicom®
- SiteControl
- MDC2

Cycle + Soak™

Eliminates run-off by applying water at rate the soil can absorb such as slopes, compacted soils, and areas of poor drainage.

- Maxicom®
- SiteControl
- IQ

*All claims of water savings depend on proper design, installation, and maintenance of irrigation products. Actual water savings may vary from user to user depending on weather, irrigation system and site conditions, and previous irrigation practices.

1-6 For references, see pg 217
Introduction
Anatomy of a Water Efficient Commercial System

Pump Stations
Boost pressure to correct levels. Because low pressure can result in poor, uneven performance of nozzles, users frequently over-water the entire landscape to water the dry spots. Pumps boost pressure and prevent this problem from occurring.
- D-, DP-, and DPX-Series Pump Stations
- Intermediate Flow Pump Stations
- Main Irrigation Pump Stations

Landscape Drip
Direct-to-Plant-Root Watering Devices
Apply water slowly and directly to the roots of plants, using 30-50% less water than sprinkler irrigation.6
- Drip Emission Devices
- XF Dripline
- RWS Root Watering Series

High Efficiency Nozzles
Provide more uniform distribution of water and eliminate over-spray which can result in 30%+ water savings.2
- Rotary Spray Nozzles
- U-Series Spray Nozzles
- Matched Precipitation Rate (MPR) Nozzles

Check Valve Devices
Prevent water from draining out of the system at the lowest sprinkler, which eliminates erosion and runoff.
- 1800-PRS Sprays
- 1800-SAM-PRS Sprays

Sprays
In-Stem Pressure Regulation
Maintain optimal water pressure. Every 5 psi reduction in pressure reduces water usage by 6-8%. A 70 psi system reduced to a recommended 30 psi can provide more than 50% in water savings.1
- 1800-PRS Sprays
- 1800-SAM-PRS Sprays

Valves
Pressure regulation for valves maintains constant water pressure to prevent water waste caused by misting and fogging at the head
- PRS Dial Module
Rain Bird® Products Specifically Designed for Use with Non-Potable Water

**Purple Covers for Rotor:**
- 3500, 5000/5000 Plus, 5500, Falcon® 6504, 7005, 8005 and 2045A Maxi-Paw™
- (pg. 47-73)

**PESB-R Series Valves:**
- Reclaimed water valves available in 1 1/2” and 2” sizes
- (pg. 99)

**EFB-CP Series Valves:**
- Reclaimed water valves available in 1 1/4” and 1 1/2” sizes
- (pg. 103)

**Quick Coupling Valves:**
- with locking purple covers: 33DNP, 44NP and SNP
- (pg. 109)

**Purple Covers for Spray Heads:**
- 1800® Series and UNI-Spray™ Series
- Purple Plastic Shrub Adapter
- (pg. 11, 13-14)

**Purple Landscape Dripline**
- Black Stripe Tubing with Emission Devices
- (pg. 184)

**Purple Valve Box Lids**
- (pg. 212)

**Control Zone Kits**
- (pg. 195)

**Purple Flush Cap with Fitting**
- (pg. 190)

**Purple PC Diffuser Cap and Diffuser Bug Cap**
- (pg. 180)

**Purple Valve Box Lids**
- (pg. 212)

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