



Four Seasons Resort, Sharm El Sheikh, Egypt

Luxury Resort Uses Rain Bird® to Irrigate Lush Landscaping Where Water Is Scarce

The Four Seasons Resort Sharm El Sheikh sits on limestone cliffs between the desert and the Red Sea on Egypt's Sinai Peninsula. Despite the region's scarcity of fresh water, the 200-room hotel features extensive landscaping, including 3,000 palm trees.

THE CHALLENGE

The cliffside location creates an elevation difference of more than 35 meters between the highs and lows of the project, making erosion, runoff, puddling, and lowpoint drainage a challenge. While the resort's many palm trees prefer moist soil, the irrigation is reliant on reclaimed water, which is notoriously tough on systems. Additionally, the sheer size of this property—nearly 2,000 square meters—involves a large number of controllers and valves. A centralized system of management will be key.

THE SOLUTION:

The team will need to install an innovative Rain Bird system to irrigate the slopes and care for the palms using the least amount of water possible. The key will be in choosing durable components that can withstand the harsh reclaimed water. If possible, the goal is to connect the new project to the existing Rain Bird system so that everything can be managed from one central location.



PESB-R Series Valves

Core Products Used:

- [Maxicom Central Control System](#)
- [ESP-SAT Series Satellite Controller](#)
- [1400 Series Bubbler](#)
- [PESB-R Series Valves](#)
- [RD1800™ Series Spray Head](#)
- [VAN Series Nozzles](#)

KEY OBJECTIVES

- ✓ Irrigate across varied elevations
- ✓ Conserve limited water supply
- ✓ Withstand reclaimed water debris
- ✓ Manage from a central location



Site Report: **Four Seasons Resort, Sharm El Sheikh, Egypt**

Luxury Resort Uses Rain Bird® to Irrigate Lush Landscaping Where Water Is Scarce

APPROACH:

Irrigate Efficiently Across Elevations

Rain Bird's 1400 Series Bubblers provide a controlled, gentle umbrella of water, ensuring sufficient irrigation while saving water and reducing erosion caused by runoff. Exclusive Seal-A-Matic check valves in RD1800 Series Spray Heads, which hold back up to 14 feet of head, further guard against erosion and help with low-head drainage, runoff, and water hammer at startup. Modifications onsite at Sharm El Sheikh will ensure the system's lower valves and sprinklers are secure even with differences in elevation.

Make Use of Reclaimed Water

PESB-R Series Valves and RD1800 Series Spray Heads are designed for durability in challenging conditions, including reclaimed water applications. VAN Series Nozzles offer precision without overspray, keeping hotel guests from being exposed to the chemically treated water.

Manage From a Central Location

The Maxicom Central Control System enables management of all the Four Seasons' irrigation components from one location. A new central control unit in the same operating room as the existing system connects 12 ESP-SAT Series Satellite Controllers via two-wire cables. These controllers feature Cycle+ Soak™ technology, which enables the Four Seasons to customize watering based on soil types around the property—further conserving water.



“ With Rain Bird products and technical support, we are able to control available water and meet the planting requirements all over the resort. Atrium appreciates working with Rain Bird and is very satisfied with Rain Bird's support throughout the project.”

MOHAMED SAIED
ATRIUM QUALITY CONTRACTORS

RESULTS:

The Four Seasons Resort Sharm El Sheikh is an oasis of rich greenery and blooming flowers thanks to Rain Bird solutions tailored to the desert and sea location. New and existing components are easily managed from a central control system by the same engineers who have been using it for 22 years. Even with reclaimed water, the purpose-built valves and spray heads offer durable, worry-free operation for years to come.

