



ECOVIE Residential Rainwater Collection System

Application:

Potable Indoor Use and Non-Potable Use for Toilet Flushing

Project Location:

St.Croix USVI

The ECOVIE potable rainwater collection system installed in this private residence is a 25,000 gallon basement cistern lined with Rainwater Pillows. The cistern collects the rainwater from the 7,000 square foot roof by filtering rain through the Gutter Glove screens. A Rainmaster pump then feeds water to treatment and irrigation. Treatment uses a Rainsafe ozone/UV system with 5 micron and carbon filtration following an M21 GE multi-media filter rated for 21 gallons per minute(gpm).

There is also a brackish well on site and ECOVIE installed a desalinization plant with a 7,500 gallon cistern and equipped it with Rainwater Pillows and a Rainmaster pump which can filter water at 6 gpm. This well acts as a backup water supply for the home. In a normal year the ECOVIE system can sustain 95 percent of the family's water needs, and in a drought it can still provide 85 percent.



Rooftop of Project Location



Desalinization System

Project Summary:

Collection Square Footage: 7,000 sq. ft.

Tank Capacity: 25,000 Gallons

Projected Annual Water Supply: 350,000

Desalination: 7,500 gallon Cistern

Equipment: Rainwater Pillows and Rainwater pump and filter.