



THE PROCESS

Our patented technology uses the Adiabatic Distillation Process to draw water from the atmosphere, which “Mother Nature” is constantly replenishing naturally and sustainably. Adiabatic is defined as "occurring without gain or loss of heat" and distillation is the condensation process where water vapor is reduced to a liquid. Skywater®’s patented adiabatic distillation process replicates and augments nature's hydrologic cycle by circulating ambient air through a condensation chamber where the dewpoint is constantly maintained, literally harvesting available vapor right out of the air, creating a continuous flow of water, even in low humidity conditions. The air is filtered, vapor is condensed, and the water that is collected is purified and finally filtered through a high quality carbon filters.



Water is collected by continuously simulating the dew point. As you probably remember from your very first physics lesson back in primary school, water exists in all three states of matter; solid, liquid, or gas, depending on the ambient temperature. In its natural state water is a liquid. When the temperature is below 32°F it freezes becoming a solid. When the temperature reaches 212°F it boils, transforming from liquid in to vapor. The Dew Point is the temperature at which vapor condenses back into liquid. That temperature will vary based on Relative Humidity. Relative Humidity is the measurement of the amount of moisture available in the air relative to the saturation point. Saturation point is determined by the temperature. In other words, the colder it is the denser vapor becomes and the lower the saturation point is, 90% RH at 35°F is equal in available water vapor to 10% RH at 100°F. By maintaining the dew point within a chamber that continuously circulates moisture laden ambient air, Skywater® machines are an energy efficient source of fresh, clean drinking water even in places where no other apparent source of water exists. The systems contain filters to increase purity, maintain pH and add nutrients. It is rainwater in a box, even in the desert.



CONDENSING WATER

Skywater® replicates nature's natural hydrologic cycle. Water is collected by continuously simulating the dew point. Vapor in the air is transformed into water using vapor compression that increases the dynamics of condensing vapor in the air, thus producing a high volume of water with low electricity consumption.

PURE WATER

The Skywater water vapor extraction process has been reviewed by water authorities world-wide for over 14 years. The water quality testing results have all met the highest standards and approvals. All water tests are available to the public along with certifications and warranties including CE and UL.

WATER SUSTAINABILITY

If you're a fan of water, you've come to the right place. Skywater supplies our clients with the best freshest products in the market to ensure their health and satisfaction. We are positioned to become market leaders in the beverage industry and we make sure our customers know it. Check out what's in stock to fill your cart.

For more information go to: <https://www.skywater.com>