



# BONAIRE®

The leaders in heating and cooling

## FREQUENTLY ASKED QUESTIONS

### How much water does an evaporative air conditioner use?

Evaporative air conditioners being a natural method of cooling consume water in 2 ways, firstly, in the process of evaporation to provide cool air. All evaporative air conditioners of equal performance will evaporate the same amount of water in the cooling process.

Secondly, water is used to maintain the integrity of the air conditioner and reduce the build up of minerals and sediment in the water reservoir, this is commonly known as either the bleed off or dump / drain system.

The following information describes the 2 processes and the amount of water used.

More information about maintenance water use can be found at the Frequently Asked Questions topic "How does evaporative air conditioning work"

#### Evaporation water consumption

Whenever a water surface is exposed to air that has a relative humidity less than 100% it will evaporate into the air.

The evaporation process of converting water to vapour for the purpose of cooling is a natural one.

There are many variables that affect the rate of evaporation and the water used in this process which include ambient weather conditions (temperature & humidity) the saturation efficiency of the filters – how good they are doing their job of providing cool air and air flow through the filters i.e. the size of the unit and the speed of the fan.

These many variables have a direct effect on the quantity of water used in the cooling process.

A Bonaire dealer can best advise you on how much this might be in the area you live.

#### Maintenance water consumption

In order to conserve as much water as possible evaporative air conditioners recirculate water from the reservoir to the distribution system and through the filters and as each litre of water is evaporated, it leaves behind the minerals and sediment.

For more information about maintenance water use, please see the Frequently Asked Questions topic "Why water runs out of an evaporative air conditioner".

The amount of bleed or dump / drain water that is used to maintain the integrity of the evaporative air conditioner will vary depending on the water hardness and the amount of minerals and solids dissolved in the water.

Your Bonaire dealer will best advise what quantity this will be based on your local area and the water quality.

A dump / drain system is an effective way to conserve maintenance water usage and Bonaire advocates this method.

#### In summary

You will probably find that many other appliances around your home consume more water overall than your evaporative air conditioner

For more information see the document "Choosing a cooling system" from the Sustainability Victoria web site