



everything eveningbr^eeze

cooling personal spaces



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Introduction

As EveningBreeze is a relatively new product in the market, some people find it hard to grasp what EveningBreeze is and how it works. We have met people who thought we produced cool bedding or air-cooled mattresses. Even people that experienced EveningBreeze first hand and were amazed about the gentle way we provide cooling to the sleeper, had difficulty understanding how the conditioned air magically appeared in their bed.

With the help of this document we will unveil some of that magic and give you an insight into the heart of the EveningBreeze system and the thoughts that lie behind the way the system is set up. Furthermore we explore the basics of installing, using and maintaining the system.

In case you have any questions left after reading this document, we will conclude with the Frequently Asked Questions.

Enjoy.

About

Ever had difficulty falling asleep during a hot summer night? Irritated by the noisy air conditioner? And how about your ecological footprint, let alone the energy costs connected to air conditioning...

Inspired by a cry for help from the hospitality sector, where energy prices soared and air conditioners didn't provide their guests with the sleeping comfort they desired so much, we believed it was possible to combine the need for more comfort and less energy consumption in an innovative new cooling solution.

We set out to create a cooled sleeping sensation which provides the utmost in comfort while minimizing environmental impact. After a lot of hard work and sweaty nights, we've managed to create an amazing product which fulfills all our requirements and more!

The patented system makes use of the latest advancements in air conditioning technology. Due to the well-known split-type technology, clear manuals and a self-diagnosing system all EveningBreeze products can easily be installed by any qualified HVAC contractor.

Currently EveningBreeze has a customer base spread over more than 20 countries and 4 continents, providing resorts worldwide with a unique sleeping experience which not only guarantees a comfortable nights' rest, but a huge energy reduction too!

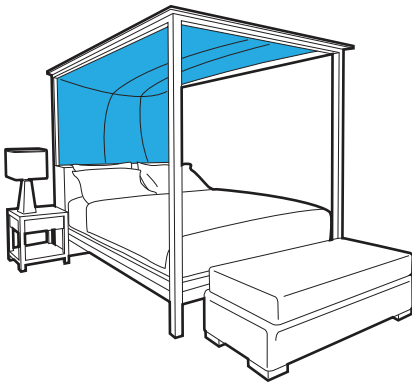


EveningBreeze supplies 3 standard models, based on king size beds (1.80 x 2.00m) covering the majority of bed designs available in the world.

In the unlikely situation that your bed design is so exotic that it's not part of our standard range, we're pretty sure that we can provide you with a custom solution that will fit your needs.

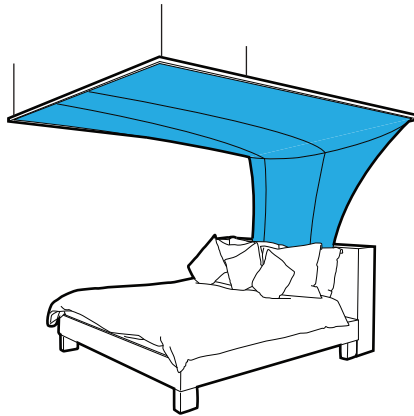
If you have any specific wishes, like a 3 by 4 meter bed in pink with an orange mosquito net you can have your EveningBreeze custom made. Just ask your local distributor for the possibilities.

EveningBreeze
Four Poster



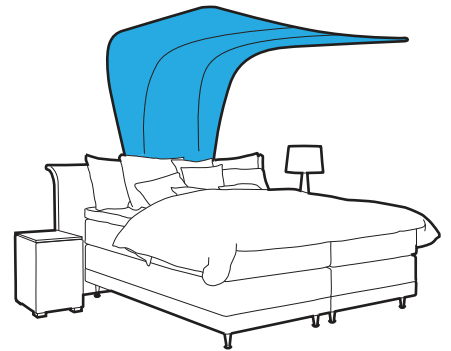
The EveningBreeze Four Poster can be retro-fitted to most standard four poster beds.

EveningBreeze
Suspended



The EveningBreeze Suspended can be suspended from the ceiling and is easily combined with a Kiwinet mosquito net.

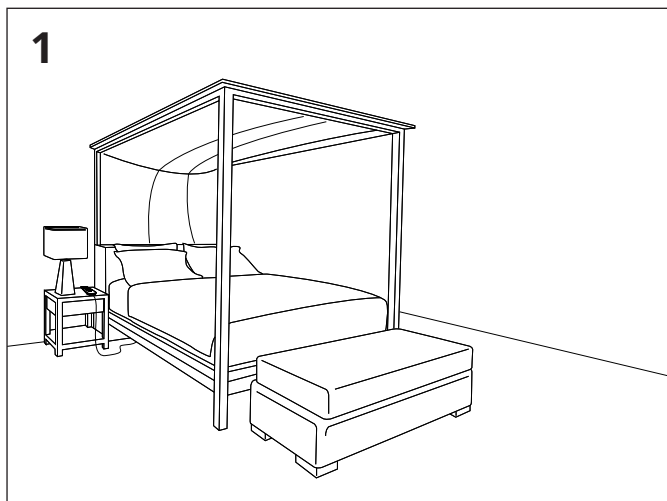
EveningBreeze
Free Standing



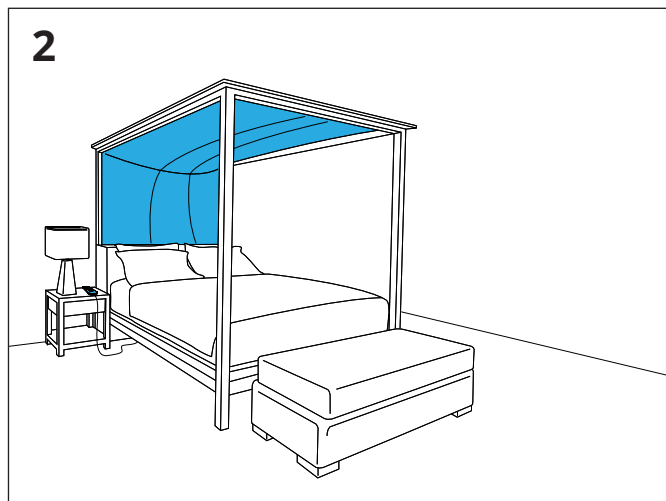
The EveningBreeze Free Standing can be combined with any bed, as it's suspended on a self-supporting aluminium frame.

How it Works

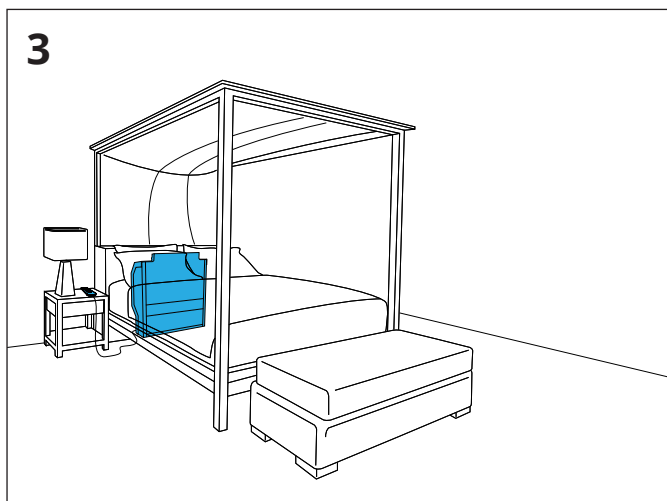
To explain how the system works and which components do the magic, we will have a closer look at the EveningBreeze FOUR POSTER. The working principle is the same in all 3 models.



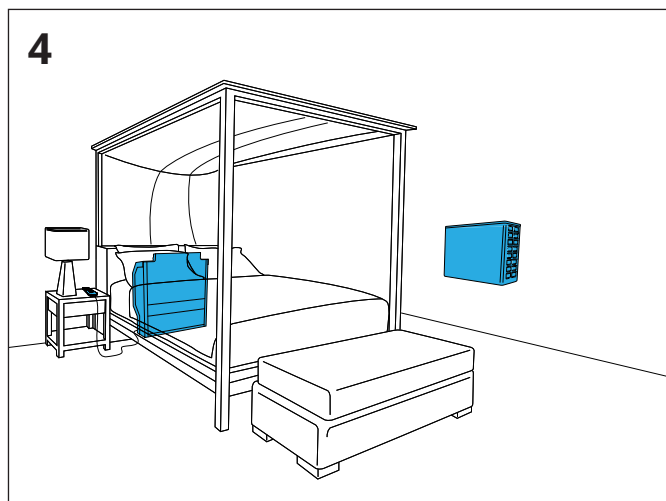
1
Your typical room layout with a four poster bed.



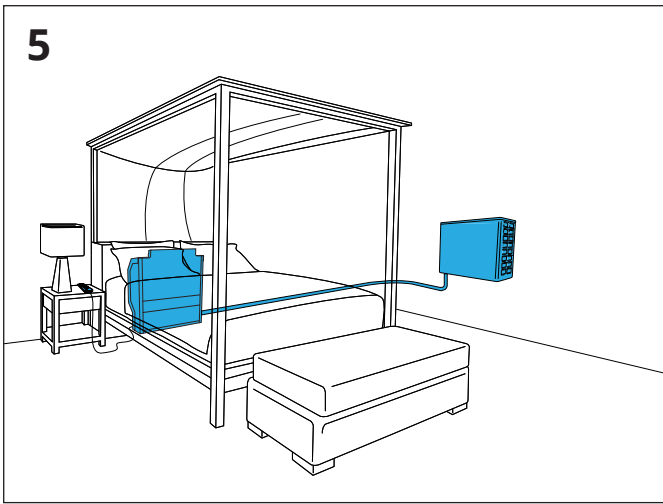
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The only way to notice that this is not an ordinary bed is the fact that you can see the **EveningBreeze Ventilation System** going up at the back of the bed and covering the ceiling. Also the remote lying next to the bed is a dead giveaway.



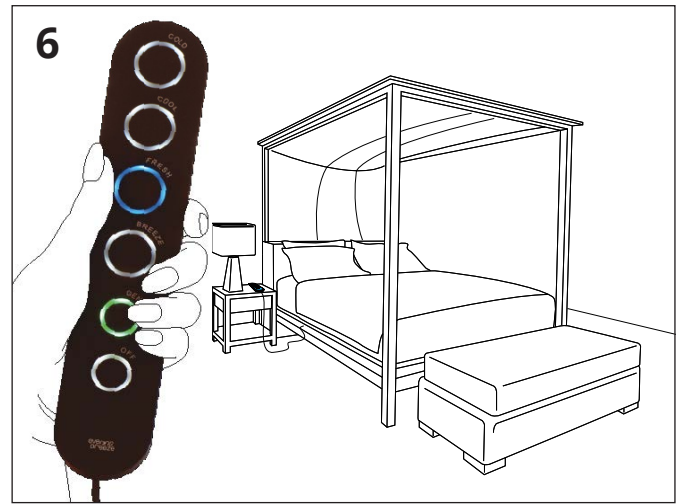
3
Hidden in or behind the headboard is the heart of the EveningBreeze system, the **indoor unit**. Which cools, dehumidifies and filters the air.



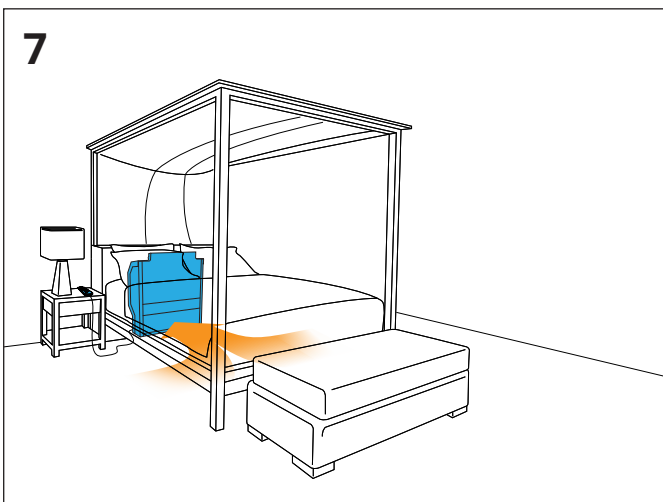
4
Outside of the bedroom you will find the **outdoor unit**, either on a wall, on the roof or on or under the floor(ing). The outdoor unit is the motor of the system, containing the compressor and expelling the heat outside.



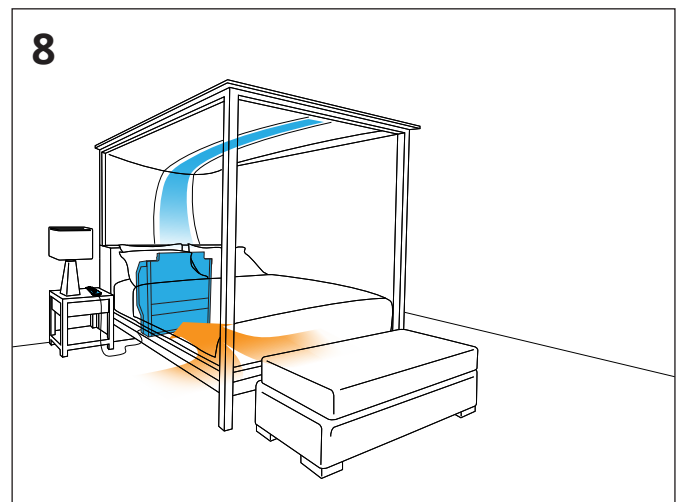
The in- and outdoor unit are connected by **refrigerant pipes, wiring and a condensate drain**. The refrigerant used is **R-410A** which is a non-ozone depleting refrigerant.



Using the **remote control**, the user can set the desired sleeping climate (see chapter 'USING EveningBreeze' for a full explanation of the remote control functions).

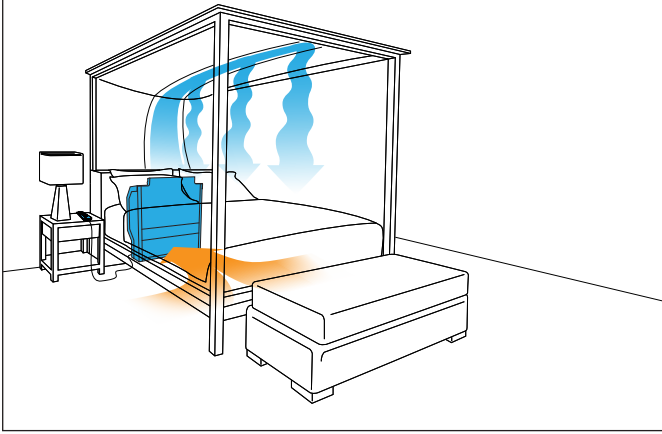


Once the desired climate setting has been selected, relatively cool air will be drawn from under the bed into the indoor unit. The indoor unit will then **clean, cool and dehumidify the air**.



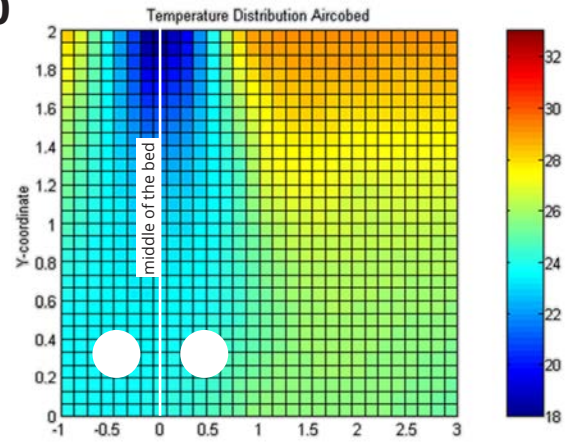
Once the air is conditioned it will make its way up to the top of the bed through the **air shute** that's located in the middle of the Ventilation System.

9



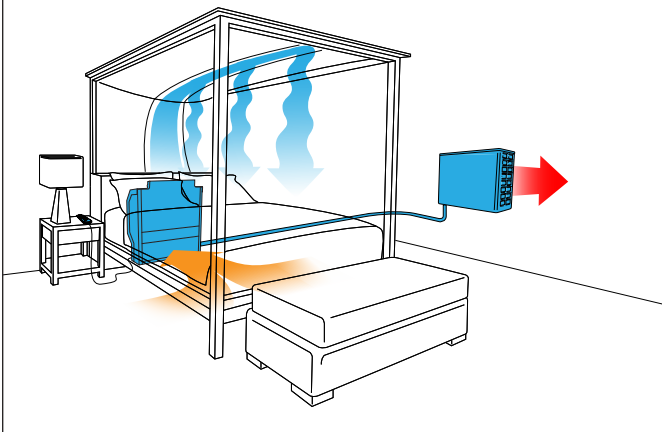
When the air reaches the ceiling it penetrates through the breathable part of the ceiling and is gently spread over the sleepers using nothing more than gravity (as cold air is heavier than warm air).

10



In this section view of the bed, you can clearly see the cool air distribution over the sleepers in a room at 32°C and 80% RH. Sleepers are comfortably cool at 23°C and 70% relative humidity.

11



While the sleepers are enjoying their comfortable cool nights' rest, the outdoor unit expels the hot air outside.

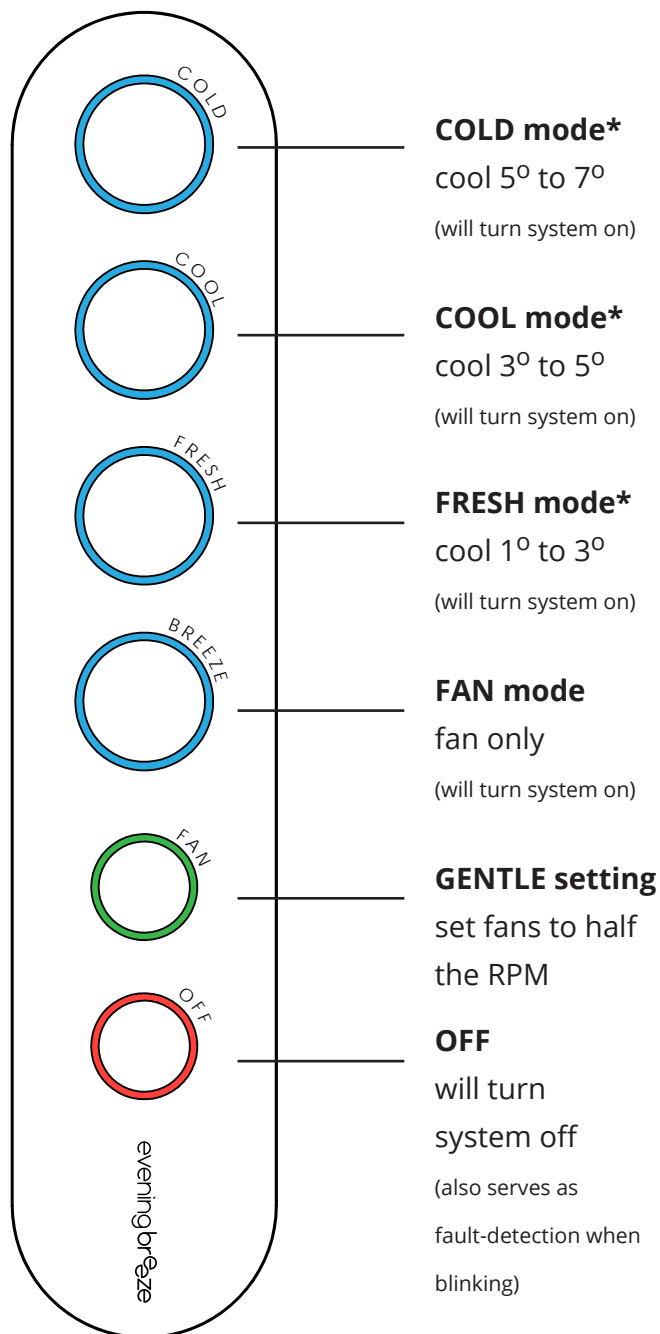
12



Having enjoyed a perfect nights' sleep users wake up refreshed knowing that they don't have to worry about any of the technicalities that make EveningBreeze work!

Using EveningBreeze

Using the EveningBreeze is so easy, it's a breeze! Just pick up the remote and you will see the buttons light up slowly, making it easy to use in the dark. Select your preferred climate setting and optionally put the fans on 'GENTLE' mode to lower the amount of air that's circulated by the system. Now put away the remote and while the lights slowly dim, close your eyes and off you go...



* For clients in very hot regions (35°C and up) EveningBreeze can provide a TURBO-switch option increasing the cooling power by 25%

Pick up the remote and the buttons will auto-magically light up!

Installation

EveningBreeze is a completely new product in the market, but not a new technology! As EveningBreeze is based on well-known air conditioning (AC) technology, any AC installer can install our systems. A typical installation will take 2 to 4 hours. With a normal installation no extra refrigerant is needed, as the systems are pre-charged with R410-A. Only if the installation requires a distance longer than 15m between the indoor and outdoor unit then extra refrigerant will have to be added. Every system comes with a very elaborate installers handbook which contains all the information needed for installation. In the unlikely event of an error in the system the built-in fault-finding system will ensure fast and easy problem-solving.

For a complete overview of the installation instructions for EveningBreeze please download our Installers Handbook below:

[EveningBreeze Installers Handbook](#)

Maintenance

As with any AC system, maintenance largely determines the lifetime of your product.

The EveningBreeze indoor and outdoor unit should be checked by an AC installer at least once a year to guarantee a long life-time and proper functioning. The check mainly consists of cleaning the evaporator and condensor and checking the pressure in the system.

Filter

The filter should be checked for dirt especially in the first weeks of running, as it's not clear yet how often it needs cleaning/replacing as this depends strongly on the environment in which it is used.

Ventilation System

The Ventilation Systems are fixed to the bed-frame with snap buttons and/or Velcro and are easily removed for maintenance. The FREE STANDING has its own aluminum frame which holds the Ventilation System, it can be taken apart for washing. All Ventilation Systems can be machine washed at 30°C, but please do not tumble-dry!

For a more elaborate overview of how to service the EveningBreeze system, please check page 40 to 47 of the Installers Handbook:

[EveningBreeze Installers Handbook - page 40](#)

Benefits



Comfortable

Comfortable, comforting and revitalizing. Forget noise. Forget draft.



Healthy

No more dry skin, sore throats and nasty colds.



Effective

Higher comfort with a clear conscience and lower energy bills.



silent

Sleep quiet. Evening Breeze doesn't push or blow large volumes of air, it simply releases the amount of air you need and let's gravity take the air down to the sleeping zone. This simple principle makes the Evening Breeze extremely silent, you won't hear a thing!



perfect temperature

Everybody has its own preference when it comes to sleeping temperature and even different seasons ask for different temperature settings. The intelligent thermostat combined with the Fresh, Cool and Cold user settings cater for just that. Waking up from a cool night, you'll feel fresh and revitalized!



draft free

Too much draft is uncomfortable while asleep and might lead to sneezing and congesting sinuses. Since evening Breeze doesn't push or blow the air, but rather gently releases, air movement is kept at an absolute minimum. You'll enjoy the cooling but not the draft!



clean air

During the day we get exposed to unhealthy air, at night Evening Breeze revitalises your lungs. The air you're breathing is constantly filtered, making the air free of any pollen or air born particles. This a treat even if you don't need the cooling!



perfect humidity

Sound humidity levels are key to a pleasant temperature experience and are vital for a healthy skin and respiratory system. Evening Breeze keeps the degree of moisture in the air at healthy levels. Relative humidity just right!



fresh air

If you wish to open up a window before going to sleep, you're more than welcome to do so. Evening Breeze focuses the cooling around the bed area, so no more need to close your sleeping room to keep to cool air inside. A breath of fresh air!



minimal energy use

Cooling is many household's number one energy consumer. Evening Breeze uses energy effectively by only cooling the space that requires cooling: the surface of your bed. This means than no energy is wasted in cooling the walls, the furniture and all other items in the bedroom. Saving you up to 80%



reduced energy bill

Energy gets more expensive and utility bills tend to rise. Evening Breeze radically reduces the amount of energy spend in creating your cool night's sleep, resulting in significantly lower electricity bills. Making your Evening Breeze pay for itself!



low carbon footprint

The bigger picture. Significantly lowering your energy use for bedroom cooling directly results in lower carbon emissions and takes us a step closer to a renewable energy society. Furthermore Evening Breeze uses a non Ozone depleting refrigerant. Sure that will make you sleep better!

A. General Product

A1. Where is the cold air coming from?

It's coming from the ceiling of the bed. The air has been taken from below the bed and cooled, dehumidified and cleaned in the indoor unit behind the bed. Then the conditioned air is pressurized in the bed-ceiling after which it is pushed through the 'breathing' ceiling-surface and gently drops down on the bed using nothing more than gravity.

A2. Does the system include the bed?

No, the system comprises of the indoor- and outdoor unit and the ventilation system, which is the textile part that is suspended above your bed. The EveningBreeze FREE STANDING also includes an aluminium self-supporting frame to be able to place the system above any bed, regardless of size or design.

A3. Are there any special requirements for my bed?

EveningBreeze provides solutions for every type of bed.

However, there are 2 things to keep in mind:

- 1. You need 200mm of space underneath your bed for the unit to be able to suck in enough air.*
- 2. You need 260mm of space behind your bed to place the indoor unit.*

A4. Is the mosquito net included with the system?

We can supply the EveningBreeze SUSPENDED included with an Kiwinet mosquito net. This product nicely integrates the EveningBreeze system into a quality mosquito net of Kiwinet (www.kiwinet.co.za). We also have custom solution for our other products in place. Please contact us for more information: info@evening-breeze.com.

B. Energy

B1. How much power does the EveningBreeze system use?

The system uses 400W on average, with a start-up peak of 620W. The system is able to adapt the energy use to the cooling capacity needed, so you will use less energy on cooler days and a bit more on warmer days.

B2. Can I run the system on solar power?

Yes you can! Several of our clients are running the system off battery banks that are connected to an array of solar panels. The low average power use of EveningBreeze enables you to save on the amount of panels and batteries used (or on generators).

C. Comfort/Health

C1. What makes EveningBreeze so comfortable?

Most common complaints about AC systems are: noisy, too cold, dry air and too much draft.

EveningBreezes solves all of these issues with our unique air displacement system. For starters EveningBreeze uses big fans that run on low RPM to move the air silently from under your bed to the top of the bed. This conditioned air (cooled, dehumidified and cleaned) is pressurized in the ceiling of the bed and as it pushes through the 'breathing' ceiling-surface, it gently drops to the sleepers without any draft or noise using nothing more than gravity. As we focus the cooling on the area where it's needed (the sleepers), you can leave your windows and/or doors open to enjoy natural ventilation and fresh air. While we cool such a specific area, we can be very precise on getting the temperature exactly right, making sure you're enjoying the perfect sleeping climate.

C2. What about the rest of the room?

Research shows that during the day, when people are active, natural ventilation is sufficient to create a comfortable cool room. Opening up windows or balcony doors combined with a ceiling fan will create a natural fresh air flow which can bring relief on even the hottest of days. During the night you are much more susceptible to the heat, because you are in a passive and dormant state and you're probably less keen on keeping doors and windows open. Putting a fan above your bed can help, but your body is also much more sensitive to draft and noise at this time of day. This is when you need active cooling to keep yourself comfortable.

D. Technology

D1. What cooling technology is EveningBreeze based on?

The EveningBreeze system is based on compressive cooling. Compressive cooling has been around for ages and is perceived as the most effective way to cool air. As the term suggests, compressive cooling is based on a compressor. EveningBreeze uses the latest in compressor technology: a DC Inverter Twin Rotary Compressor. The Twin Rotary compressor is one of the most durable, silent and efficient in its kind and allows for the cooling capacity to be adapted to the cooling necessity, lowering your energy use significantly. Furthermore, the refrigerant used in the system is R-410A, which is a non-ozone depleting refrigerant which is much more efficient than its predecessors.

D2. What refrigerant do you use?

EveningBreeze uses R-410A. R-410A is a non-ozone depleting refrigerant which can run more efficiently than its predecessors, like R-22. R-410A is widely available and considered the global replacement of R-22.

E. Installation

E1. Can I install the EveningBreeze system myself?

No, not unless you are a trained air conditioning installer. EveningBreeze's systems can be installed by any experienced air conditioning installer and does not require any extra knowledge. EveningBreeze provides an elaborate Installers Handbook for installers who are new to the product.

E2. What adaptation do I need to make to my room to install EveningBreeze?

You will need to have 260mm of space behind your bed to place the indoor unit and a 50mm hole needs to be drilled in an outer wall for the piping, wiring and condensate drain.

Contact Us

Breeze

Laan van Kronenburg 14
1183 AS Amstelveen
the Netherlands

email: info@evening-breeze.com

web: www.evening-breeze.com

tel: +31 152 612 705

fax: +31 848 328 334

