

# LIFEBREATH<sup>®</sup>

THE ULTIMATE AIR EXCHANGER



Protect the health of your home and family, save energy and enjoy fresh clean air with a Lifebreath Energy Recovery Ventilator (ERV).



# Your house could be a health hazard without you knowing it!

We can't live without air. Lots of it – clean, fresh air, full of life-giving oxygen. Yet our homes today are built to keep fresh air out. All in the name of energy efficiency. Even if you don't live in an ultra energy-efficient home, you have probably spent some time recently weather stripping doors and windows, caulking around frames, filling walls and attics with insulation. As a result you've cut your air-conditioning and heating costs. Excellent. But at the same time you have made it more difficult for fresh air to move into your home and for stale air to move out. The indoor air quality has deteriorated, and that makes the home environment uncomfortable and unhealthy.



*The indoor air is over-loaded with carbon dioxide. You feel drowsy and find it difficult to concentrate.*



*Colds seem to hang around forever.*



*Young children are especially at risk because they can be particularly prone to asthma and other respiratory problems.*



*Smells from cooking, pets and bathrooms never seem to go away.*



*Health problems are aggravated by paint, adhesives, furnishings, plastics, cleaning compounds, carpets and underpadding fumes trapped inside your house.*



*Respiratory problems are aggravated by tobacco smoke, pollen, dust, cat and dog dander, dust mites and combustion byproducts. These build up all winter – summer, too, if you have air-conditioning.*

## Mold – Your house suffers and you suffer too!



Molds and fungi are commonly found growing on wood, drywall, upholstery, fabric, wallpaper, drapery, ceiling tiles and carpeting. They are most often found in slab/wall intersections, kitchens and bathrooms or any place where there is moisture because molds and fungi need damp conditions to grow.

Some amount of molds and fungi exist in every home. That does not always mean that health problems will occur. But for some, especially young children, those with asthma or allergies and the elderly, the inhalation of fungi spores can lead to health problems or make certain health conditions worse. In fact, some molds have been found to cause severe reactions in people and even to be toxic when inhaled.



### There is a solution:

A way to protect your family from the harmful effects of mold, minimize energy use and at the same time fill your home with fresh healthy air.

It's called Lifebreath.

### Lifebreath Energy Recovery Ventilation (ERV)...

Exhausts stale air and harmful contaminants, transfers moisture and fills your home with fresh clean air.



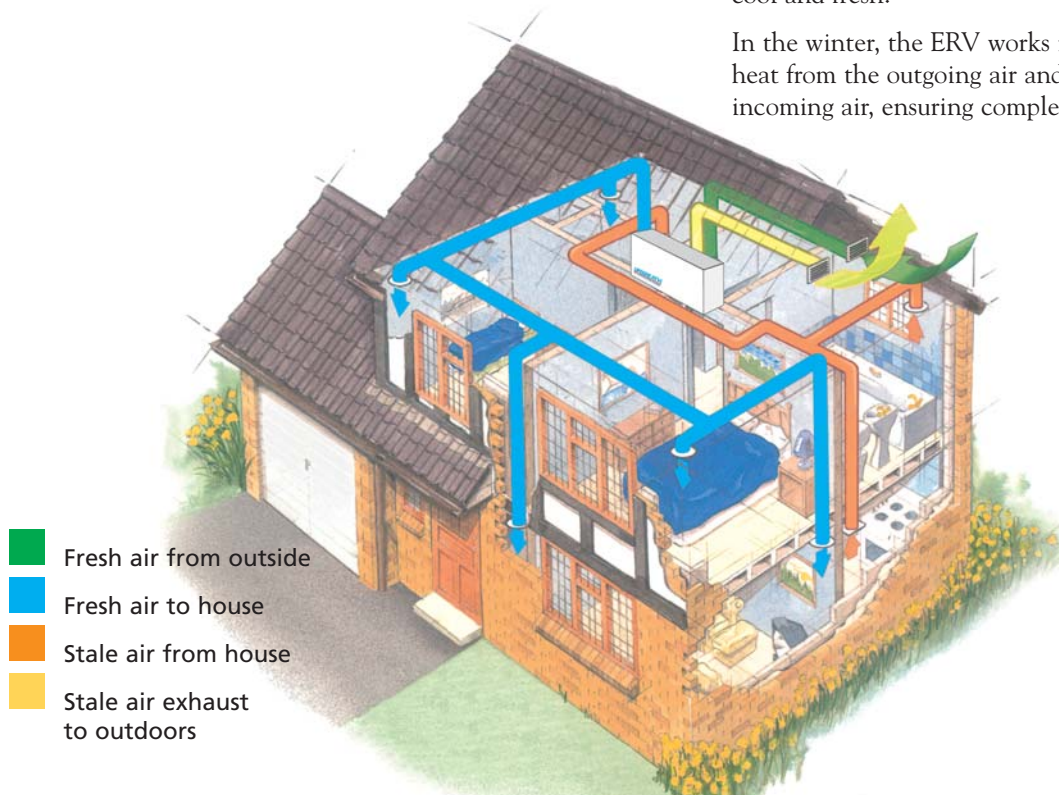
# Lifebreath delivers fresh clean

## Reliable Clean Air

Our compact, electrically powered ERV moves stale, contaminated air from inside the home to outdoors. At the same time it draws fresh, oxygen-laden air from outside and distributes it throughout your home.

Stale, polluted air is constantly being replaced by an equal quantity of fresh clean air.

The Lifebreath ERV installs easily in new or existing homes



## How the ERV Core Works

The Lifebreath Energy Recovery Ventilator (ERV) is designed for warm, humid regions and uses a specialized Enthalpic core to transfer moisture and energy. During the air-conditioning season, outside air brought in for ventilation is reduced in temperature and humidity as it passes through the Enthalpic core. This exchange occurs as a result of vapor transmission technology; the temperature (heat) and moisture is transferred to the stale exhaust air stream.

As the two air streams pass through the ERV they do not mix. They pass on either side of the Enthalpic core membrane. The Lifebreath ERV efficiently reduces moisture and transfers energy, minimizing the impact on air conditioning load, keeping your home cool and fresh.

In the winter, the ERV works in reverse removing heat from the outgoing air and transferring it to the incoming air, ensuring complete home comfort.

- Tempered fresh air is distributed through a system of ducts.
- The Lifebreath ERV can eliminate the need for separate exhaust fans in kitchens and bathrooms which can often be noisy and inefficient.
- The Lifebreath ERV moves stale air out, replaces it with fresh air

## Have Control Over Your Indoor Environment

Lifebreath ControlAir-15 is standard on all residential ERV's and is the best way to take control of your Indoor Air Quality (IAQ).

The control panel comes mounted on the ERV, but can be installed in a remote location for the most convenient operation.

ControlAir-15 features:

- Standby/On mode
- 20 On/40 Off
- 5 Speeds

**ControlAir-**  
Digital Remote Control

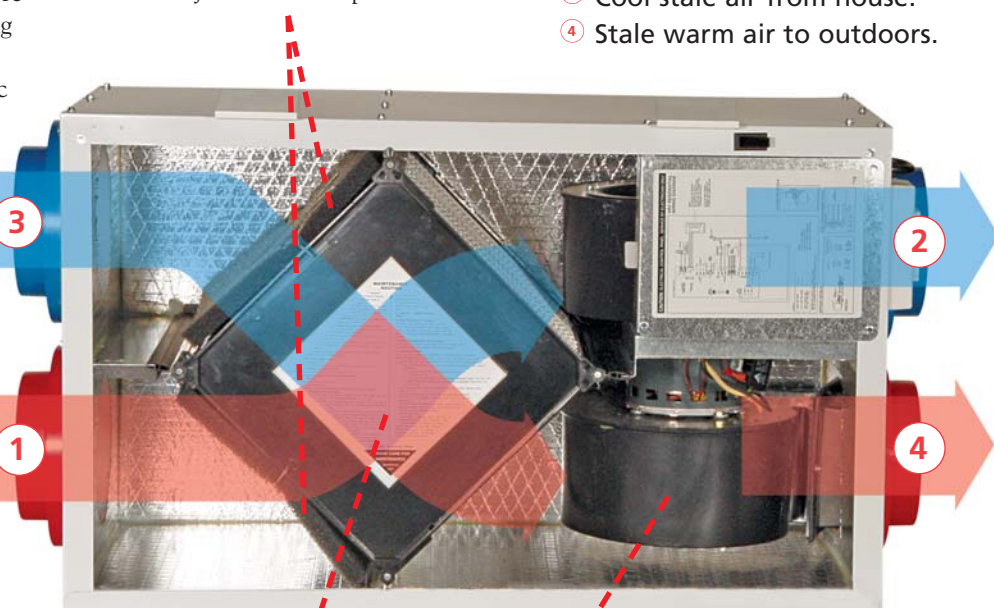


# air to every corner of your home!

## Easy-clean filters

Protect the heat exchange core.  
Just rinse and replace.

- ① Warm fresh air from outside.
- ② Fresh cooled air to house.
- ③ Cool stale air from house.
- ④ Stale warm air to outdoors.



## The perfect balance of clean fresh air

What sets Lifebreath ventilation technologies ahead of the others is “balanced ventilation”. This means that for every cubic foot of fresh air introduced into the home an equal amount of stale, contaminated air is exhausted out by a dedicated fan in the ERV. Unlike other “simple” ventilation practices the ERV is an engineered system specifically designed to avoid negative house pressures and the development of air infiltration into wall cavities which can lead to moisture damage, rot and harmful mold.

## Installation flexibility\*

Lifebreath ventilation systems are built for reliability. Like any mechanical system the installation should be accessible for inspection and filter maintenance. The ERV has a fully insulated cabinet suitable for a variety of installation locations such as:

- Garages
- Attics
- Utility Rooms
- Closets

*\*Consult local building codes prior to installation*

## Motor

Energy efficient and designed for maintenance-free long life. Quiet and reliable.

## Easy installation

Wide selection of capacities and sizes means there’s an energy-efficient Lifebreath ERV for every home.

## Most efficient ERV available!

Not only does the Lifebreath ERV save energy through its Enthalpic energy recovery core it is also the most efficient ERV offered:

- Only 50 watts on continuous low speed.



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# Experts agree ventilation and the introduction of fresh air are critical to improving indoor air quality.

According to the American Lung Association, elements within our homes have been increasingly recognized as threats to our respiratory health. The Environmental Protection Agency (EPA) lists poor indoor air quality as the fourth-largest environmental threat to our country and that inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emissions from indoor sources and by not carrying indoor air pollutants out of the home.

ERV's are the most advanced and complete home ventilation systems available removing stale, contaminated air while at the same time introducing fresh, clean air and recovering energy.



- ERV's are recommended in regions where high outdoor humidity is cause for operating air conditioning/dehumidification more frequently than heating system.
- ERV's not recommended where temperatures fall below 25°F (-4°C) for more than five days.

## Selecting the correct ERV for your home

The home ventilation system can be sized using room counts or by using whole-house ventilation. Using a whole-house ventilation rate of 0.35 ACH (Air Changes per Hour) the ERV cfm has been determined for the following homes.

**Condominium – 800 sq. ft.**  
 800 sq. ft. X 8'h = 6,400 cu. ft.  
 6,400 cu. ft./60 = 106 cfm  
 106 cfm X 0.35 ACH = 37 cfm

**Bungalow – 2800 sq. ft.**  
 2800 sq. ft. X 8'h = 22,400 cu. ft.  
 22,400 cu. ft./60 = 373 cfm  
 373 cfm X 0.35 ACH = 131 cfm

**Two Storey – 4,000 sq. ft.**  
 4,000 sq. ft. X 8'h = 32,000 cu. ft.  
 32,000 cu. ft./60 = 534 cfm  
 534 cfm X 0.35 ACH = 187 cfm

**Two Storey – 5,500 sq. ft.**  
 5,500 sq. ft. X 8'h = 44,000 cu. ft.  
 44,000 cu. ft./60 = 733 cfm  
 733 cfm X 0.35 ACH = 257 cfm

## Specifications and Performance Quick Reference Guide

Model No.	150ERV	150ERVD	200ERV	200ERVD	500ERV	Commercial 700ERV	Commercial 1200ERV
<b>Airflow Wg (Pa)</b>	CFM(L/S)	CFM(L/S)	CFM(L/S)	CFM(L/S)	CFM(L/S)	CFM(L/S)	CFM(L/S)
<b>.1 (25 PA)</b>	177 (83)	177 (83)	232 (109)	232 (109)	525 (245)	650 (305)	1175 (560)
<b>.2 (50 PA)</b>	164 (77)	164 (77)	223 (105)	223 (105)	500 (235)	630 (300)	1135 (525)
<b>.3 (75 PA)</b>	156 (73)	156 (73)	215 (102)	215 (102)	475 (223)	620 (290)	1100 (516)
<b>.4 (100 PA)</b>	143 (67)	143 (67)	195 (92)	195 (92)	440 (210)	608 (285)	1050 (494)
<b>.5 (125 PA)</b>	123 (58)	123 (58)	189 (89)	189 (89)	N/A (N/A)	602 (283)	995 (470)
<b>Effectiveness</b>	50	50	50	50	50	50	50
<b>Defrost Type</b>	N/A	Damper	N/A	Damper	N/A	N/A	N/A
<b>Dimensions</b>							
<b>H x W x D (in.)</b>	19 x 33.5 x 14.75	19 x 33.5 x 14.75	19 x 33.5 x 14.75	19 x 33.5 x 14.75	75 x 49 x 28.25	24.63 x 29.63 x 28.75	24.63 x 41.5 x 29.9
<b>(mm)</b>	483 x 850 x 375	483 x 850 x 375	483 x 850 x 375	483 x 850 x 375	475 x 1245 x 717	625 x 753 x 730	625 x 1055 x 759
<b>Electrical</b>	All units are 120VAC/60HTZ/1 Phase All units carry a 5 year warranty on the Energy Recovery Core, residential 5 year warranty on parts, commercial 2 year.						

Options: All above units are capable of operating via remote low voltage controls. Check shop drawings and accessories for details. Nutech reserves the right to make changes without prior notification.

Nutech: Making Your Home Healthier



# LIFEBREATH®

THE ULTIMATE AIR CLEANER

Nutech Brands Inc., developer of the Lifebreath line of climate and air quality control products, is a world leader in the increasingly important field of Indoor Air Quality Management. Nutech's mission is to improve the quality of the indoor air we breathe. With more than 170,000 Heat/Energy Recovery Ventilation installations throughout North America, Lifebreath is the recognized leader in Indoor Air Quality (IAQ).



Portable Unit

Whole House Unit



The Clean Air Furnace

## The TFP + Hepa Air Cleaner for Long Lasting 99.97% Clean Air

Revolutionizing home air cleaning, combining two particle capture technologies to ensure clean, healthy air throughout your home.

1. Removes 99.97% of health-threatening particles from the air in your home.
2. Lowest maintenance air cleaner available. Check-up required only once a year. Hepa filter replacement only required every 3 years. Operating continuously at maximum efficiency with minimum maintenance.
3. Unlike electronic air cleaners Lifebreath does not generate any poisonous ozone which can damage your lungs.
4. Cleans the air throughout your home, benefiting everyone in the family all the time.
5. It allows air to circulate freely without putting any extra load on your air distribution system.

Now for the price of an ordinary furnace you can have whole-house ventilation as well. The Lifebreath Clean Air Furnace with its integral energy recovery ventilator is the perfect total heating, air-conditioning ventilation solution.

The Clean Air Furnace is capable of up to 4 ton of cooling and can heat from a variety of sources including:

- Hot water heater
- Boiler
- Heat pump
- Electric coil

Enjoy high efficiency heating and cooling with a constant supply of fresh, healthy air.



The TFP ultimate air cleaner forms part of an excellent strategy for improving indoor air quality (IAQ). To achieve best results three steps are essential:

1. **Elimination** (remove pollutant causing items from the home)
2. **Ventilation** (introduce fresh air with a Lifebreath HRV or ERV)
3. **Filtration** (clean the air with a Lifebreath TFP ultimate air cleaner)



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