

## **Ventilation Solutions**

Fresh Air Solutions for Ductless Heating & Cooling



# We can fill your home with healthy, fresh air

Indoor Air Pollution is real, and it can pose a number of problems for your home, your loved ones and pets.

We know the secret of proper ventilation.

#### **Proper Ventilation**

The Environmental Protection Agency (EPA) estimates that the air in your home can be as much as 10 times more polluted than outside air.

#### What it means to you

Good ventilation protects you, your family, and your guests from unpleasant odors, irritating pollutants, and potentially dangerous gases like carbon monoxide.

A well-designed and properly operated ventilation system also prevents the growth of mold and mildew, which can cause or aggravate allergic reactions and lung problems such as asthma. Because people generally spend about 90% of their time inside, indoor air pollution can actually be a bigger health risk than outdoor air pollution.

#### What it means to your home

Good ventilation protects your home from damage by working to eliminate excess moisture from the air. Too much moisture rots window sills and attic eaves, peels paint, and invites insect infestation. Damp insulation in walls and ceilings means lost heat, higher fuel bills, and destructive mold growth. Carpeting, wallpaper, electronic equipment, and furniture can all be damaged by excess moisture.

#### **Proper Filtration**

Air pollution isn't just car exhaust or factory smoke. Dust mites, mold spores, pollen, and pet dander in the air inside your home can cause problems if your family has allergies or asthma.

Using HEPA filters can trap these pollutants and may help bring allergy relief.

Only you can control the sources of pollutants in your home, but Fantech's Filtration System can help provide ventilation and filtration solutions so your family can breathe easier.

## Clean, fresh air comes in all sizes

Fantech provides an added solution for better indoor air quality with the Whole House HEPA Filtration System. This small, compact unit can be installed on the existing ductwork of your furnace/air handler or can be used as an independent system mounted in the attic, crawl space or closet.

#### 2,2200 sq.ft.

The system is designed to clean and filter the air in an average 2200 sq. ft. home once an hour. Larger homes will take slightly longer for a complete air change.

#### 240 cfm built-in fan

The system is equipped with a speed 240 cfm energy efficient fan.

#### 99.97% Efficient

Mold spores, pet dander, cooking odors, dust, dust mites and their by-products are all captured in a series of three filters. The prefilter collects the largest particles while the carbon filter absorbs odors. The third filter is a true certified HEPA filter, which collects 99.97% of particles down to 0.3 microns.

#### Plug & Play

All units are delivered tested and ready for installation. With easy-to-reach filters, service and maintenance is made easy.

#### For new and renewal

All units are perfectly designed for both new and retrofit construction.



#### CM 3000

240 cfm, 150W, 8" duct, non-insulated version shipping weight 28 lbs, art. #40219

#### CM 2000i

to a full HEPA solution with pre-filter and odor reduction Carbon filter? No

#### CM 3000i



## Filtration for a single family home

Many small to medium homes now use Mini Split AC/Heat Units rather than the traditional HVAC ducted systems that distribute the air/heat around the home. Mini Splits rely on indoor air currents for distribution, but in tight homes this becomes a problem as the air/heat stays locally around the unit.

## Whole House Filtration Unit

The CM unit draws air from the space conditioned by a Mini Split and distributes it via a small duct system to other parts of the home, ensuring a supply of clean air.

The filtration unit can be fitted with a MERV13 filter or a high efficiency HEPA filter for truly clean air.

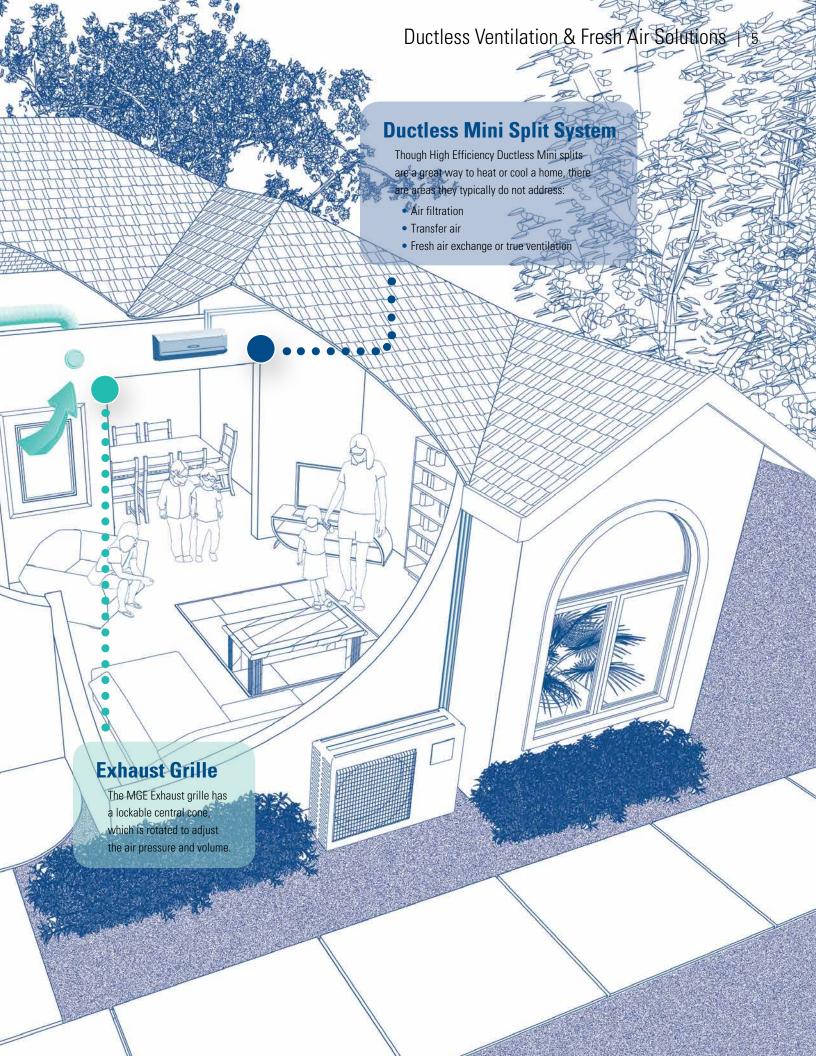
pattern and adjustable gap for balancing airflow.

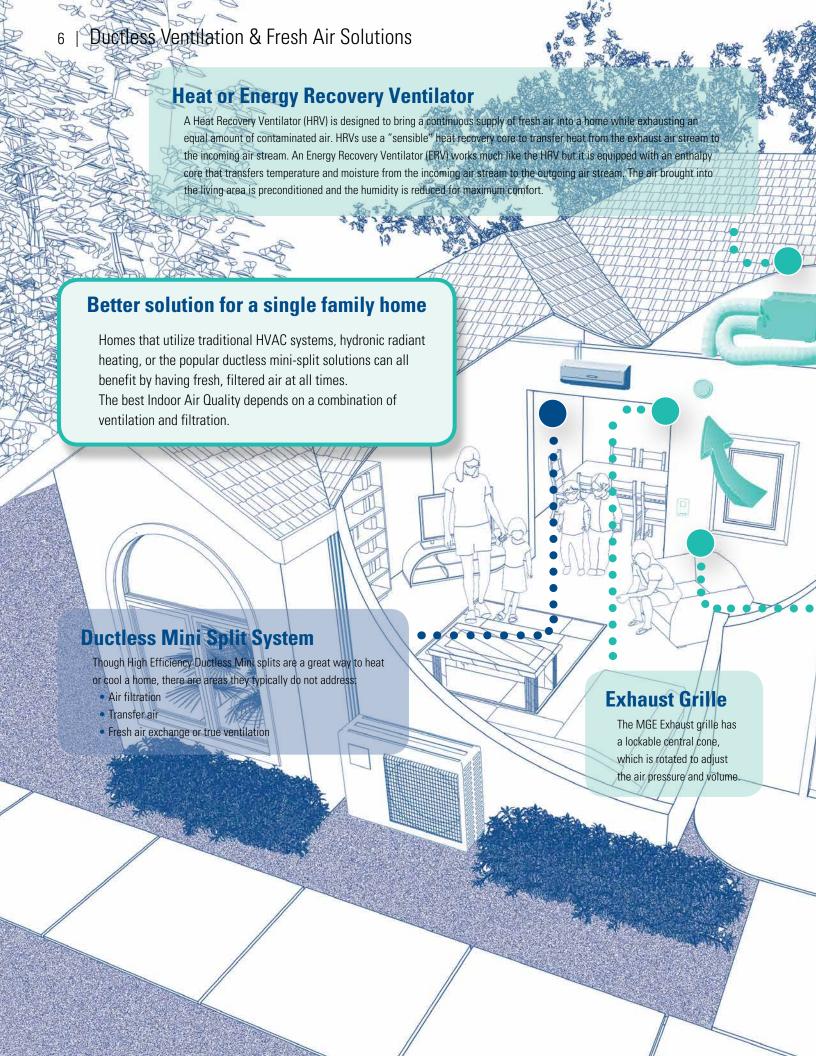
**Supply Grille** 

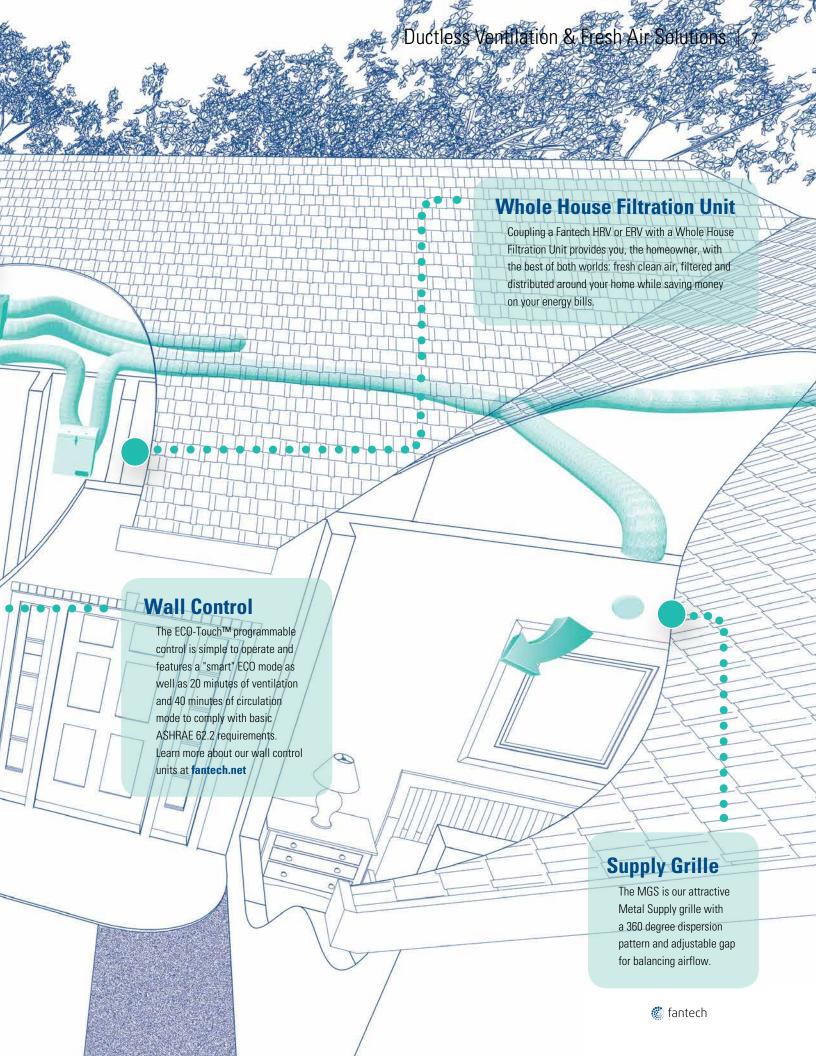
The MGS is our attractive

Metal Supply grille with

a 360 degree dispersion

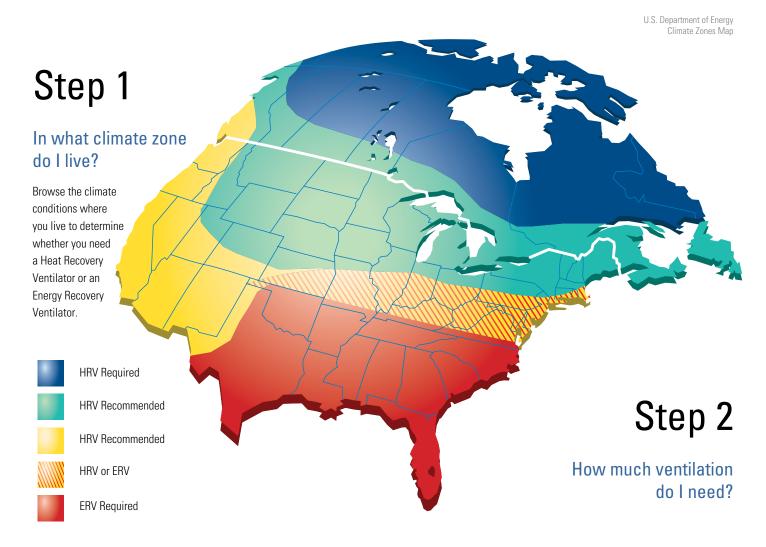






## Two simple steps to help you choose

## the ideal HRV or ERV for your living space



HRVs are usually recommended for colder climates with longer heating seasons. ERVs are used for warmer more humid climates with long cooling seasons.

Living area	Number of bedrooms				
	0-1	2-3	4-5	6-7	>7
sq.ft.	cfm				
< 1,500	30	45	60	75	90
1,500 - 3,000	45	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

Table 1. Ventilation needs of a home, ASHRAE 62.2

The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) has developed a guideline to evaluate the minimum ventilation needs of a home according to ASHRAE Standard 62.2, Ventilation for Acceptable Indoor Air Quality.

The standard defines whole house and local ventilation needs. Whole house ventilator sizing is based on the home's overall liveable surface area and the number of bedrooms. The whole house ventilation is the continuous ventilation rate required to meet the minimum requirements of the standard, represented in the table to the left.

Along the left side of the table simply select the size of the home; then find the corresponding line matching the number of bedrooms; the resulting number is the amount of air you will need in a whole house ventilator. An HRV/ERV can also be used to meet local ventilation needs if a dedicated duct system exists otherwise bathroom and kitchen exhaust may be required to meet minimum ventilation needs.



## **How Do They Work?**

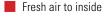
#### Heat Recovery Ventilators (HRVs)

An HRV is designed to bring a continuous supply of fresh air into a home while exhausting an equal amount of contaminated air. HRVs use what is called a "sensible" heat recovery core. This special aluminum core transfers heat from the exhaust air stream to the incoming air stream. During winter fresh incoming air is tempered by the heat that is transferred from the outgoing air so you save on energy costs, while during summer, the incoming air is pre-cooled if the house is equipped with an air cooling system. Fantech HRVs are equipped with automatic defrost mechanisms so even if you live in a cold climate you can use your HRV all year long.

### **Energy Recovery Ventilators (ERVs)**

Fantech's ERV works much like the HRV but it is equipped with a different type core. The enthalpy core at the center of the unit transfers heat and moisture from the incoming air to the outgoing air that was cooled and dried by the building's air conditioner. The air brought into the living area is cooled and the humidity is reduced for maximum comfort. The load on your air conditioner is reduced saving on cooling costs.

> Stale air to outside Fresh air from outside Stale air from inside











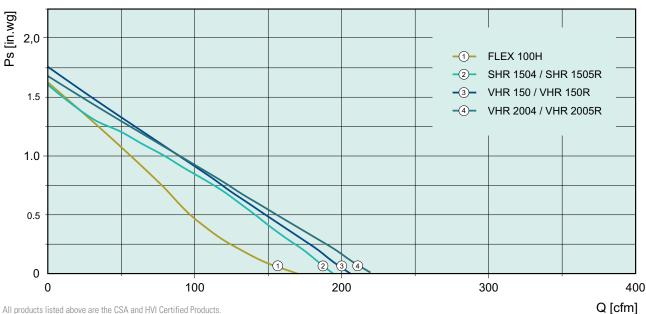


#### **Flex 100H**\*

Vertical connected heat recovery ventilator with a fixed-plate heat exchanger designed to serve up to 7 bedroom homes. With its exclusive TurboTouch™ feature, FLEX 100H can deliver up to 50% more exhaust capacity to easy meet your ventilation needs.

#### **VHR Series**

Vertical connected heat recovery ventilators with a fixed-plate heat exchanger designed for residential applications. These units bring a continuous supply of fresh air into a home while exhausting an equal amount of contaminated air.



All products listed above are the CSA and HVI Certified Products.

<sup>\*</sup> This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA.





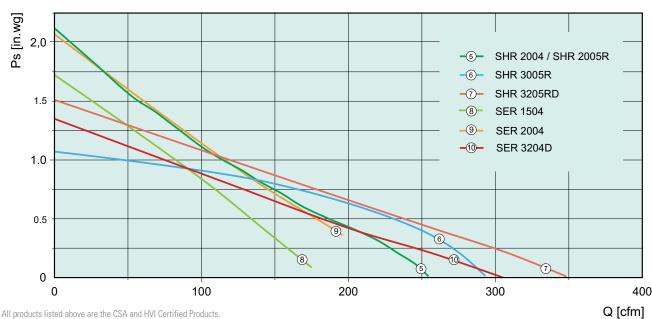
#### **SHR Series**

art. #40072 | #40077 | #40085 | #40086 | #40226

Side connected heat recovery ventilators with a fixed-plate heat exchanger designed for residential applications. During winter, fresh incoming air is tempered by the heat that is transferred from the outgoing air.

#### **SER Series**

Side connected energy recovery ventilators with a fixed-plate energy exchanger designed for residential applications. The enthalpic core at the center of the unit transfers heat and moisture from the incoming air to the outgoing that was cooled and dried by the building's air conditioner.





<sup>\*</sup> This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA.



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