By using the energy recovery ventilator, outdoor air will be filtered and ventilated indoors. It will also effectively filter the indoor polluted air to outdoors. “Green” lifestyle is achieved and you and your family’s health are taken care of.

With energy recovery ventilator, nature is inside your home.
Outdoor Pollution

Quantity of automobile in China is ranked no.2 in the world
120 million cars

Coal consumption
3.6 tons

Data based on Chinese Govt Traffic Control/Energy Department

Indoor Pollution

Benzene  Formaldehyde  Ammonia
TOVC  Furniture Odor  Bacteria

Air pollution of major cities of China in 1st half of 2013

Over 60% of the time Beijing’s air quality did not meet the standard air quality level

2013 first half of the year, daily air quality based on 74 cities
- 25% Slightly polluted
- 10% Moderate polluted
- 8% Slightly polluted
- 3% Severely polluted
- 45% Average air quality
- 9% Good air quality

Data based on China’s Environmental Dept.

Table:

|------------------|-----------|------------|-----------|------------|------------|-------------|------------|-------------|

Enjoy Double Comfort with Interlocking Air Conditioning

The newly developed energy recovery ventilator can interlock air conditioning. It allows you to enjoy both fresh air and comfortable temperature.

Convenient Installation and Maintenance

Side maintenance opening is only 450 x 450mm, that saves installation space and allows easy inspection for filter, element, as well as terminal box.

Multiple ways of installation, horizontally hanging or vertically mounting

The new energy recovery ventilator of the heat exchange device can be installed onto the ceiling or wall, so from now on installation and maintenance will not be a problem.

View at Wall Ceiling

+ Terminal box should be at top as vertically mounted.
Whole House Filled With Clean Air
Slim Energy Recovery Ventilator

Slim design, ventilation with filtration

Standard Series
24-hour continuous

With 24-hour continuous ventilation, stale air is exhausted while fresh air is enters into the house. Circulation of fresh air throughout the whole house is maintained.

Structure Diagram

Recommended to change filter every year and clean every month

Pre Filter
Standard Series
Filter outdoor large dust particles and insects

Life time of filter is subject to usage environment

Pre Filter (Standard Type Energy Recovery Ventilator)

Dust
Worms
Mold spores
Sand particles
Insects

Dust particle diameter
1 μm
10 μm
100 μm
1 mm

Considerate Design for Extra Saving

Slam and Quiet
Slim design of the newly developed models enables easy installation in narrow space.

Bypass Ventilation for Speedy Exhaust of Polluted Air

Divergence damper is equipped for Bypass Ventilation. Return airflow (RA) is greater than supply airflow (SA) allowing speedy exhaust of indoor polluted air. By using bypass ventilation during season change, it will be more comfortable and energy saving.

* In case outdoor air is highly polluted, it is not recommended to use bypass ventilation. It may cause negative air pressure and even may ingress into the houses through the place at the doors and windows.

I Heat Exchange Mode

Long Term Cost Comparison

Long term cost comparison for Panasonic ventilation fan and energy recovery ventilator

<table>
<thead>
<tr>
<th>Unit: Dollar/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation cost of energy recovery ventilator</td>
</tr>
<tr>
<td>Operation cost of air conditioner</td>
</tr>
</tbody>
</table>

Based on the following condition

[Test condition]
- Indoor: Cooling 26°C (RH50%) Heating 20°C (RH40%)
- Outdoor: Cooling 35.2°C (RH69%) Heating 14°C (RH44%)
- Ventilation air volume: 0.09m³/s × 0.5 m³/min = 0.045 m³/min
- Air conditioner operation time:
  - Summer: 24hr/day × 120 days = 2880hrs (June to September)
  - Winter: 24hr/day × 120 days = 2880hrs (November 16th to March 16th)
- Electrically charged: 0.48 dollars/kWh

Highly efficient energy recovery reduces energy loss during ventilation, thus achieving energy saving.

Utilize energy of indoor return cool air to cool down outdoor air before intake to indoor, indoor cool loss is reduced.

Energy Recovery Ventilation Mode

<table>
<thead>
<tr>
<th>Outdoor air</th>
<th>Normal Ventilation Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>26°C</td>
<td>-2°C</td>
</tr>
<tr>
<td>Outdoor fresh air through heat exchange</td>
<td></td>
</tr>
<tr>
<td>Ventilating Fan</td>
<td></td>
</tr>
<tr>
<td>Outdoor exhaust</td>
<td></td>
</tr>
<tr>
<td>30°C</td>
<td></td>
</tr>
<tr>
<td>Air conditioner cooled 10°C</td>
<td></td>
</tr>
</tbody>
</table>

Energy Recovery Ventilation Mode

Large particles
Medium particles
Small particles