FAQs
Air exchangers

1. **Why should I install an air exchanger in my home?**
   Today's homes are very well insulated to save energy. However, due to this efficient insulation, homes trap much more stale air, humidity and pollutants indoors than before. Harmful pollutants float indoors, compromising your health and your home. Studies have shown that indoor air can be up to 100 times more polluted than outdoor air. These pollutants can increase the risk of chronic respiratory illness and can seriously damage the structure of your home. The installation of an air exchanger is the solution for improved indoor air quality in your home. It provides effective, adequate ventilation by removing stale indoor air and replacing it with fresh outdoor air.

2. **What does HRV and ERV mean?**
   HRV means Heat Recovery Ventilator.
   ERV means Energy Recovery Ventilator.

3. **3.What's the difference between an HRV and an ERV?**
   Heat recovery ventilator (HRV):
   An air exchanger equipped with a heat recovery ventilator (HRV) is ideal for homes in colder regions where there is excess humidity during the heating season. The HRV eliminates the excess humidity. An HRV system is designed to use the heat from exhausted stale air to “preheat” incoming fresh air. While warm stale indoor air is being exhausted, the heat recovery core warms cold outdoor air before it is distributed throughout the house.

   Energy recovery ventilator (ERV):
   An Energy Recovery Ventilator (ERV) is suitable for colder regions, in homes where there is **no** excess humidity in the heating season, as well as in homes in warmer regions where the humidity outdoors is high.

   Like the HRV, ERV units also preheat incoming fresh air, but in addition, they recover some of the humidity contained in the ambient air before it is distributed throughout the home.

   In winter, when it’s cold, an ERV transfers some of the humidity in the exhaust air to the incoming fresh air, preventing the house from drying out too much. In summer, when it's hot, the unit transfers humidity from the incoming air to the outgoing air, preventing the house from becoming too humid. Therefore, it is recommended to install an HRV in a house that is

usually too humid in winter and an ERV for a house that is too dry in winter.

4. **Does Aldes North America only offer residential ventilation systems?**
   No, Aldes offers a full range of residential products for single-family homes and high-rise towers, as well as a full range of commercial and light commercial products.

5. **What's the difference between ventilating a bathroom and "whole-house" ventilation?**
   Keeping your entire home smelling and feeling fresh generally takes a low amount of continuous airflow. There are some factors to consider, like the number of people living in your home, whether you have pets, whether you cook frequently inside, the size of your home and how you use your home (Do you host? Do you smoke?). A qualified HVAC contractor can help you determine the size of the system you need for your home. These systems are what the industry calls "whole-house" ventilation.

   Your bathrooms, however, are used differently than the rest of your house. One shower can leave up to a pint of water in the air which can cause serious mold and mildew problems as well as discomfort for the dwelling's inhabitants. Bath fans have the power to exhaust the humid air out of your bathroom quickly. The industry sometimes refers these systems as "spot" or "zone" ventilation.

   In a nutshell, bathroom fans exhaust lots of humid air quickly whereas whole-house ventilation gives you a low volume of continuous fresh air. Both are important for keeping you healthy and comfortable and keeping the air in your home from becoming stale or damp.

   Fortunately, you don't always need two separate systems for these ventilation needs. Aldes has all-in-one patented systems that include spot/zone ventilation (for your bathrooms) and whole-house ventilation.

6. **What is the ventilation capacity of Aldes air exchangers?**
   We offer a wide range of products to meet different ventilation needs. The ventilation capacity of our products ranges from 95 CFM to 11,000 CFM.

7. **Why should I choose an air exchanger with heat recovery?**
   An air exchanger equipped with a heat recovery core preheats the fresh filtered air that goes into the building by recovering and transferring part of the heat contained in the exhaust air that goes out of the building

without ever mixing the airflows. This helps reduce indoor air heating costs.

8. **Will ventilation save me money on my energy bills?**
   Ventilating correctly will save you money on heating and cooling costs. If you simply open a window, at least two things could go awry. First, you can't control which way the air flows, how fast or slow it flows, or the quality of their air that comes into your home (i.e., the air could be filled with pollen). Second, the money you've already spent to heat or cool the air in your home is wasted as it escapes out the open window.

   Ventilation systems allow you to control how much fresh air comes into your home, how much stale or damp air is exhausted, and how pure your home's air can be. Furthermore, when you use a heat or energy recovery ventilator, you can save money on your energy bill due to the machine's capability to recover the heat or cool air from the stale air it is exhausting to heat or cool the fresh air it is supplying to the home. This means that no additional energy (and money) is needed to heat or cool the air that is being brought in from the outside.

9. **My child suffers from allergies. How can I bring fresh air into the house without introducing these allergens indoors?**
   Ventilation systems with filters provide fresh air and help trap pollutants and allergens before they enter your home. No filter can trap all impurities, however, using Aldes filters in conjunction with Aldes heat and energy recovery ventilators is an effective way to significantly reduce pollutants in your home's air.

   We offer various types of filters (sold separately depending on the HRV/ERV model) including high efficiency filters, which purify indoor air and prevent the recirculation of airborne pollutants, thus contributing greatly to the well-being of persons affected by allergies.

10. **Do you offer wall controls to operate air exchangers?**
    Yes, we offer a wide range of wall controls to meet your needs. For more information about the available wall controls and the operating modes they offer, you can refer to our website or our products technical specification sheets.

11. Can an air exchanger create or eliminate humidity?

An air exchanger does not create humidity and is not a dehumidifier. The air exchanger is used to evacuate excess humidity during the winter. A humidifier may be required in very dry weather, and a dehumidifier in very humid weather.

12. Do ventilation standards or requirements apply to new buildings?

Ventilation standards do exist. It's essential to check with your municipality which ones apply since it's their responsibility to ensure that those standards are implemented.

13. Why does the humidity level in my home remain high in summer?

High humidity levels are common in summer, because they depend on outdoor conditions. This is particularly noticeable in basements. In this case, a dehumidifier or air conditioner may be needed.

14. An air exchanger has been installed in my house. Why is there still condensation on my windows?

It's important to note that an air exchanger is not a dehumidifier. Although it is used to evacuate excess humidity in winter, the main purpose of an air exchanger is to evacuate stale air to the outside and bring in fresh air from outside into the building.

Several factors contribute to this excess humidity situation: poor ventilation, poor insulation, window quality, temperature and heating mode, obstructions in front of windows (e.g., blinds, curtains, etc.), prevailing winds, outside temperature, etc.
Taking action to eliminate these factors will considerably reduce the risk of condensation forming on your windows.

15. Can ventilation systems be installed outdoors?

Some of our commercial systems are designed for indoor or outdoor applications. Various optional products are available for these ventilation systems such as electric or hot-water pre- and post-heating coils, for example.

16. Can my air exchanger be connected to my furnace ducts?

Residential air exchangers can be installed independently or connected to the furnace ducts. Depending on the type of installation, the furnace motor may or may not have to run continuously to ensure proper circulation. For more details, please consult your unit's installation manual.

17. Does my air exchanger need to be balanced?

During installation, the professional installer ensures that the system is properly balanced. To ensure optimal operation thereafter, we recommend that you have your unit balanced by an HVAC professional. An unbalanced unit can lead to certain problems (risk of parts freezing in the unit and/or frozen ducts) and reduce the unit's efficiency.

18. Where can I buy an air exchanger?

ALDES air exchangers are sold and installed exclusively by specialized HVAC contractors. Please consult the “Where to buy” section of our website to find an authorized service center near you.